Certified Organic by A Greener World - South Africa

Private Standards



The Certified Organic by A Greener World seal is a hard-earned badge of difference and demonstrates the farmer's commitment to the care of their animals, the land, environment and the local community. Participants in this programme will be distinguished by a humane and conscientious attitude towards the land and animals in their care as evidenced by physical audit and development of detailed plans and records of farm practices.

The Certified Organic by A Greener World programme is based on Objectives and Principles set by the European Union, complemented, for holdings with livestock by the Animal Welfare Approved (AWA) by A Greener Worlds seal.

Operators in the programme agree to a minimum of one visit a year from A Greener World (AGW) staff or agents, with the possibility of additional visits if deemed necessary, to confirm compliance with the standards during various seasons and to allow observation of animals in different phases of life. Participation in the programme is on an annual basis and MUST be renewed each year.

The premise of these standards is that animals MUST be allowed to behave naturally, and land managed in accordance with the objectives and principles set out.

The following standards ensure that the holding is managed as organic whilst allowing animals the opportunity to perform natural and instinctive behaviours essential to their health and well-being. Provisions are made to ensure social interaction, comfort, and physical and psychological well-being.

Certified Organic by A Greener World is a private standard, products carrying the logo may only be sold within a domestic market in the region the product is produced. Contact A Greener World to discuss equivalency arrangements should the opportunity to export arise.

The Certified Organic by A Greener World programme is voluntary. The standards do not supersede national government or state legislation.

AGW recommends that operators have the Guide to Understanding Our Standards and Standards and Programme Definitions documents at hand while reading these standards.

Table of Contents

	A) OBJECTIVES OF ORGANIC PRODUCTION	6
	B) PRINCIPLES OF ORGANIC PRODUCTION	6
	C) SPECIFIC PRINCIPLES APPLICABLE TO AGRICULTURAL ACTIVITIES AND AQUACULTURE	7
	D) SPECIFIC PRINCIPLES APPLICABLE TO THE PROCESSING OF ORGANIC FOOD	8
	E) SPECIFIC PRINCIPLES APPLICABLE TO THE PROCESSING OF ORGANIC FEED	9
1	GENERAL Production Standards – ALL AGRICULTURAL HOLDINGS	10
	1.0 General Requirements	10
	1.1 Conversion	11
	1.2 Origin of Plants and Plant Reproductive Material	12
	1.3 Soil Management and Fertilisation	13
	1.4 Pest and Weed Management	15
	1.5 Harvesting and storage	16
	1.6 Storage of Organic / in-conversion / non-organic products	16
	1.7 Manure Storage	17
	1.8 Grassland Management	17
	1.9 Mushroom production	17
	1.10 Collection of Wild Plants	18
	1.11 Control of Rats and Mice	18
	1.12 Deviations	19
	1.13 Derogations	19
	1.14 Complaints	19
2	Livestock Production STANDARDS (Incorporating Certified Animal Welfare Approved by AGW	
St	andards for all species)	20
	2.0 Ownership and Operation	20
	2.1 Conversion	21
	2.2 Breeds and Origin	21
	2.3 The Beef, Dairy, Sheep, Goat, Deer or Pig Breeding Herd or Flock	23
	2.4 The Poultry Breeding Flock	24
	2.5 Health Management	26
	2.6 Treatment	27
	2.7 Parasites	29
	2.8 Euthanasia	30
	2.9 General Animal Management	30
	2.10 Shearing (Sheep and goats only)	31
	2.11 Group Management	31

2.12 Breeding and Calving / Lambing / Kidding / Farrowing	32
2.13 Provisions for Calves, Lambs and Kids	34
2.14 Fostering and Artificial Rearing	34
2.15 Weaning and Separation of Calves, Lambs, Kids and Piglets	36
2.16 Castration (Animals)	37
2.17 Other Physical Alterations (animals)	38
2.18 Identification (animals)	39
2.19 General Management of Poultry	40
2.20 Management of Breeding Flocks and Laying Birds	41
2.21 Provision for Hatching	41
2.22 Management of Chicks, Pullets, Ducklings, Goslings and Poults	42
2.23 Physical Alteration of Poultry	42
2.24 General Food and Water Standards	43
2.25 Food and Water for Ruminants	45
2.26 Food and Water for Pigs	45
2.27 Food and Water for Poultry	46
2.28 General Pasture Access / Ranging and Foraging Area Access	47
2.29 Ranging and Foraging Area Access for Pigs	49
2.30 Ranging and Foraging Area Access for Poultry	49
2.31 Access to Water for Ducks and Geese	51
2.32 Exclusion from Pasture / Ranging and Foraging Areas	52
2.33 Exclusion from Ranging and Foraging Areas for Pigs and Poultry	52
2.34 General Housing Standards	53
2.35 Space Allowances in Housing and Shelter	55
2.36 Tie Stalls (and Free Stalls)	59
2.37 Temporary Separation and Hospital Pens	60
2.38 Bedding	60
2.39 Raised Platforms for Goats	61
2.40 Poultry Housing – General	61
2.41 Poultry Housing - Perches	61
2.42 Poultry Housing – Nest Boxes	62
2.43 Poultry – Entries / Exits from the House to the Ranging and Foraging Area	63
2.44 Removal of Animals from the Approved Farm – General Standards	64
2.45 Temporary Removal of Certified Animals from the Approved Farm	64
2.46 Protection from Predators	64
2.47 Records and Record Keeping	65

	2.48 Written Plans	66
	2.49 Handling Cattle, Sheep, Goats, Deer and Pigs	66
	2.50 Handling Poultry	67
	2.51 Transport – General Standards	68
	2.52 Transport of Cattle, Sheep, Goats, Deer and Pigs	70
	2.53 Transport of Calves, Lambs, Kids or Piglets	71
	2.54 Transport of Poultry	72
	2.55 Transport of Chicks, Pullets, Ducklings, Goslings and Poults	72
	2.56 Transport Containers for Poultry	73
	2.57 Transporting Breeder Poultry	74
	2.58 Transport of Poultry by Air	74
	2.59 Sale or Transfer of Cattle, Sheep, Goats, Pigs and Deer	74
	2.60 Marketing Breeding Stock	75
	2.61 Slaughter of Cattle, Sheep, Goats, Deer and Pigs	76
	2.62 Slaughter of Poultry	
3	BEE PRODUCTION STANDARDS	79
	3.0 Conversion	79
	3.1 Breeds and Origin	79
	3.2 Nutrition	79
	3.3 Health care	79
	3.4 Animal Welfare	80
	3.5 Housing and Husbandry Practices	80
4	ALGAE PRODUCTION STANDARDS	82
5	AQUACULTURE PRODUCTION STANDARDS	82
6	PROCESSED FOOD PRODUCTION STANDARDS	83
	6.0 General Requirements	83
	6.1 Composition and Ingredients	84
	6.2 Cleansing and Disinfection	85
7	PROCESSED FEED PRODUCTION STANDARDS	86
	7.0 General Requirements	86
	7.1 Composition and Ingredients	87
	7.2 Cleansing and Disinfection	88
8	WINE PRODUCTION STANDARDS	89
9	YEAST (USED AS FOOD OR FEED) STANDARDS	90
	9.0 General Requirements	90
	9.1 Cleansing and Disinfection	91

COLLECTION, PACKAGING, TRANSPORT AND STORAGE OF PRODUCTS (ALL AGRICULTURAL DLDINGS, ALL PROCESSING, TRANSPORTATION AND STORAGE SITES)	92
10.0 Collection of Products and Transport to Preparation Units	92
10.1 Packaging and Transport of Products to Other Operators or Units	92
10.2 Transporting Feed to Other Production Units or Storage Premises	92
10.3 Transport of Live Fish	93
10.4 Reception of Products from other Operators or Units	93
10.5 Reception of Products from a Third Country	93
10.6 Storage of Products	94
10.7 Cleansing and Disinfection	94
10.8 Labelling	95
Annex 1 – Definitions	96
Annex 2 – Approved Fertilisers, Soil Conditioners and Nutrients	102
Annex 3 – Approved Plant Protection Products	107
Annex 4 – Products for Cleaning and Disinfection	110
Annex 5 – Permitted Feed Materials and Additives	111
Annex 6 – Livestock Nitrogen Production Figures	115
Annex 7 – Approved Pest and Insect Control Products in Livestock Buildings	118
Annex 8 – Approved Ingredients, Additives and Processing Aids for Food Production	119
Annex 9 – Approved Colourings for Food Production	126

A) OBJECTIVES OF ORGANIC PRODUCTION

Organic production shall pursue the following general objectives:

- (a) contributing to protection of the environment and the climate;
- (b) maintaining the long-term fertility of soils;
- (c) contributing to a high level of biodiversity;
- (d) substantially contributing to a non-toxic environment;
- (e) contributing to high animal welfare standards and, in particular, to meeting the species-specific behavioural needs of animals;
- (f) encouraging short distribution channels and local production.
- (g) encouraging the preservation of rare and native breeds in danger of extinction;
- (h) contributing to the development of the supply of plant genetic material adapted to the specific needs and objectives of organic agriculture;
- (i) contributing to a high level of biodiversity, in particular by using diverse plant genetic material, such as organic heterogeneous material and organic varieties suitable for organic production;
- (j) fostering the development of organic plant breeding activities in order to contribute to favourable economic perspectives of the organic sector.

B) PRINCIPLES OF ORGANIC PRODUCTION

Organic production is a sustainable management system that is based on the following general principles:

- (a) respect for nature's systems and cycles and the sustainment and enhancement of the state of the soil, the water and the air, of the health of plants and animals, and of the balance between them;
- (b) the preservation of natural landscape elements, such as natural heritage sites;
- (c) the responsible use of energy and natural resources, such as water, soil, organic matter and air;
- (d) the production of a wide variety of high-quality food and other agricultural and aquaculture products that respond to consumers' demand for goods that are produced by the use of processes that do not harm the environment, human health, plant health or animal health and welfare;
- (e) ensuring the integrity of organic production at all stages of the production, processing and distribution of food and feed;
- (f) the appropriate design and management of biological processes, based on ecological systems and using natural resources which are internal to the management system, using methods that:
 - (i) use living organisms and mechanical production methods;

- (ii) practice soil-related crop cultivation and land-related livestock production, or practice aquaculture which complies with the principle of the sustainable exploitation of aquatic resources;
- (iii) exclude the use of GMOs, products produced from GMOs, and products produced by GMOs, other than veterinary medicinal products;
- (iv) are based on risk assessment and the use of precautionary measures and preventive measures, where appropriate;
- (g) the restriction of the use of external inputs; where external inputs are required or the appropriate management practices and methods referred to in point
- (h) do not exist, the external inputs shall be limited to:
 - (i) inputs from organic production; in the case of plant reproductive material, priority shall be given to varieties selected for their ability to meet the specific needs and objectives of organic agriculture;
 - (ii) natural or naturally-derived substances;
 - (iii) low solubility mineral fertilisers;
- (i) the adaptation of the production process, where necessary and within the framework of this Regulation, to take account of the sanitary status, regional differences in the ecological balance, climatic and local conditions, stages of development and specific husbandry practices;
- (j) the exclusion from the whole organic food chain of animal cloning, of rearing artificially induced polyploid animals and of ionising radiation;
- (k) the observance of a high level of animal welfare respecting species-specific needs.

C) SPECIFIC PRINCIPLES APPLICABLE TO AGRICULTURAL ACTIVITIES AND AQUACULTURE

As regards agricultural activities and aquaculture, organic production shall, in particular, be based on the following specific principles:

- (a) the maintenance and enhancement of soil life and natural soil fertility, soil stability, soil water retention and soil biodiversity, preventing and combating loss of soil organic matter, soil compaction and soil erosion, and the nourishing of plants primarily through the soil ecosystem;
- (b) the limitation of the use of non-renewable resources and external inputs to a minimum;
- (c) the recycling of waste and by-products of plant and animal origin as input in plant and livestock production;
- (d) the maintenance of plant health by preventive measures, in particular the choice of appropriate species, varieties or heterogeneous material resistant to pests and diseases, appropriate crop rotations, mechanical and physical methods and protection of the natural enemies of pests;
- (e) the use of seeds and animals with a high degree of genetic diversity, disease resistance and longevity;

- (f) in the choosing of plant varieties, having regard to the particularities of the specific organic production systems, focussing on agronomic performance, disease resistance, adaptation to diverse local soil and climate conditions and respect for the natural crossing barriers;
- (g) the use of organic plant reproductive material, such as plant reproductive material of organic heterogeneous material and of organic varieties suitable for organic production;
- (h) the production of organic varieties through natural reproductive ability and focussing on containment within natural crossing barriers;
- (i) the possibility for farmers to use plant reproductive material obtained from their own farms in order to foster genetic resources adapted to the special conditions of organic production;
- (j) in the choosing of animal breeds, having regard to a high degree of genetic diversity, the capacity of animals to adapt to local conditions, their breeding value, their longevity, their vitality and their resistance to disease or health problems;
- (k) the practice of site-adapted and land-related livestock production;
- (I) the application of animal husbandry practices which enhance the immune system and strengthen the natural defence against diseases, including regular exercise and access to open air areas and pastures;
- (m) the feeding of livestock with organic feed composed of agricultural ingredients resulting from organic production and of natural non-agricultural substances;
- (n) the production of organic livestock products derived from animals that have been raised on organic holdings throughout their lives since birth or hatching;
- (o) the continuing health of the aquatic environment and the quality of surrounding aquatic and terrestrial ecosystems;
- (p) the feeding of aquatic organisms with feed from sustainably exploited fisheries or with organic feed composed of agricultural ingredients resulting from organic production, including organic aquaculture, and of natural non-agricultural substances;
- (q) avoiding any endangerment of species of conservation interest that might arise from organic production

D) SPECIFIC PRINCIPLES APPLICABLE TO THE PROCESSING OF ORGANIC FOOD

The production of processed organic food shall be based, in particular, on the following specific principles:

- (a) the production of organic food from organic agricultural ingredients;
- (b) the restriction of the use of food additives, of non-organic ingredients with mainly technological and sensory functions, and of micronutrients and processing aids, so that they are used to a minimum extent and only in cases of essential technological need or for particular nutritional purposes;
- (c) the exclusion of substances and processing methods that might be misleading as regards the true nature of the product;

- (d) the processing of organic food with care, preferably through the use of biological, mechanical and physical methods;
- (e) the exclusion of food containing, or consisting of, engineered nanomaterials.

E) SPECIFIC PRINCIPLES APPLICABLE TO THE PROCESSING OF ORGANIC FEED

The production of processed organic feed shall be based, in particular, on the following specific principles:

- (a) the production of organic feed from organic feed materials;
- (b) the restriction of the use of feed additives and processing aids, so that they are used to a minimum extent and only in cases of essential technological or zootechnical needs or for particular nutritional purposes;
- (c) the exclusion of substances and processing methods that might be misleading as regards the true nature of the product;
- (d) the processing of organic feed with care, preferably through the use of biological, mechanical and physical methods.

1 GENERAL Production Standards – ALL AGRICULTURAL HOLDINGS

Note: These standards are applicable to ALL organic plant production on the holding, including grass and forage crops grown as livestock feed.

The requirements mentioned in the regulations or standards are covered in the body of the standards below.

1.0 General Requirements

```
(EU) 2018/848, Article 9
(EU) 2018/848, Annex II, Part 1 (1)
AWA Standards 2020 (7.0)
```

- 1.0.1 The entire holding MUST be managed with the requirements of these standards that apply to organic production.
- 1.0.2 A holding may be split into clearly and effectively separated production units for organic, in-conversion and non-organic production, provide that for the non-organic production units:
 - 1.0.2.1 Different species of livestock are involved.
 - 1.0.2.2 Different varieties of plants that can be easily differentiated are involved.
- 1.0.3 Where not all production units on the holding are managed under these standards, the operator MUST:
 - 1.0.3.1 Keep the products used for organic and in-conversion production separate from those used for non-organic production.
 - 1.0.3.2 Keep the products produced by the organic, in-conversion and non-organic production units separate from each other.
 - 1.0.3.3 Keep adequate records to show the effective separation of the production units and of the products.
- 1.0.4 All crops, unless naturally grown in water, MUST be grown in living soil or in living soil mixed or fertilised with materials and / or products permitted in Annex 2.
- 1.0.5 Hydroponic production is prohibited.
- 1.0.6 The production of sprouts by moistening of seeds and the obtaining of chicory heads including by dipping in clear water shall be allowed by prior approval issued by AGW only.
- 1.0.7 Growing plants for the production of ornamentals and herbs in pots, sold in the pot to the final consumer shall be allowed by prior approval issued by AGW only.
- 1.0.8 Growing seedlings or transplants in containers for further transplanting shall be allowed by prior approval issued by AGW only.
- 1.0.9 All plant production techniques MUST prevent or minimise any contribution to the contamination of the environment.
- 1.0.10 Water sources on the farm MUST be managed and maintained to prevent environmental pollution.
- 1.0.11 Land MUST be managed to avoid erosion.

- 1.0.12 Note: AGW understands that even with the best management some erosion due to the activities of pasture-based livestock may occur. This standard is scored against the steps farmers take to try to avoid and/or minimize erosion risks rather than the presence or absence of erosion on the farm. A complete absence of any erosion is desirable but it is accepted that it may not always be possible.
- 1.0.13 Point source pollution and other local environmental conditions MUST be met.

1.1 Conversion

```
(EU) 2018/848, Article 10
(EU) 2018/848, Annex II, Part 1 (1.7)
```

- 1.1.1 For plants and plant products to be considered as organic the following conversion periods MUST be adhered to:
 - 1.1.1.1 Grassland or perennial forage Two years before use as organic feed.
 - 1.1.1.2 Perennial crops other than forage Three years before first harvest of organic products.
- 1.1.2 In the case of perennial crops which require a cultivation period of at least three years, different varieties that cannot be easily differentiated, or the same varieties may be involved, provided that the production is detailed within the application process, organic production must begin as soon as possible and MUST be completed within a maximum of five years. Where this occurs, the operator MUST:
 - 1.1.2.1 Notify AGW of the start of harvest of each of the products at least 48hours in advance.
 - 1.1.2.2 Notify AGW of the exact quantities harvested and the measures taken to separate them from organic products.
 - 1.1.2.3 Detail in the conversion plan / application process measures that will be taken to ensure the effective and clear separation.

Note: These requirements shall not apply in the case of research and educational facilities, plant nurseries, seed multipliers and breeding operations.

- 1.1.3 Where the land or parcels of land have been contaminated with products or substances prohibited by these standards, AGW may extend the conversion period at its discretion. This period may be shortened where:
 - 1.1.3.1 A prohibited product or substance has been applied as part of a compulsory control measure for pests or weeds.
 - 1.1.3.2 A prohibited product or substance has been applied as part of an approved scientific test.
- 1.1.4 The length of conversion period referred to in 1.1.2 shall be fixed considering the following requirements:
 - 1.1.4.1 The process of degradation of the product or substance MUST guarantee at the end of the conversion period, an insignificant level of residues in the soil and, in the case of a perennial crop, in the plant.
 - 1.1.4.2 The harvest following treatment is not marketed as organic or inconversion.

- 1.1.5 For land associated with organic livestock production, the conversion standards MUST apply to the whole area of the holding on which animal feed is produced.
- 1.1.6 The conversion period may be reduced to one year for pasture and open-air areas used by non-herbivore species, providing that standards 1.1.2 is met.
- 1.1.7 No previous period may be retroactively recognised as being part of the conversion period, except where the operator can provide proof that the land parcels were natural or agricultural areas that, for a period of at least three years, have not been treated with products or substances prohibited within these standards.
 - 1.1.7.1 Any reduction to the conversion period is at AGWs discretion.
- 1.1.8 Products produced during the conversion period MUST not be marketed as organic or in-conversion products.
- 1.1.9 Plant reproductive material may be marketed as in-conversion provided that a conversion period of at least 12 months has been complied with.
- 1.1.10 Food and feed products of plant origin may be marketed as in-conversion, provided that the product only contains one agricultural crop ingredient and a conversion period of at least 12 months before harvest has been complied with.
- 1.2 Origin of Plants and Plant Reproductive Material
 - (EU) 2018/848, Article 11
 - (EU) 2018/848, Article 23
 - (EU) 2018/848, Annex II, Part 1 (1.8)
- 1.2.1 Organic plant reproductive material MUST be used for the production of plants and plant products other than plant reproductive material.
- 1.2.2 In order to obtain organic plant reproductive material to be used for the production of products other than plant reproductive material, the mother plant and other plants intended for plant reproductive material MUST have been produced to the organic standards:
 - 1.2.2.1 For at least one generation.
 - 1.2.2.2 For at least one generation during two growing seasons for perennial crops.
- 1.2.3 Preference MUST be given to plants and plant reproductive material suitable for organic production.
- 1.2.4 For the production of organic varieties suitable for organic production, breeding activities MUST be carried out under organic conditions and focus on enhancement of:
 - 1.2.4.1 Genetic diversity
 - 1.2.4.2 Natural reproductive ability
 - 1.2.4.3 Agronomic performance
 - 1.2.4.4 Disease resistance
 - 1.2.4.5 Adaptation to diverse local conditions
 - 1.2.4.6 Adaptation to diverse climate conditions

- 1.2.5 All multiplication practices except meristem culture MUST be carried out under certified organic management.
- 1.2.6 When organic plant reproductive material is not available in sufficient quality or quantity in the area the holding is located, approval MUST be requested from AGW prior to sowing.
 - 1.2.6.1 Approvals will be issued to individual holdings, for just one season at a time.
- 1.2.7 Non-organic plant reproductive material MUST not be treated with plant protection products unless approved by AGW in Annex 3.
 - 1.2.7.1 AGW MUST be notified if chemical treatment is required by local/regional regulation for phytosanitary purposes.
- 1.2.8 Records of purchase of plant reproductive material, seedlings or seeds MUST be kept.
- 1.2.9 Records of sowing MUST be kept, including:
 - 1.2.9.1 Species and variety
 - 1.2.9.2 Seed rate
 - 1.2.9.3 Location
 - 1.2.9.4 Date
- 1.2.10 The use of plant reproductive material produced from GMOs is prohibited.
- 1.3 Soil Management and Fertilisation

```
(EU) 2018/848, Article 11
(EU) 2018/848, Annex II, Part 1 (1.9)
(EU) 2018/848, Article 23
AWA Standards 2020 (7.0)
```

- 1.3.1 Tillage and cultivation practices MUST be used that maintain or increase soil organic matter, enhance soil stability and soil biodiversity, and prevent soil compaction and erosion.
- 1.3.2 The fertility and biological activity of the soil MUST be maintained and increased:
 - 1.3.2.1 Except in the case of grassland or perennial forage by the use of a multiannual annual crop rotation including leguminous crops as the main crop or cover crop for rotating crops and other green manure crops.
 - 1.3.2.2 In the case of greenhouses or perennial crops other than forage, by the use of short-term green manure crops, legumes and plant diversity.
 - 1.3.2.3 In all cases, by the application of livestock manure or organic matter, both preferably composted, from organic production.
- 1.3.3 Soil testing MUST be conducted at least every three years.

Note: Farmers with extensive, unfertlised pasture and/or farming land on short term lease agreements should contact AGW for guidance on appropriate soil testing intervals.

- 1.3.3.1 **Recommended** Annual soil testing should be carried out in any pastures where manure is spread.
- 1.3.3.2 **Recommended** Annual soil testing should be carried out in any areas where pigs and poultry have been kept.
- 1.3.4 Where the nutritional needs of plants cannot be met for standards 1.3.1 and 1.3.2, only fertilisers and soil conditioners that have been approved by AGW in Annex 2 may be used only to the extent necessary.
 - 1.3.4.1 Justification of use MUST be recorded.

Note: this may include soil analysis results.

- 1.3.5 The use of mineral or artificial nitrogen fertilisers is prohibited.
- 1.3.6 The use of fertilisers containing GMOs is prohibited.
- 1.3.7 Records of fertiliser and soil conditioner purchase MUST be kept.
- 1.3.8 Records of fertiliser and soil conditioner use MUST be kept, including:
 - 1.3.8.1 Product
 - 1.3.8.2 Application rate
 - 1.3.8.3 Location
 - 1.3.8.4 Date
- 1.3.9 The total amount of livestock manure used MUST not exceed 170kg Nitrogen per year/hectare of total registered area.

Note: This limit only applies to the use of farmyard manure, dried farmyard manure, dehydrated poultry manure, composted animal excrement, including poultry manure, composted farmyard manure and liquid animal excrement.

- 1.3.10 Holdings may establish written cooperation agreements with operators of other certified organic holdings for the purpose of spreading surplus manure.
- 1.3.11 Where livestock manures are exchanged, the following records MUST be retained by both parties.
 - 1.3.11.1 Producer details
 - 1.3.11.2 Receiver details
 - 1.3.11.3 Manure type
 - 1.3.11.4 Quantity
 - 1.3.11.5 Organic certificate
- 1.3.12 The use of manures produced from livestock fed GMOs is prohibited.
- 1.3.13 Preparations of micro-organisms may be used to improve the overall condition of the soil or to improve the availability of nutrients in the soil or in crops. Details of use MUST be recorded.
- 1.3.14 Plant-based preparations and preparations of micro-organisms may be used for compost activation. Details of use MUST be recorded.

- 1.3.15 The use of soil conditioners containing GMOs is prohibited.
- 1.3.16 Biodynamic preparations may be used. Details of use MUST be recorded.
- 1.3.17 The use of waste from on-farm slaughter, and the remains of animals that die or are euthanized on farm is prohibited.
- 1.3.18 Fish fertilisers (where compliant with Annex 2) MUST come from sustainable sources.
- 1.3.19 After the application of fish fertilizer to pasture/ranging and foraging areas there MUST be an interval of at least one month, or until all visible signs of the application have disappeared (whichever is longer), before animals graze/use the land.

Note: Permission may be granted to graze/use the land prior to one month after application of fish fertilizer if it can be demonstrated that animals will not be exposed to any trace of the fertiliser.

1.3.20 **Recommended** Manures and fertilisers that can have a negative effect on soil microbial life and/or which contain heavy metals should be avoided.

1.4 Pest and Weed Management

- (EU) 2018/848, Article 9
- (EU) 2018/848, Article 11
- (EU) 2018/848, Article 23
- (EU) 2018/848, Annex II, Part 1 (1.8)
- 1.4.1 The prevention of damage caused by pests and weeds MUST rely primarily on protection by:
 - 1.4.1.1 Natural enemies
 - 1.4.1.2 Choice of species, varieties, and heterogeneous material
 - 1.4.1.3 Crop rotation
 - 1.4.1.4 Cultivation techniques such as bio-fumigation, mechanical and physical methods
 - 1.4.1.5 Thermal processes such as solarisation and, in the case of protected crops, shallow steam treatment of the soil (to a maximum depth of 10cm)
- 1.4.2 Where plants cannot adequately be protected from pests by measures provided in 1.4.1 or in the case of an established threat to a crop, only products and substances that have been approved by AGW in Annex 3 may be used only to the extent necessary.
 - 1.4.2.1 Justification for use MUST be recorded.

Note: This may include recommendations from a qualified agronomist.

- 1.4.3 Safeners, synergists and co-formulants are permitted as components of plant protection products.
- 1.4.4 Adjuvants are permitted to be mixed with plant protection products.
- 1.4.5 The use of plant protection products containing GMOs is prohibited.

- 1.4.6 Where products and substances other than pheromones are used in traps or dispensers, the trap or dispenser MUST prevent the product or substance being released into the environment and MUST prevent contact with the crop being cultivated.
- 1.4.7 All traps, including pheromone traps MUST be collected after use and disposed of safely.
- 1.5 Harvesting and storage
 - (EU) 2018/848, Article 9 (EU) 2018/848, Article 23
- 1.5.1 Records of crops, including forage harvested MUST be kept, including
 - 1.5.1.1 Crop harvested
 - 1.5.1.2 Quantity
 - 1.5.1.3 Location
 - 1.5.1.4 Date
- 1.5.2 Products used for cleansing and disinfection of harvesting equipment, handling equipment and storage facilities MUST have been approved by AGW in Annex 4.

Note: AGW may issue a derogation where no approved products are available within the region.

- 1.5.3 Records MUST be kept of cleansing and disinfection of harvesting equipment, handling equipment and storage facilities.
- 1.5.4 Ionising radiation as a treatment of harvested crops is prohibited.
- 1.6 Storage of Organic / in-conversion / non-organic products (EU) 2018/848, Annex III (7)
- 1.6.1 Areas for the storage of products MUST be managed in such a way as to ensure identification of lots and to avoid any mixing or contamination with products or substances not in compliance with the organic production rules.
- 1.6.2 Organic and in-conversion products MUST be clearly identifiable at all times.
- 1.6.3 No input products or substances other than those authorised within these standards for use in organic production shall be stored in organic or in-conversion plant and livestock production units.
- 1.6.4 Where operators handle organic, or in-conversion or non-organic products in any combination and the organic or in-conversion products are stored in storage facilities in which also other agricultural products or foodstuffs are stored:
 - 1.6.4.1 The organic or in-conversion products MUST be kept separate from the other agricultural products or foodstuffs.
 - 1.6.4.2 Every measure MUST be taken to ensure identification of consignments and to avoid mixtures or exchanges between organic, in-conversion and non-organic products.

1.6.4.3 Suitable cleaning measures, the effectiveness of which has been checked, MUST have been carried out before and recorded.

1.7 Manure Storage

AWA Standards 2020 (7.1)

- 1.7.1 Holdings where livestock manure is produced MUST have a manure management plan that covers:
 - 1.7.1.1 Land area available for spreading.
 - 1.7.1.2 Crop rotation and crop nutrient need.
 - 1.7.1.3 Storage capacity on farm.
 - 1.7.1.4 Areas of the farm and times of year where spreading cannot take place (e.g., waterlogged ground, fields close to water courses).
- 1.7.2 Liquid manure MUST be agitated prior to spreading.
- 1.7.3 Liquid manure MUST be tested prior to spreading, unless standard value figures are used.
- 1.7.4 Liquid manure MUST only be applied to land and crops where soil testing has demonstrated they need and can utilise nutrients from the manure, unless standard crop requirement figures are used.
- 1.7.5 There MUST be no leakage, overflow or other environmental risk or damage from liquid manure systems.

Note: AGW recognises the unique nature of manure management systems in active dairy production and while liquid manure systems are prohibited in other species; well managed liquid manure systems that meet the requirements above may be considered for approval.

1.8 Grassland Management

```
(EU) 2018/848, Annex II, Part 2 (1.4.2)
AWA Standards 2020 (7.0) / (7.1)
```

- 1.8.1 Non-organic animals may graze organic pasture for a limited period each year, providing they are not fed feed prohibited by these standards.
- 1.8.2 Pastures/Ranging and foraging areas MUST not be degraded by overgrazing and/or other management techniques.
- 1.8.3 Pasture/Ranging and foraging areas on which animals have been outwintered or that are otherwise worn out or denuded MUST be restored.

1.9 Mushroom production

```
(EU) 2018/848, Annex II, Part 1 (2.1)
```

- 1.9.1 Substrates used for the production of mushrooms MUST only contain any combination of the following components:
 - 1.9.1.1 Farmyard manure and animal excrement:

- 1.9.1.1.1 From organic production units or from in-conversion units in the second year of conversion.
- 1.9.1.1.2 Where organic manures or manures in second year conversion are not available, fertilisers or soil conditioners approved by AGW in Annex 2 may be used, provided that the farmyard manure and animal excrement do not exceed 25% of the weight of the total components of the substrate, excluding the covering material and any added water, before composting.
- 1.9.1.1.3 Products of agricultural origin, other than farmyard manure and animal excrement.
- 1.9.1.1.4 Peat, not treated with chemical products.
- 1.9.1.1.5 Wood, not treated with chemical products after felling.
- 1.9.1.1.6 Mineral products approved by AGW in Annex 2, water and soil.
- 1.9.2 Records MUST be kept of:
 - 1.9.2.1 Substrate/s used
 - 1.9.2.2 Quantities / weights harvested
 - 1.9.2.3 Date of harvest
- 1.9.3 The use of GMOs in mushroom production is prohibited, including in substrates.

1.10 Collection of Wild Plants

```
(EU) 2018/848, Annex II, Part 1 (2.2)
```

- 1.10.1 The collection of wild plants and parts of plants growing naturally in natural areas, forests and agricultural areas may be considered organic, proving that:
 - 1.10.1.1 For at least three years prior to collection, those areas were not treated with products or substances, other than those approved by AGW in Annex 2 and Annex 3.
 - 1.10.1.2 The collection does not affect the stability of the natural habitat or the maintenance of the species in the collection area.
- 1.10.2 The operator MUST produce a sustainability plan, in order to ensure the harvesting isn't detrimental to the species harvested or local biodiversity.
- 1.10.3 Records MUST be kept of:
 - 1.10.3.1 Plant / organism harvested.
 - 1.10.3.2 Quantity / weights harvested
 - 1.10.3.3 Date
 - 1.10.3.4 Location

1.11 Control of Rats and Mice

```
AWA Standards 2020 (10.1)
(EU) 2018/848, Annex II, Part 2 (1.5.1.7)
(EU) 2018/848, Annex II, Part 2 (1.9.6.3)
```

1.11.1 Glue boards for the control of rats and mice are prohibited.

- 1.11.2 Licensed rodenticides placed such that non-target species have no access to them may be used for the control of rats or mice.
- 1.11.3 Lethal control/euthanasia of live trapped rodents MUST result in instantaneous irreversible unconsciousness and death.

1.12 Deviations

AWA Standards 2020 (15.0)

- 1.12.1 AGW MUST be informed immediately of any changes on farm that could result in a deviation from the standards.
- 1.12.2 Temporary deviations will be taken into consideration when unexpected circumstances that are not under the control of the farmer arise.
- 1.12.3 All other deviations from these standards can be cause for reconsideration of the operators participation or removal from the Certified Organic by A Greener World program and use of its seal, in conjunction with that operators products.

1.13 Derogations

```
(EU) 2018/848, Article 24
(EU) 2018/848, Article 53
AWA Standards 2020 (15.1)
```

- 1.13.1 If, in the opinion of the Standards Board, a system meets all of the principles of the program but does not pass a specific standard or standards, derogation may be granted.
- 1.13.2 In order for a derogation to be granted, an inspection report MUST be submitted stating the deviation from the published standard, the reason for this deviation, the length of time this deviation from standards will occur and the outcome should the derogation be granted.
- 1.13.3 Derogation may be granted for on-farm trials and case studies that deviate from the standards when the proposed outcome is a benefit to animal welfare and/or operator education.

1.14 Complaints

AWA Standards 2020 (15.2)

1.14.1 A complaints record relating to complaints about Certified Organic by A Greener World or products MUST be maintained and be available at annual inspection. The record MUST list both the complaint and the action taken by the farm.

2 Livestock Production STANDARDS (Incorporating Certified Animal Welfare Approved by AGW Standards for all species)

2.0 Ownership and Operation

(EU) 2018/848, Annex II, Part II (1) (EU) 2018/848, Annex II, Part II (1.7) AWA Standards 2020 (1.0)

- 2.0.1 The individual or entity seeking certification for their livestock MUST own and have management control of the animals.
- 2.0.2 The individual or entity seeking certification for their livestock MUST produce a livestock product for sale or trade that is eligible to carry the organic or AWA seal.
- 2.0.3 The organic production standards and AWA standards MUST be met for all the animals or birds of the species for which approval is sought. Farmers MUST not use "split" or "dual" systems, in which some animals or birds of one species are simultaneously kept in systems that do as well as systems that do not meet AWA Standards.
- 2.0.4 Certified Organic by A Greener World and AWA are birth to slaughter programmes. Meat sold under the Certified Organic by A Greener World and AWA label or logo MUST come from animals that have been certified as being raised to organic and AWA standards and slaughtered using a method and at a location that has received written approval from AGW.
 - 2.0.4.1 If the farm does not intend to market meat from some or all of their animals/birds as Certified Organic by A Greener World but owns or has control of an animal/a bird when it is slaughtered, the slaughter process MUST meet the AWA Slaughter Guidelines for Red Meat/Poultry.
- 2.0.5 The certified farm may participate in networks, co-operatives or marketing groups in order to market livestock products as Certified Organic by A Greener World and AWA as long as each member is audited as meeting all other requirements listed in these standards.

Note: [DAIRY, LAYING HENS ONLY] If milk or eggs are pooled, they may only be represented for sale as Organic AWA if all producers are certified as such. Similarly, if milk, eggs or meat from several producers are sold under a single brand, the brand may only represent the products as organic and AWA if all producers are certified.

2.0.6 All those working with animals/birds MUST be competent to carry out the tasks required of them.

Note: This standard applies to contract and temporary workers as well as full time employees and family members.

2.0.7 Landless livestock production, where the farmer intending to produce organic livestock does not manage agricultural land and has not established a written cooperation agreement with a farmer for the use of organic or in-conversion land is prohibited.

- 2.0.8 Where agreements detailed in 2.0.7 are in place, the following records MUST be kept by both producers and certificates exchanged:
 - 2.0.8.1 Details of each party name, farm name
 - 2.0.8.2 Dates of agreement
 - 2.0.8.3 Grazing areas / fields agreement relates to
 - 2.0.8.4 Organic status

2.1 Conversion

```
(EU) 2018/848, Annex II, Part II (1.2)
AWA Standards 2020 (2.3)
```

- 2.1.1 Where existing animals are simultaneously converting from the start of the conversion of the holding, including pasture or any land used for animal feed, animals and animal products may be considered organic at the end of the conversion period of the holding, even if the conversion period in 2.1.3 for the type of animal concerned is longer than the conversion period for the holding.
- 2.1.2 Non-organic animals may be introduced into an in-conversion production unit after the start of the conversion period in accordance with 2.2.
- 2.1.3 Conversion periods specific to the type of animal production are set out as follow:
 - 2.1.3.1 Twelve months in the case of bovine animals for meat production, and in any case no less than three quarters of their lifetime.
 - 2.1.3.2 Six months in the case of sheep, goats, pigs and animals for milk production.
 - 2.1.3.3 Ten weeks for poultry for meat production, except for Peking ducks, brought in before they are 36 hours old.
 - 2.1.3.4 Seven weeks for Peking ducks brought in before they are three days old.
 - 2.1.3.5 Six weeks in the case of poultry for egg production brought in before they are 36 hours old.
 - 2.1.3.6 Twelve months for deer.

2.2 Breeds and Origin

```
(EU) 2018/848, Article 14 (2c(i))
(EU) 2018/848, Annex II, Part II (1.3)
(EU) 2018/848, Article 23
AWA Standards 2020 (2)
AWA Standards 2020 (2.3)
```

- 2.2.1 Without prejudice to the rules on conversion, organic livestock MUST be born or hatched and raised on holdings certified as organic and AWA.
- 2.2.2 Breeds and strains MUST be chosen with consideration of their ability to thrive in the prevailing climatic conditions of the farm, in pasture-based, free range, outdoor systems.
- 2.2.3 Cloned or genetically engineered animals are prohibited.

Note: This includes the use of cloned or genetically engineered breeding stock, the offspring of clones or genetically engineered animals and semen from cloned or genetically engineered animals.

- 2.2.4 Breeding replacements may come from farms that are not certified Organic or AWA but MUST be nulliparous and of a suitable breed or type for organic pasture-based production under these standards.
- 2.2.5 Where female breeding replacements are brought-in, they MUST be reared subsequently in accordance with these standards and the holding MUST be compliant with 2.2.6 and 2.2.7.
- 2.2.6 Prior approval MUST be obtained from AGW prior to bringing on non-organic female breeding replacements, subject to the following restrictions per year:
 - 2.2.6.1 10% of adult cattle.
 - 2.2.6.2 20% of adult sheep.
 - 2.2.6.3 20% of adult goats.
 - 2.2.6.4 20% of adult deer.

Note: For holdings with fewer than 10 cattle or deer, or less than 5 pigs, sheep or goats, any approval will be limited to one animal per year.

- 2.2.7 The percentages set in 2.2.6 may be increased to up to 40% in the following circumstances:
 - 2.2.7.1 A major extension to the holding has been undertaken.
 - 2.2.7.2 One breed has been replaced with another.
 - 2.2.7.3 A new livestock specialisation has been initiated.
- 2.2.8 For breeding purposes, non-organic young animals may be introduced when a herd or flock is constituted for the first time. They MUST be reared in accordance with these standards immediately after weaning. The following conditions apply:
 - 2.2.8.1 Cattle and deer MUST be less than six months old.
 - 2.2.8.2 Sheep and goats MUST be less than 60days old.
 - 2.2.8.3 Pigs shall weigh less than 35kg.
- 2.2.9 In countries, where there are insufficient organic animals available of the quality or quantity available in the territory of the country, prior approval MUST be obtained from AGW to bring in non-organic animals.
- 2.2.10 For breeding purposes, non-organic females of any age may be brought on, where the breed is in danger of being lost to farming. Prior approval MUST be obtained from AGW.
- 2.2.11 Non-organic animals may only be considered as organic if the conversion period specified in 2.1.3 has been complied with.
- 2.2.12 Non-organic animals MUST be either kept separate from other livestock or kept identifiable until the end of the conversion period in 2.1.3.

- 2.2.13 Where a poultry flock is constituted for the first time, or is renewed or reconstituted, and where there are insufficient organic birds available of the required quality or quantity, non-organic poultry may be brought on, provided that the pullets for egg production or poultry for meat production are less than 36 hours old. Eggs and meat derived from these birds will only be considered as organic when the conversion periods at 2.1.3 have been complied with.
- 2.2.14 If chicks, ducklings, goslings and poults can't be placed on farm within 36 hours of hatch they may be sourced from non-AWA hatcheries. Birds over 36 hours old MUST come from Organic and AWA sources.

Note: If it is not possible to place chicks, ducklings, goslings or poults within 36 hours please contact AGW for further advice.

This standard will be reviewed annually, and when there are sufficient organic AWA hatcheries it will be a requirement to source Organic AWA chicks, ducklings, goslings or poults.

- 2.2.15 Birds hatched on farm or delivered as a straight run from a hatchery that does not provide sexed birds, MUST be raised to these standards until they can be sexed on farm. If only males or only females are required the unwanted birds may be removed from the system.
- 2.2.16 **Recommended** All birds hatched on farm or delivered as a straight run should be raised to these standards.
- 2.2.17 A record of the source, date of purchase and number and identification of animals MUST be kept.
- 2.2.18 **Recommended** Wherever possible the farm should run a closed herd/flock.

Note: A closed herd/flock is one where no animals are brought onto the farm from external sources. Farms that do not have the genetic diversity or the expertise to achieve this should partner with experienced breeders to source their animals and learn more about selection criteria.

2.2.19 Rescue animals and animals sold as culls from other herds or flocks cannot be bought on.

Note: If an experienced farmer is asked to participate in rescue activities they MUST contact AGW as soon as possible and preferably before rescue animals arrive on farm to discuss their options. Rescue animals cannot be used or marketed as organic AWA.

2.3 The Beef, Dairy, Sheep, Goat, Deer or Pig Breeding Herd or Flock (EU)2018/848, Annex II, Part II (1.3)

AWA Standards 2020 (2.1)

- 2.3.1 Reproduction MUST use natural methods; however, artificial insemination is allowed.
- 2.3.2 Laparoscopic or surgical artificial insemination is prohibited for sheep and goats.

Note: [SHEEP AND GOATS] other forms of artificial insemination are permitted.

2.3.3 Artificial insemination of deer is prohibited.

Note: Exceptions may be granted on a case-by-case basis.

Note: Even when cervical techniques are used, it is common practice to have to synchronise a group, due to the short season for service.

- 2.3.4 Reproduction MUST not be induced or impeded by treatment with hormones or other substances with a simar effect, except as a form of veterinary therapeutic treatment in the case of an individual animal.
- 2.3.5 Embryo transfer and knowingly using the semen or progeny of animals produced by embryo transfer is prohibited.

Note [DAIRY CATTLE ONLY]: If farmers are unable to obtain semen from sources other than embryo transfer bulls please contact AGW.

Note [ALL ANIMALS]: The prohibition on use of embryo transfer extends to a single generation. In other words, if the sire or dam of an animal was produced by embryo transfer then that animal cannot be bought onto the certified holding. New farms with existing livestock produced by embryo transfer should contact AGW for further advice.

2.3.6 The ability to successfully give birth independently MUST be taken into account in modifications over time to herd genetics.

Note: In order to score this standard the auditor will assess the number of assisted births.

- 2.3.7 In breeding programmes, attention MUST be paid to breed characteristics that:
 - 2.3.7.1 Demonstrate suitability to principles of organic production.
 - 2.3.7.2 Will improve welfare and prevention of suffering such as udder health, susceptibility to lameness.
 - 2.3.7.3 Improve longevity.
 - 2.3.7.4 Avoid the need for the mutilation of animals.
- 2.3.8 Selection for double-muscled beef animals that require routine caesarean sections is prohibited.
- 2.3.9 Pigs selected for breeding MUST be chosen for their good maternal qualities, hardiness and ability to meet the needs of their piglets.
- 2.4 The Poultry Breeding Flock

```
(EU)2018/848, Annex II, Part II (1.3)
(EU)2018/848, Annex II, Part II (1.9.4.1)
AWA Standards 2020 (2.2)
```

2.4.1 Artificial insemination for poultry is prohibited.

Note: Exceptions may be granted on a case-by-case basis.

- 2.4.2 The use of birds from confinement and/or caged systems is prohibited.
- 2.4.3 **Recommended** According to breeders published data, egg production for birds kept on AWA farms should not exceed 280 eggs per laying cycle.
- 2.4.4 If negative welfare outcomes from the use of prolific hens, such as high mortality, high levels of prolapse or bone fractures are seen or reported, breed and/or management changes MUST be made to improve welfare.

Note: AGW may require the farm to change breeds for any replacement hens within the affected flock or any future flocks in order to remain in the programme.

- 2.4.5 Poultry MUST either be reared until they reach the minimum age below or MUST come from slow-growing poultry strains adapted to outdoor rearing. Where slow-growing strains are used, they MUST meet the requirements of 2.4.5, 2.4.6 and 2.4.7.
 - 2.4.5.1 81 days for meat chickens.
 - 2.4.5.2 150 days for capons.
 - 2.4.5.3 49 days for Peking Ducks.
 - 2.4.5.4 70 days for Mascovy Ducks.
 - 2.4.5.5 84 days for Mallard Ducks.
 - 2.4.5.6 94 days for guinea fowl.
 - 2.4.5.7 140 days for male turkeys and roasting geese.
 - 2.4.5.8 100 days for female turkeys.
- 2.4.6 When averaged over their entire lives, the rate of growth of meat chickens allowed to grow naturally on an optimum ration MUST not exceed 0.088 lbs (40 g) per day.

Note: The rate of growth for a breed type MUST be measured as if the bird was allowed to grow on an optimum ration that ensures the welfare of the bird is maintained. AGW looks at information from the breeding company or hatchery that supplies the bird and not individual on farm information to determine compliance with standard.

- 2.4.7 When averaged over their entire lives, the rate of growth of meat ducks and meat geese allowed to grow naturally on an optimum ration MUST not exceed 0.132 lbs (60 g.) per day.
- 2.4.8 When averaged over their entire lives, the rate of growth of meat turkeys allowed to grow naturally on an optimum ration MUST not exceed 0.15 lbs (68.0 g) for females, and 0.19 lbs (86.2 g) for males, per day.
- 2.4.9 If negative welfare impacts relating to growth rate, such as lameness, other skeletal health issues and/or high mortality are seen or reported, breed and/or management changes MUST be made to improve welfare.

Note: AGW may require the farm to change breeds for any future flocks in order to remain in the program.

- 2.4.10 **Recommended** The use of birds derived from traditional breeds is recommended.
- 2.4.11 **Recommended** The use of dual-purpose breeds so that male chicks can be raised as meat type birds and female chicks can be raised as laying hens is recommended.

Note: The recommendations in 2.4.10 and 2.4.11 will be reviewed annually with the intent of making them requirements whenever sufficient suitable stock is available.

2.5 Health Management

```
(EU) 2018/848, Article 14 (2c)
(EU)2018/848, Annex II, Part II (1.5)
AWA Standards 2020 (3)
```

- 2.5.1 Animal management MUST be focused on promoting health rather than treating disease. Disease prevention MUST be based on:
 - 2.5.1.1 Breed and strain selection.
 - 2.5.1.2 Husbandry management practices.
 - 2.5.1.3 High quality feed.
 - 2.5.1.4 Exercise.
 - 2.5.1.5 Appropriate stocking density.
 - 2.5.1.6 Adequate and appropriate housing maintained in hygienic conditions.
- 2.5.2 Each farmer in the programme MUST establish contact with a qualified expert such as a veterinarian. The qualified expert MUST be familiar with:
 - 2.5.2.1 The animals on the farm.
 - 2.5.2.2 The health requirements of the state / country / province.
 - 2.5.2.3 Methods to maximise animal health and welfare.
- 2.5.3 **Recommended** Each farmer should schedule regular preventative care visits by a qualified expert.

Note: AGW will provide support and assistance in achieving this standard.

- 2.5.4 A health plan emphasising prevention of illness or injury MUST be prepared in consultation with the farm's qualified expert advisor to promote positive health and limit the need for treatment. It MUST address:
 - 2.5.4.1 Avoidance of physical, nutritional or environmental stress.
 - 2.5.4.2 Lameness.
 - 2.5.4.3 Climatic considerations.
 - 2.5.4.4 Vaccinations and other methods to cope with prevailing disease challenges.
 - 2.5.4.5 Biosecurity measures.
 - 2.5.4.6 Nutrition.
 - 2.5.4.7 Environmental impacts, including manure management and run-off.
 - 2.5.4.8 Pasture management.
 - 2.5.4.9 Exclusion of predators and control of rats and mice.
 - 2.5.4.10 Euthanasia.
 - 2.5.4.11 Mastitis in cattle, sheep, goats and pigs.

- 2.5.4.12 Johne's disease [IN BEEF AND DAIRY CATTLE AND MEAT AND DAIRY SHEEP AND GOATS AND DEER].
- 2.5.4.13 Caprine Arthritis Encephalitis (CAE) [IN GOATS].
- 2.5.5 If there is disease or known risk of disease on farm, vaccines / immunological veterinary medicinal products MUST be used.

Note: In order to help eliminate or reduce vulnerability to disease and the need for antibiotics at therapeutic levels, AGW encourages the appropriate use of vaccines on an individual or group basis for prevention of disease.

- 2.5.6 Action MUST be taken to address any causes of lameness.
- 2.5.7 **Recommended** Farmers should participate in recognised disease eradication programs.

Note: AGW supports management to eliminate or reduce the risk of certain diseases and farmers are therefore encouraged to engage with programs that seek to achieve this. Recognised schemes could be national / regional / statewide or province-wide and could cover diseases such as scrapie or Johne's.

This standard may become required for specific diseases when a funded and functioning programme is available.

- 2.5.8 Udders of dairy animals in milk MUST be kept clean.
- 2.5.9 **Recommended** Farmers should test for Malignant Catarrhal Fever (MCF). [DEER ONLY]
- 2.5.10Where livestock are obtained from non-organic holdings, special measures such as screening tests or quarantine periods MUST be put in place, depending on local circumstances.

2.6 Treatment

```
(EU) 2018/848, Article 11
(EU) 2018/848, Annex II, Part II (1.5)
(EU) 2018/848, Annex III (7)
Article 115 (1)
AWA Standards 2020 (3.1)
```

- 2.6.1 Any sick or injured animals on the farm MUST be treated immediately to minmise pain and distress. This MUST include veterinary treatment if required.
 - 2.6.1.1 Homeopathic, herbal or other non-antibiotic alternative treatments are preferred.
 - 2.6.1.2 If alternative treatments are not suitable or not effective or if a veterinarian has recommended antibiotic treatment, this MUST be administered.
 - 2.6.1.3 Withholding treatment in order to preserve an animal's eligibility for market is prohibited.

Note: The discovery of untreated injured or ill animals may be grounds for removal from the programme.

- 2.6.2 The sub-therapeutic and/or non-therapeutic use of antibiotics, or any other medicines, to control or prevent disease or promote growth, is prohibited.
- 2.6.3 Growth hormones or the use of any other substances (including antibiotics and coccidiostats) promoting weight gain are prohibited.

Note: Probiotics to promote positive health are permitted.

- 2.6.3.1 The use of ractopamine (Paylean) is prohibited (PIGS).
- 2.6.4 Non-therapeutic use of substances to induce oestrus (heat) is prohibited.
- 2.6.5 The use of chemically synthesized veterinary medicinal products containing GMOs is prohibited.

Note: This does not apply where there are no alternative products available.

- 2.6.6 Animals treated with a chemically synthesised allopathic veterinary medicinal product, including of an antibiotic, MUST not be slaughtered to produce meat or used to produce milk or eggs for the programme before a period of time has passed that is at least twice the licensed withdrawal period of the antibiotic used, and shall be at least 48 hours.
- 2.6.7 Where animals are treated with any off-label medication the following withdrawal periods MUST be adhered to, or twice the alternative withdrawal period as advised by a veterinarian.
 - 2.6.7.1 56 days for animals produced for meat and offal.
 - 2.6.7.2 14 days for animals producing milk.
 - 2.6.7.3 20 days for animals producing eggs.
- 2.6.8 Animals MUST not be treated with any medications prohibited for food animal use.
- 2.6.9 Records MUST be kept of the administration of veterinary medical products.
 - 2.6.9.1 Date of purchase.
 - 2.6.9.2 Name of product.
 - 2.6.9.3 Quantity purchased.
 - 2.6.9.4 Identity of the animals treated.
 - 2.6.9.5 Reason why animals were treated.
 - 2.6.9.6 Number of animals treated.
 - 2.6.9.7 Date when treatment started and finished.
 - 2.6.9.8 Standard withdrawal time.
 - 2.6.9.9 Organic withdrawal time.
- 2.6.10 With the exception of vaccinations, treatments for parasites and compulsory eradication schemes, where an animal of a group of animals receives more than three courses of treatments with a chemically synthesised allopathic veterinary medicinal product, including antibiotics, within 12 months or more than one course of treatment if their productive lifecycle is less than one year, neither the animal or products derived from them may be sold as organic. These animals will the subject to the relevant conversion periods in 2.1.

- 2.6.11 Allopathic veterinary medicinal products, including antibiotics, may be stored in agricultural and aquaculture holdings provided that they have been prescribed by a veterinarian in connection with the treatment of livestock, that they are stored in a supervised location and that they are entered in the medicine purchase records.
- 2.6.12 Any surgical procedure not covered by these standards MUST be carried out by a veterinarian.
- 2.6.13 A competent person may use a dart gun loaded with a sedative to anesthetize the animal when the farmer has a concern about an individual and examination and/or treatment cannot otherwise take place (DEER ONLY).
- 2.6.14 Animals MUST only be darted when necessary, never enter the food chain and tagged according to legislation. [DEER ONLY]

Note: Darting may be required to sedate deer. This practice MUST be limited to essential circumstances only and MUST not form the basis of stock management.

- 2.6.15 Animals MUST only be darted in a suitable area of the farm where they are unable to injure themselves. [DEER ONLY]
- 2.6.16 Animals MUST be closely monitored during and after sedation. [DEER ONLY]
- 2.6.17 Darting drugs MUST be obtained only by persons referred to in standard 2.6.13 from the veterinary surgeon and MUST be recorded when the drug is used, returned and stored. [DEER ONLY]
- 2.6.18 Darting equipment and drugs MUST be stored in accordance with codes of practice. [DEER ONLY]

2.7 Parasites

AWA Standards 2020 (3.2)

- 2.7.1 The primary methods of preventing parasite infestations MUST be pasture management or rotation and bedding management and removal.
- 2.7.2 If prevention has not been effective, medicine regimens MUST be implemented to effectively control worms, lice, mange and any other parasites.
- 2.7.3 The use of organophosphates and other products with the same or a similar mode of action is prohibited.

Note: An exception to the standard above may be considered if other treatments have been shown to be ineffective. Please refer to the AGW paper on organophosphate and non-organophosphate type products.

- 2.7.4 **Recommended** Faecal samples to monitor internal parasite burdens should be taken at least annually.
- 2.7.5 If taken, faecal samples MUST be reviewed by a competent person.
- 2.7.6 **Recommended** Faecal samples should be taken during the growing season when animals are out on pasture.
- 2.7.7 **Recommended** (SHEEP AND GOATS) FAMACHA should be used to monitor barber pole worm burdens.

2.8 Euthanasia

AWA Standards 2020 (3.2)

Note: When local or national authorities order the killing of a herd or flock or if any large-scale euthanasia is about to take place to eradicate disease, AGW MUST be notified as soon as possible.

2.8.1 Animals experiencing pain or suffering from which they are unlikely to recover MUST be promptly euthanised on the farm in a manner that renders the animal immediately insensible to pain.

Note: Please contact AGW if further information on appropriate methods of euthanasia is required.

- 2.8.2 Euthanising cattle, sheep, goats or pigs and deer in a way that causes unnecessary pain or suffering is prohibited. Prohibited methods include:
 - 2.8.2.1 Electrocution.
 - 2.8.2.2 Suffocation.
 - 2.8.2.3 Exsanguination without prior unconsciousness.
 - 2.8.2.4 Poison.
 - 2.8.2.5 Blow to the head by blunt instrument on any calf, on kids or lambs older than seven days or on piglets heavier than 12lbs (5.5kg).

Note: A blow to the head by blunt instrument on kids or lambs younger than seven days of age or on piglets below 12lbs (5kg) is only acceptable if a preferred method is not readily available and the animal would suffer if euthanasia was not carried out immediately.

- 2.8.3 Euthanising poultry in a way that causes unnecessary pain or suffering is prohibited. Methods that do not render the birds immediately insensible to pain include:
 - 2.8.3.1 Suffocation.
 - 2.8.3.2 Poison.
 - 2.8.3.3 Penetration of the brain or spinal column without pre-stunning.
- 2.8.4 **Recommended** *AGW* recommends that euthanasia of deer is carried out using a high-powered hunting rifle.
- 2.8.5 Note: Please contact AGW if further information on appropriate methods of euthanasia is required.
- 2.9 General Animal Management

(EU) 2018/848, Annex II, Part II (1.6) AWA Standards 2020 (4.0)

2.9.1 All beef cattle and non-dairy sheep and goats and deer MUST be thoroughly inspected at least once per 24 hours.

Note: Derogation may be granted for operations that can show, in extensive systems, welfare would not be compromised by fewer inspections.

2.9.2 All dairy animals and all pigs MUST be thoroughly inspected at least twice per 24 hours.

Note: During the inspections noted in 2.9.1 and 2.9.2, the welfare of each animal MUST be observed. If any animal is not in a state of well-being, it MUST be cared for immediately and corrective measures MUST be taken. During a time of increased risk to health and welfare, inspections MUST be increased as necessary to protect the animal's well-being.

- 2.9.3 Animals MUST be maintained at body condition score 4 or above on a 1-9 scale or body condition score 2 or above on a 1-5 scale.
- 2.9.4 Breeding animals MUST not exceed body condition score 7 on a 1-9 scale or body condition score 4 on a 1-5 scale.

2.10 Shearing (Sheep and goats only)

AWA Standards 2020 (4.1)

- 2.10.1 The health and well-being of sheep and goats MUST be protected by ensuring the animals have appropriate wool or hair cover at critical times of the year.
- 2.10.2 Shearing of sheep or goats MUST be carried out by a competent person who can minimise stress and avoid injury.

Note: Any injured sheep/goat that is cut or injured as part of the shearing process, MUST be treated immediately to minimise pain and distress. This MUST include veterinary treatment if required.

- 2.10.3 Where extenuating circumstances requires shearing in colder weather, bedding and shelter MUST be provided for at least seven days.
- 2.10.4 Use of chemicals that would cause the cessation of hair/wool growth is prohibited.

2.11 Group Management

(EU) 2018/848, Annex II, Part II (1.6) AWA Standards 2020 (4.2)

- 2.11.1 All classes of animals MUST be sorted (for example by age, size and/or behaviour) so that they remain in stable groups and the welfare of less dominant animals is protected. Mixing animals from different groups should be avoided.
- 2.11.2 Pregnant sows MUST be kept in groups.
- 2.11.3 Special care MUST be taken when mixing breeding males to socialise them to one another as safely as possible and to minimise harm to individuals.
- 2.12.14 **Recommended** Male breeding animals should be kept with the main herd or have nose to nose contact with other animals of the same species.

Note: No animal can be kept completely in isolation unless it is sick or injured (see Standard 2.37.3). If a male breeding animal has to be kept away from other animals of the same species, it may have a compatible companion of another species.

2.11.5 Housing adult stags separately from the herd, other than for reasons of veterinary treatment is prohibited.

Note: This does not preclude removing stags from the main herd during calving season, but they should be maintained on separate pasture areas during this time and not housed.

- 2.11.6 The social dynamics and family group development within a herd of deer MUST be acknowledged. Disruption of the herd dynamics, adding to or taking away, MUST be addressed with consideration for the following criteria.
 - 2.11.6.1 New animals MUST be allowed a period of time no less than two weeks to become familiar with the farm from a small field or large holding pen.
 - 2.11.6.2 New animals MUST be allowed to form a family group consisting of the new arrivals before introducing that group to the established herd.
 - 2.11.6.3 **Recommended** New animals should be exposed to daily humane and or machine interaction in quarantine so as to become familiar with the routines of the farm and farm personnel.
 - 2.11.6.4 **Recommended** At the time of assimilation with the existing herd, behaviours observed during assimilation should be documented.
 - 2.11.6.5 Exposing newborn deer calves to the behaviours that occur during the assimilation of new animals to the herd is prohibited.
 - 2.11.6.6 Deer MUST be allowed the ability to separate into stable subgroups at will.
- 2.11.7 Non-breeding Yearling Stags MUST be separated from hinds by the 15th September, to avoid unwanted pregnancies.
- 2.11.8 Unless yearlings, stags in hard antler MUST be penned individually.
- 2.12 Breeding and Calving / Lambing / Kidding / Farrowing

 AWA Standards 2020 (4.3)
- 2.12.1 A competent person MUST be available at birthing time to assist if problems are anticipated at delivery.

Note: (DEER) As far as is possible a competent person MUST monitor calving from a distance to ensure health and welfare of the newborn calf and its mother are maintained.

- 2.12.2 Heifers MUST not calve before the age of two years.
- 2.12.3 Ewes/does MUST not lamb/kid before the age of 13 months.

Note: In a situation where lambing/kidding takes place over a period of time the herd average figure will be assessed.

2.12.4 Gilts MUST not farrow before the age of 10 months.

Note to accompany 2.12.2, 2.12.3 and 2.12.4: Young females may reach puberty before the optimal age of first service. Males MUST be managed carefully to ensure females are not accidentally served too young.

- 2.12.5 When conditions permit, calving, lambing and kidding MUST take place outside on pasture. [NOT DEER]
- 2.12.6 Deer MUST be allowed to calve outdoors on pasture.

2.12.7 A clean environment with sufficient space MUST be provided for calving, lambing or kidding.

See the specified space allowances in section 2.35.

- 2.12.8 **Recommended** es/does should not lamb/kid before the age of 18 months.
- 2.12.9 If welfare problems (including high mortality of lambs/kids or ewes/does, high levels of assisted births, low body condition of lambs/kids or ewes/does) result from the early age at which does kid/ewes lamb, then AGW will require the farmer to increase the age at first kidding/lambing accordingly.
- 2.12.10 If a lambing or kidding pen is used it MUST provide a minimum of 25 sq feet (2.32 sq meters) and provide easy access to fresh water and feed.

Note: Pens constructed following farm approval MUST meet the standard above. Pens that were constructed before farm approval that are at least 20 sq ft (1.86 sq meters) may be acceptable.

2.12.11 The ewe and newborn lamb or the doe and newborn kid(s) MUST not be kept in a pen for more than 72 hours.

Note: This standard assumes that ewes and newborn lamb(s)/does and newborn kid(s) are healthy. See Section 2.37 for requirements for sick pens.

Note also that this standard does not require that ewes and newborn lamb(s)/does and newborn kid(s) must be returned to pasture after the 72 hour period has elapsed. If the requirements of section 2.32 - Exclusion from Pasture - are met, ewes and newborn lamb(s)/does and newborn kid(s) may still be kept indoors, if they meet the space requirements in Section 2.35.

2.12.12 A ewe or doe may only be temporarily restrained if all other methods to encourage adoption of a lamb or kid have failed.

Note: A written record for the reason for rejection and the method of restraint MUST be kept.

- 2.12.13 Farrowing systems MUST be arranged and managed in such a way to minimize mortality.
- 2.12.14 Sows about to farrow MUST be provided with an individual arc, hut or pen for farrowing and nursing.
- 2.12.15 Prior to farrowing arcs, huts or pens MUST be amply bedded with fresh, dry bedding that the sow can manipulate.

Note: Particular care should be taken when using a heat lamp for piglets over bedding because of the risk of fire.

- 2.12.16 **Recommended** ows that farrow within 10 days of each other should be put into groups during lactation.
- 2.12.17 Sows MUST not be placed into individual pens for farrowing for more than two weeks prior to the expected farrowing date.
- 2.12.18 Sows MUST not be confined within individual huts for more than 24 hours prior to the expected farrowing date.

- 2.12.19 After sows have farrowed they MUST not be confined within individual huts.
- 2.12.20 Piglets MUST be able to leave the arc or hut after 10 days of age.
- 2.12.21 If fresh farrowed sows and piglets over the age of 10 days do not have free access to a ranging and foraging area the area outside the housing, hut or pen MUST not be less than 48.00 sq feet (4.5 sq meters) per sow and litter.
- 2.12.22 The sow and litter MUST have free access to a ranging and foraging area once the piglets reach the age of 21 days.
- 2.12.23 Hinds MUST not calve before the age of 2 years. [deer only]
- 2.12.24 Natural cover (i.e. long grass, nettles) MUST be available for the calf for the first 2-3 weeks. [deer only]
- 2.12.25 Stocking rates during the calving period MUST be a maximum of 8 hinds per hectare in order to minimize calving competition. [deer only]
- 2.13 Provisions for Calves, Lambs and Kids

AWA Standards 2020 (4.4)

- 2.13.1 Calves, lambs and kids MUST be provided with colostrum within the first six hours of birth.
- 2.13.2 **Recommended** Farmers should test for Johne's disease.
- 2.13.3 Colostrum and milk for calves, lambs and kids MUST not knowingly come from cows/does/ewes that are Johne's positive.
- 2.13.4 **Recommended** Goat farmers should test for Caprine Arthritis Encephalitis (CAE).
- 2.13.5 Colostrum and milk for kids MUST not knowingly come from does that are CAE positive.
- 2.13.6 **Recommended** Calves, lambs and kids should be reared by their mothers.
- 2.14 Fostering and Artificial Rearing

(EU) 2018/848, Article 11 AWA Standards 2020 (4.5)

Note for deer: AGW acknowledges the fact that in the majority of instances no human interactions with the newborn deer calf are possible or desired.

- 2.14.1 **Recommended** phan or excess young animals should be fostered onto other cows, ewes, does or sows. [not deer]
- 2.14.2 If foster mothers are used the number of calves, lambs, kids or piglets MUST be adjusted to the amount of milk the foster mother can produce and the number of foster calves, lambs, kids or piglets she will accept. [not deer]
- 2.14.3 Foster mothers MUST not become debilitated by nursing. [not deer]
- 2.14.4 Sick or injured animals MUST not be used as foster mothers. [not deer]
- 2.14.5 Excess piglets MUST not be removed for fostering until they have had colostrum.

- 2.14.6 Pigs MUST be fostered onto sows within 48 hours of the foster sow giving birth.
- 2.14.7 Calves, lambs or kids MUST be fed milk or milk replacer at least twice a day.
- 2.14.8 Milk replacer containing antibiotics, growth promoters and/or any animal by-products aside from milk protein is prohibited.

Note: If the welfare of a calf, lamb, kid or piglet could be compromised and evidence can be submitted that suitable products are not available an allowance is in operation to allow milk replacers which do not meet the standard above.

- 2.14.9 The use of milk replacer containing GMOs is prohibited.
- 2.14.10 All nipples and other feeding equipment MUST be cleaned regularly.
- 2.14.11 If feeders are used there MUST never be more calves, lambs, kids or piglets in the pen than nipples on the feeder unless *ad lib* self-feeding is provided.
- 2.14.12 Artificially reared lambs, kids and piglets MUST be kept in groups.
- 2.14.13 Artificially reared calves may be kept in individual pens to facilitate training to drink from a bottle or bucket, to start the transition from milk to forage and concentrate feed (and to help avoid cross suckling), up to a maximum of 28 days.

Note: The space allowances in standard 2.35 MUST be met.

2.14.14 When in individual pens, artificially reared calves MUST have sight and sound of other calves.

Note: It is acceptable for a companion animal to be another species. [deer only]

2.14.15 Provision MUST be made for weaned dairy calves/dairy lambs/dairy kids to go outside and graze during the growing season.

Note: The growing season is the period between the last frost and the first frost each year.

- 2.14.15.1 If calves are kept in pens on pasture the minimum pen size MUST be 13 foot by 10 foot (4m by 3m).
- 2.14.15.2 If calves are kept in pens on pasture they MUST have continuous access to at least 32 sq ft (3 sq m) pasture area.
- 2.14.16 Calves, lambs and kids MUST have continuous access to high quality fresh forage from seven days of age onwards.

Note: Access is recommended from day one.

- 2.14.17 Dairy farms that raise their own calves/kids/lambs for meat MUST follow the *Animal Welfare Approved* dairy standards from birth to weaning and the *Animal Welfare Approved* meat animal standards from weaning onwards.
- 2.14.18 The holding MUST have a plan of management and the equipment to deal with orphaned deer calves.
- 2.14.19 Removal of deer calves from the herd MUST be documented.
- 2.14.20 Rescued deer calves MUST be held in a clean bedded pen that protects them from extreme weather, is predator proof and out of sight and sound from the hind so as to reduce stress for both.

2.15 Weaning and Separation of Calves, Lambs, Kids and Piglets

(EU) 2018/848, Article 14 (3a) (EU) 2018/848, Part II (1.3.4) AWA Standards 2020 (4.6)

- 2.15.1 **Recommended** Husbandry systems that allow young calves, lambs or kids to remain in the herd or flock with their mothers until weaning occurs naturally are recommended.
- 2.15.2 In some systems natural weaning of pigs may be possible. If this practice is carried out care MUST be taken to ensure the correct genetics are used and the welfare of sow and litter is not compromised.
- 2.15.3 Newly weaned or separated calves, lambs and kids MUST be kept in groups of familiar animals.
- 2.15.4 **Recommended** Newly weaned piglets should be kept with their litter mates.
- 2.15.5 Separation of the calf, lamb or kid from its mother MUST involve methods designed to cause as little stress as possible.
 - 2.15.5.1 **Recommended** Use of a two-stage separation process for calves is recommended.
- 2.15.6 After separation calves, lambs or kids and their mothers MUST either be kept in adjacent pens where they can see, hear and sniff/lick each other or be completely out of sight and hearing of each other.
- 2.15.7 Feed for freshly weaned calves, lambs, kids or piglets MUST be clean and appealing.
- 2.15.8 Piglets MUST be consuming solid food by the time of weaning.
- 2.15.9 **Recommended** Dairy calves, lambs or kids should not be weaned from milk before they are 12 weeks of age [dairy cattle, sheep, goat standards only]
- 2.15.10 **Recommended** Artificially reared calves should not be weaned from milk before they are 12 weeks of age. [beef cattle only]
- 2.15.11 Dairy calves, lambs or kids MUST not be weaned from milk before they are six weeks of age. [dairy cattle, sheep, goat standards only]
- 2.15.12 Artificially reared calves MUST not be weaned from milk before they are six weeks of age. [beef cattle only]

Note: If dairy calves are to be reared as Certified Grassfed by AGW beef animals, there are additional requirement for feeding and weaning calves. See section 16.3 of the Grassfed standards. [dairy cattle only]

- 2.15.13 Weaning beef calves at less than six months of age is prohibited (see 2.15.18).
- 2.15.14 The average weaning age of beef calves in the herd MUST be eight months.

Note: Farms that do not meet this standard but which have a protocol to assess and manage individual cows and calves based on body condition scoring with the time of weaning based on weight and cow/calf condition rather than age should contact AGW for further advice.

- 2.15.15 Weaning lambs or kids in a meat sheep flock or goat herd at less than three months of age is prohibited (see 2.15.18).
- 2.15.16 Lambs or kids that are not yet weaned may be separated from their mothers at less than three months of age if they go direct to slaughter.
- 2.15.17 Piglets MUST be at least six weeks of age at weaning (see 2.5.18).
- 2.15.18 In exceptional circumstances when the health and welfare of the beef calf, or meat lamb, kid or piglet or the mother would otherwise be compromised, calves may be weaned before six months of age, lambs and kids may be weaned before three months of age and piglets may be weaned before six weeks of age. A record MUST be kept of each instance and the reasons for this early weaning.
- 2.15.19 Weaning deer calves at less than three months old is prohibited. [DEER ONLY]
- 2.15.20 The average weaning age of deer calves in the herd MUST be four months. [DEER ONLY]
- 2.15.21 **Recommended** Mating or post-rut weaning should be practiced. [DEER ONLY]
- 2.16 Castration (Animals)

```
(EU) 2018/848, Part II (1.7.9), (1.7.10)
AWA Standards 2020 (4.7)
```

Beef and dairy calves and piglets may be castrated.

- 2.16.1 Buck kids or ram lambs may only be castrated when uncontrolled breeding cannot be prevented by any other management.
- 2.16.2 Immunocastration and other forms of chemical (synthetic or natural) castration or testosterone production limiting methods are prohibited.

Note: AGW is reviewing the evidence relating to immunocastration in pigs. Any farm wishing to use this method of castration MUST first contact AGW.

- 2.16.3 Castration using rubber bands or rings is prohibited for calves over seven days of age.
- 2.16.4 Castration using scalpel or burdizzo is prohibited for calves over two months of age.

Note: We understand that extensive beef operations may have difficulty with this standard. Such operations should contact AGW for guidance.

2.16.5 It is prohibited to castrate lambs and kids that are more than seven days old.

Note: Lambs/kids may be castrated using rubber rings, scalpel or emasculator (burdizzo).

2.16.6 It is prohibited to castrate piglets that are more than seven days old.

Note: Where a risk to the piglets' health or welfare can be demonstrated this period can be extended to 14 days.

2.16.7 Castration of male deer is prohibited.

2.17 Other Physical Alterations (animals)

(EU)2018/848, Annex II, Part II (1.7) AWA Standards 2020 (4.8)

2.17.1 Tail docking of beef and dairy cattle, sheep, deer and pigs is prohibited.

Note: Shepherds who meet all other AWA protocols but do not meet the standard on tail docking are invited to contact AGW to discuss a timetable to come into full compliance. [SHEEP ONLY]

- 2.17.2 Dehorning is prohibited. Horns may be tipped as long as the living tissue inside the horn is not being cut.
- 2.17.3 Mulesing of sheep is prohibited.
- 2.17.4 Spaying of heifers is prohibited.
- 2.17.5 Disbudding of beef and dairy calves, lambs, kids and deer is prohibited.

Note: Approval may be issued by AGW only on a case by case basis, when it improves the health, welfare or hygiene of the livestock or where workers safety would otherwise be compromised. (Calves and kids only)

2.17.6 Where approved by AGW, disbudding of beef or dairy calves over two months of age is prohibited.

Note: We understand that extensive beef operations may have difficulty with this standard. Such operations should contact the Animal Welfare Approved office AGW for guidance.

2.17.7 Where approved, beef or dairy calves, two months or younger, may be disbudded using hot iron cauterization. Hot iron cauterization MUST be preceded and followed by administration of appropriate anesthetic and analgesia.

Note: Derogation to this standard will only be granted if the farmer can show that they cannot legally obtain local anesthetics and analgesics. [NOT IN EU]

2.17.8 Where approved, caustic paste may be used to disbud beef or dairy calves that are no older than seven days.

Note: Best practice recommendations for use of caustic paste are as follows. Great care needs to be taken in applying the paste: hair around the horn bud should be clipped, paste should only be applied to the horn bud and rubbed in well, and petroleum jelly should be applied in a ring around the horn bud to prevent the paste running. It is not recommended to carry out this procedure in wet conditions.

2.17.9 Where approved, kids 10 days old or less may be disbudded using hot iron cauterization. Hot iron cauterization MUST be preceded and followed by administration of appropriate anesthetic and analgesia.

Note: Derogation to this standard will only be granted if the farmer can show that they cannot legally obtain local anesthetics and analgesics.

2.17.10 **Recommended** Caustic paste disbudding should not be used for kids.

- 2.17.11 Note: Please contact AGW for guidance if you wish to disbud using caustic paste.
- 2.17.12 **Recommended** Choosing polled breeds, which avoids the need to disbud animals, is recommended. [BEEF AND DAIRY]
- 2.17.13 De-wattling [GOATS] is prohibited.
- 2.17.14 De-scenting bucks is prohibited.
- 2.17.15 If removal of supernumerary teats on dairy females is to be done the procedure MUST be carried out by a competent person using an effective local anesthetic before the calves are five weeks old.
- 2.17.16 Clipping, grinding or filing of the needle teeth of piglets is prohibited.
- 2.17.17 Removal of boar's tusks is prohibited.

Note: Trimming the tusks on boars as needed may be done with a surgical wire by a trained individual.

2.17.18 Nose ringing of pigs is prohibited.

Note: Derogation may be granted for one septum nose ring for breeding sows only if it can be demonstrated that the activity of the sow would otherwise damage soil structure, cause environmental pollution, or compromise the welfare of her litter.

- 2.17.19 Removing antlers from stags in velvet is prohibited. [DEER ONLY]
- 2.17.20 If required for safety and management purposes, hardened antlers can be trimmed above the pedicle at any time by a person competent to carry out the task. Stags MUST be restrained in a system they are familiar with or sedated with a tranquilising drug to minimize shock or fear. [DEER ONLY]

Note: Where animals are tranquilised, the darting standards MUST be adhered to.

2.18 Identification (animals)

AWA Standards 2020 (4.9)

- 2.18.1 Where identification is required it MUST not cause harm to the animal.
- 2.18.2 **Recommended** The preferred method for permanent identification is Sub-Cutaneous Radio Frequency Identification.
- 2.18.3 **Recommended** The preferred method of temporary identification is non-toxic paints or dyes.
- 2.18.4 Ear tagging, tattooing and [freeze branding of beef cattle and dairy cattle] are permitted methods of identification.
- 2.18.5 Ear-marking by cutting/notching the ears of pigs or cattle MUST be carried out with an ear notching tool. Cutting/notching with a knife is prohibited.
- 2.18.6 Marking cattle by cutting/notching the dewlap is prohibited.
- 2.18.7 Ear marking by cutting/notching the ears of goats, sheep and deer is prohibited.

2.18.8 Hot branding [of beef, deer and dairy cattle] is prohibited.

Note: Flank or rump branding may be carried out when required by state law or by financial institutions, breed societies or when there is a risk of theft or unintentional mixing with other herds. If both hot iron and freeze branding are permitted, freeze branding MUST be used when practical. Please contact AGW to discuss any requirement to brand.

2.19 General Management of Poultry

(EU)2018/848, Annex II, Part II (19.4.4) AWA Standards 2020 (5.0)

2.19.1 All birds MUST be thoroughly inspected at least twice per 24 hours.

Note: During the inspection the welfare of each bird MUST be observed. If any bird is not in a state of well-being, it MUST be cared for immediately and corrective measures MUST be taken. During a time of increased risk to health and welfare, inspections MUST be increased as necessary to protect the bird's well-being.

- 2.19.2 Birds MUST be maintained in stable groups of a suitable size to uphold a well-functioning hierarchy. Introduction of new birds to a group MUST be carefully managed and supervised.
- 2.19.3 Special care MUST be taken when mixing breeding males to minimise harm to individuals.
- 2.19.4 Poultry MUST be carefully monitored to minimise fighting, feather pecking and other negative behaviours, and necessary steps MUST be taken to protect birds from harm.
- 2.19.5 Laying hens MUST not be kept in groups of more than 3000 in a single compartment of a poultry house.
- 2.19.6 The total usable area for fattening poultry in houses MUST not exceed 5249sq ft (1600m2).
- 2.19.7 **Recommended** Chickens and turkeys should be kept in flocks of no more than 500 birds.
- 2.19.8 **Recommended** Ducks and geese should be kept in flocks of no more than 100 birds.
- 2.19.9 If negative behaviours affecting the welfare of birds in the flock are seen or reported, management and/or breed changes MUST be made to improve welfare.

Note: AGW may require the farmer to reduce the flock or colony size within the affected flock or any future flocks in order to remain in the program. Flock size is a factor that has been shown to affect the occurrence of negative behaviours such as feather pecking, cannibalism and others.

- 2.19.10 Female birds MUST be protected from excessive injury during treading.
- 2.19.11 All chickens and turkeys MUST have access to dust baths.
- 2.19.12 All ducks and geese MUST have access to water for behavioural needs (see section 2.31).

- 2.19.13 The use of goggles or other similar devices designed to reduce feather pecking is prohibited. [Chickens and turkeys]
- 2.19.14 Poultry systems MUST be arranged and managed in such a way to minimise mortality.
- 2.19.15 Where identification is required it MUST not cause harm to the bird.

2.20 Management of Breeding Flocks and Laying Birds

AWA Standards 2020 (5.1)

- 2.20.1 Birds MUST be allowed to moult naturally. Forced moulting is prohibited.
- 2.20.2 Unless compliant with AWA meat chicken / duck / goose / turkey standards, a breeder or layer flock MUST go through at least two laying cycles before removal of the flock.

Note: To be compliant with AWA meat chicken/duck/goose/turkey standards requires laying hens to be slaughtered at AWA reviewed and recommended slaughter plants and to be marketed under the AWA logo. This does not apply if birds are euthanised, composted or otherwise disposed of.

If the farm is not compliant with AWA meat chicken / duck / turkey / goose standards, only under exceptional circumstances may a farmer seek permission from AGW to end the life of a flock prior two laying cycles.

2.21 Provision for Hatching

AWA Standards 2020 (5.2)

The following standards apply if hatching takes place on or under the control of the approved farm.

- 2.21.1 **Recommended** Natural brooding is recommended.
- 2.21.2 A hen sitting on eggs may be removed from the flock and excluded from ranging and foraging areas during brooding and for up to four weeks after the chicks / ducklings / goslings / poults have hatched as long as the indoor and foraging area requirements in standard 2.25.3 are met.
- 2.21.3 Hatching records MUST be kept. These MUST include:
 - 2.21.3.1 The number of eggs received.
 - 2.21.3.2 The number of eggs set.
 - 2.23.3.3 The number of eggs hatched.
 - 2.23.3.4 The number of chicks, ducklings, poults or goslings delivered to the growing farm/transferred to the meat or layer operation.
- 2.21.4 The hatchery MUST be constructed to allow easy cleaning and disinfection.
- 2.21.5 There MUST be an alarm to show power failure to the incubator and hatchery.

- 2.21.5.1 **Recommended** There should be alarms to show when temperature and humidity in the incubator and hatcher are outside of expected levels.
- 2.21.6 There MUST be a backup power source that meets the power requirements for the hatchery.
- 2.21.7 The backup power source MUST be maintained and tested as per the manufacturer's instructions with a record kept of this.

2.22 Management of Chicks, Pullets, Ducklings, Goslings and Poults AWA Standards 2020 (5.3)

- 2.22.1 Throwing young birds or mechanical moving of young birds from delivery containers is prohibited.
- 2.22.2 Young birds MUST be placed from a height of 12 in (30.48 cm) or less.
- 2.22.3 Litter MUST be provided from placement of young birds.
- 2.22.4 Young birds MUST be placed within 36 hours of the first egg hatching.
- 2.22.5 **Recommended** Young birds should have access to forage from 24 hours after placement.
- 2.22.6 Young birds MUST have access to forage by seven days of age.
- 2.22.7 Meat chickens and meat turkeys MUST have access to raised areas from four weeks of age. These may be perches or may be provided by straw bales or other items that allow the birds to get up off the floor.
- 2.22.8 **Recommended** Meat birds should have access to raised areas from 10 days of age.
- 2.22.9 **Recommended** Meat birds should have at least 1 inch (2.54cm) per bird aerial perch space or 1 sq in (2.54cm). per bird on a raised platform.

Note: The recommended space allowances for raised areas can be met by only providing perches, only providing raised platforms – such as bales or raised flat planks – or a combination of the two. If birds are observed competing for space, more raised areas should be provided.

2.22.10 **Recommended** Raised areas for meat birds should be at least 4.5 inches (11.43cm) off the floor.

2.23 Physical Alteration of Poultry

```
(EU)2018/848, Annex II, Part II (1.9.4.3)
(EU)2018/848, Annex II, Part II (1.7.8)
AWA Standards 2020 (5.4)
```

- 2.23.1 All mutilations or physical alterations of poultry are prohibited. These include:
 - 2.23.1.1 De-beaking or de-billing (beak/bill clipping, tipping and trimming).
 - 2.23.1.2 De-clawing.

- 2.23.1.3 De-spurring. [Not water fowl]
- 2.23.1.4 De-toeing or toe trimming. [Not waterfowl]
- 2.23.1.5 Hole punching.
- 2.23.1.6 Pinioning.
- 2.23.1.7 Notching.
- 2.23.1.8 Wattle trimming. [Not waterfowl]
- 2.23.1.9 Comb trimming. [Not waterfowl]
- 2.23.1.10 De-snooding. [Turkeys]
- 2.23.2 Trimming feathers is permitted. Skin or flesh MUST not be cut.
- 2.23.3 Castration (caponising) of poultry is prohibited.
- 2.23.4 Live plucking of poultry is prohibited.

2.24 General Food and Water Standards

```
(EU) 2018/848, Annex II, Part II (1.4)
```

(EU) 2018/848, Article 11

(EU) 2018/848, Article 14 (2b(ii))

AWA Standards 2020 (6.0)

- 2.24.1 Feed for livestock MUST be obtained primarily from the holding where the livestock are kept or MUST be obtained from organic or in-conversion holdings in the same region.
- 2.24.2 Up to 20% of the total average amount of feed fed to livestock may originate from the grazing of permanent pastures, perennial forage or protein crops in the first year of conversion, provided that the feed comes from the holding where the livestock are kept.
- 2.24.3 Up to 25% on average of the feed may comprise in-conversion feed from the second year of conversion. This may be increased to 100% if this in-conversion feed comes from the holding where the livestock are kept.

Note: Where first and second year in-conversion feeds are used, the total combined percentage of such feed MUST not exceed 25%.

- 2.24.4 The figures in 2.24.2 and 2.24.3 MUST be calculated annually as a percentage of the dry matter of feed of plant origin.
- 2.24.5 Livestock MUST be fed with organic or in-conversion feed that meets the animals nutritional requirements at various stages of its development.
- 2.24.6 Animals MUST have a feeding plan that will guarantee a varied, well-balanced and wholesome nutritional regime appropriate for their age.

Note: Particular attention MUST be paid to older does/ewes that may have poor teeth.

- 2.24.6.1 A source of calcium MUST be provided for layers.
- 2.24.7 A list of ingredients or sample tear tags from all feed, feed blocks and mineral blocks used on farm MUST be made available to the AGW representative.
- 2.24.8 Food and water MUST be distributed in a way that eliminates competition.
- 2.24.9 Animals MUST have free access to clean, fresh water at all times.
- 2.24.10 If the farm operations cannot accommodate the nutritional needs of subordinate deer, they MUST be sorted from the herd and allowed to form their own subgroup. This does not apply to nursing calves.
- 2.24.11 Restricted feeding is prohibited unless justified for veterinary reasons.
- 2.24.12 Feeding meat or animal by-products is prohibited.
- 2.24.13 Feeding fishmeal and other aquatic products to ruminants is prohibited.
- 2.24.14 Fish and aquatic products fed to pigs and poultry MUST come from sustainable sources.
- 2.24.15 Note: Feeding certified organic dairy products or by-products is permitted. By-products of aquatic species caught or farmed for human consumption and/or those that come from fisheries with a valid certificate of sustainability (e.g. from MSC) may be classed as sustainable.
- 2.24.16 Livestock MUST not be kept in conditions or on a diet which may encourage anaemia.
- 2.24.17 Fattening practices MUST always respect the normal nutritional patterns for each species and the animals welfare at each stage of the rearing process.
- 2.24.18 Force-feeding is prohibited.
- 2.24.19 Growth promoters and synthetic amino-acids are prohibited.
- 2.24.20 Milk replacers containing chemically synthesised components or components of plant origin are prohibited.
- 2.24.21 Feed materials of plant, algal, animal or yeast origin MUST be organic.
- 2.24.22 Non-organic feed materials of plant, algal, animal or yeast origin may only be used if they have been authorised for use by AGW in Annex 5.
- 2.24.23 Feed materials of microbial or of mineral origin, feed additives and processing aids may only be used if they have been authorised for use by AGW in Annex 5.
- 2.24.24 Where silage additives are used, these MUST be approved for use by AGW in Annex 5.
- 2.24.25 The use of feed or feed ingredients containing GMOs is prohibited.
- 2.24.26 Where non-organic feed or feed ingredients are used, the farmer MUST require the vendor to confirm that those products are not produced from or by GMOs.

2.24.27 The percentage of dry matter of feed from agricultural origin MUST be calculated annually for each feeding group.

2.25 Food and Water for Ruminants

```
(EU)2018/848, Annex II, Part II (1.9.1.1)
(EU)2018/848, Annex II, Part II (1.9.2.1)
AWA Standards 2020 (6.1)
```

2.25.1 At least 60% of the feed MUST come from the farm itself, or if this is not feasible or such feed is not available, MUST be produced in cooperation with other organic or inconversion holdings and feed suppliers using organic feed and feed materials from the same region.

Note: This percentage MUST be raised to 70% from 1st January 2023.

- 2.25.2 To ensure proper rumen function cattle/sheep/goats/deer MUST be provided with at least 70% long fibre roughage/forage in their diet on a daily dry matter basis from weaning onwards (see also 2.25.3).
- 2.25.3 The minimum requirement for roughage for **lactating** dairy cows/dairy sheep/dairy goats is 60% long fibre roughage/forage on a daily dry matter basis.
- 2.25.4 Any changes in diet MUST be carried out gradually to minimise rumen problems.
- 2.25.5 The nutritional regime and pasture management plan MUST take into account the added nutritional requirements of lactating animals (see also 2.24.6 and 2.28.10).
- 2.25.6 Feedlots and other types of confinement feeding operations are prohibited.
- 2.25.7 Wild ponds MUST be checked on a routine schedule to ensure that no deer are stuck or in jeopardy [DEER ONLY].
 - 2.25.7.1 Frozen wild water sources MUST be checked often to ensure that no deer are in jeopardy from falling through the ice [DEER ONLY].
 - 2.25.7.2 Any deer discovered dead in a wild water source MUST be removed immediately so as not to contaminate the water source [DEER ONLY].
- 2.25.8 **Recommended** RUMINANTS ONLY] Livestock feeds should minimise ingredients that are in direct competition with human nutrition.

Note: Feeds that are in competition for human nutrition include soya and grains.

2.26 Food and Water for Pigs

```
(EU)2018/848, Annex II, Part II (1.9.3.1)
(EU)2018/848, Article 11 (1)
AWA Standards 2020 (6.2)
```

2.26.1 All pigs MUST have continuous access to forage to meet behavioral needs and to satisfy hunger.

Note: Forage may consist of grass, clean hay, straw, soybean hulls or similar fiber sources and crop stubble.

2.26.2 Skip-a-day or interval feeding plans are prohibited.

- 2.26.3 At least 30% of the feed MUST come from the farm itself, or if this is not feasible or such feed is not available, MUST be produced in cooperation with other organic or inconversion holdings and feed suppliers using organic feed and feed materials from the same region.
- 2.26.4 Where farmers are unable to obtain protein feed exclusively from organic production and AGW have confirmed that organic protein feed is not available in sufficient quantity, non-organic protein feed may be used provided that the following conditions are fulfilled.
 - 2.26.4.1 It is not available in organic form.
 - 2.26.4.2 It is produced or prepared without chemical solvents.
 - 2.26.4.3 No products produced by or from GMOs have been used in the manufacturer of the feed (see Section 7).
 - 2.26.4.4 Its use is limited to the feeding of piglets up to 35kg with specific protein compounds.
 - 2.26.4.5 The maximum percentage authorised per period of 12months for those animals does not exceed 5%.

Note: Non-organic protein feed may only be used up to 31st December 2025.

2.27 Food and Water for Poultry

(EU)2018/848, Annex II, Part II (1.9.4.2) AWA Standards 2020 (6.3)

- 2.27.1 Poultry MUST have constant access to food during daylight hours.
- 2.27.2 Birds MUST always have access to insoluble grit. Birds MUST be able to pass the grit into the gizzard.

Note: Grit may be obtained from the environment or provided as a supplement. If provided as a supplement it can be removed 48 hours prior to slaughter.

- 2.27.3 Synthetic yolk colorants are prohibited.
- 2.27.4 At least 30% of the feed MUST come from the farm itself, or if this is not feasible or such feed is not available, MUST be produced in cooperation with other organic or inconversion holdings and feed suppliers using organic feed and feed materials from the same region.
- 2.27.5 Where farmers are unable to obtain protein feed exclusively from organic production and AGW have confirmed that organic protein feed is not available in sufficient quantity, non-organic protein feed may be used provided that the following conditions are fulfilled.
 - 2.27.5.1 It is not available in organic form.
 - 2.27.5.2 It is produced or prepared without chemical solvents.
 - 2.27.5.3 No products produced from or by GMOs have been used in the manufacturer of the feed (see 7).

- 2.27.5.4 Its use is limited to the feeding of piglets up to 35kg with specific protein compounds.
- 2.27.5.5 The maximum percentage authorised per period of 12months for those animals does not exceed 5%.

Note: Non-organic protein feed may only be used up to 31st December 2025.

2.28 General Pasture Access / Ranging and Foraging Area Access

```
(EU) 2018/848, Article 14 (2b)
(EU) 2018/848, Article 14 (3e)
(EU) 2018/848, Annex II, Part II (1.4)
(EU) 20018/848, Annex II, Part II (1.6)
(EU) 2018/848, Annex II, Part II (1.7)
(EU) 2018/848, Annex II, Part II (1.9.1.1)
AWA Standards 2020 (7.0)
```

The aim of good pasture or ranging and foraging area management is to satisfy the herd or flock's food-seeking behaviours. Animals MUST be able to explore the ground and their natural environment.

Note: For goats, all standards in this section that relate to pasture access MUST also be applied to browse access. Browse is normally shrubby, taller material. If given a choice, goats will obtain up to 50% of their daily feed from browsing rather than grazing.

For pigs all standards in this section that relate to pasture access MUST be applied to the ranging and foraging area.

For management of animals in extreme weather please see sections 2.32 and 2.34.

- 2.28.1 Organic animals MUST graze on organic land.
- 2.28.2 The total stocking density for the whole holding MUST not exceed the limit of 170kg of organic nitrogen per hectare per year.
 - 2.28.2.1 The total stocking density of livestock for the holding MUST be calculated annually, using nitrogen per type of animal production figures set in Annex 6.
- 2.28.3 Continuous outdoor pasture access is required for all beef and dairy cattle, all sheep, all goats and all deer.
- 2.28.4 Continuous ranging and foraging area access is required for all pigs from the age of 21 days (see also 2.12.21 and 2.12.22).
- 2.28.5 In climatic conditions that do not pose a risk to bird welfare continuous daytime ranging and foraging area access is required for all birds from the age of four weeks onwards.

Note: AGW recommends that all birds have access to the outdoor ranging and foraging area from as early on in life as possible. This could be from two to three days old onwards if conditions allow.

2.28.6 **Recommended** Pasture areas/ranging and foraging areas should be used in rotation. Both extensive and rotational systems are permitted.

- 2.28.7 The amount of outdoor area MUST be such that the health and welfare of the animals and pasture quality/ranging and foraging area quality is maintained.
- 2.28.8 Pasture areas/Ranging and foraging areas and the fencing that surrounds them MUST be designed and maintained so they do not pose a risk or inflict injury on the animals.

Note: This includes keeping pastures/ranging and foraging areas free of old fencing, old farm machinery and any other debris that could cause injury.

- 2.28.9 Animals MUST have access to pasture/ranging and foraging areas that are well drained and clean.
- 2.28.10 A pasture/ranging and foraging area management plan MUST be in place that addresses the specific farm site. It MUST ensure that:
 - 2.28.10.1 The nutritional requirements of grazing animals can be adequately met through grazing and appropriate supplementation.
 - 2.28.10.2 Poultry and pigs MUST have access to growing green vegetation on the range whenever conditions allow.
 - 2.28.10.3 The composition of the pastures/ranging and foraging areas does not create health problems for the animals.
 - 2.28.10.4 Animals have access to fresh, clean pasture/ranging and foraging areas that has not become polluted with manure.
 - 2.28.10.5 The location of water, shelter, and feeding areas is addressed.
- 2.28.11 The activity of the animals MUST not cause more than 20% of the pasture area they are kept on to be denuded.
- 2.28.12 Animals and pastures MUST be managed to avoid the risk of bloat.
- 2.28.13 In red deer pens, animals MUST be able to roll in the mud to ensure skin grooming and body temperature regulation. (DEER ONLY)
- 2.28.14 **Recommended** Annual testing of pasture or forage nutritional content is recommended.
- 2.28.15 Organic animals may graze on common land (community land), providing that:
 - 2.28.15.1 The common land has not been treated with products or substances prohibited by these standards in the last three years.
 - 2.28.15.2 Any non-organic animals which use the common land are not fed feed prohibited by these standards.
 - 2.28.15.3 Any livestock products from organic animals that were produced during the period of which they grazed on common land are not considered as organic unless adequate segregation from non-organic animals can be proved.
- 2.28.16 During the period of transhumance, organic animals may graze on non-organic land when they are being moved on foot from one grazing area to another. During that

period, organic animals shall be kept separate from other animals. The update of nonorganic feed, in the form of grass and other vegetation on which the animals graze shall be allowed:

- 2.28.16.1 For a maximum of 35days covering both the outward and return journeys, or
- 2.28.16.2 For a maximum of 10% of the total feed per year, calculated as a percentage of the dry matter of feedstuffs of agricultural origin.

2.29 Ranging and Foraging Area Access for Pigs

```
(EU)2018/848, Annex II, Part II (1.7)
(EU)2018/848, Annex II, Part II (1.9.3.2)
AWA Standards 2020 (7.2)
```

- 2.29.1 Ranging and foraging areas MUST have evidence of grown vegetative cover within the last calendar year (refer to ranging and foraging area management plan 2.28.10).
- 2.29.2 Where vegetative cover cannot be maintained throughout the year manipulable material MUST be provided (refer to ranging and foraging area management plan 2.28.10).
- 2.29.3 **Recommended** Denuded ranging and foraging areas should be rested and allowed to regenerate after each group of pigs.
- 2.29.4 When pigs are at risk of heat stress, wallows or sprinklers, in combination with natural or artificial shade, MUST be provided.
- 2.29.5 Confinement systems, in-house or field-based pens or cages that restrict the pigs' natural behaviors, are prohibited.
- 2.29.6 Any ranging and foraging enclosure area provided for pigs MUST offer separate dunging, feeding, wallowing and foraging areas.
 - 2.29.6.1 The minimum pen size for pigs MUST be 1400 sq ft (130m2).
 - 2.29.6.2 Each adult pig MUST have at least 700 sq ft. of space (65m2).
 - 2.29.6.3 Each market pig MUST have at least 56 sq ft. of space (5.2m2).

2.30 Ranging and Foraging Area Access for Poultry

```
(EU)2018/848, Annex II, Part II (1.7)
(EU)2018/848, Annex II, Part II (1.9.4.4)
AWA Standards 2020 (7.3)
```

- 2.30.1 The activity of the birds MUST not cause more than 20% of the ranging and foraging area on being denuded.
- 2.30.2 The ranging and foraging area MUST be useable and accessible.

Note: Areas are useable and accessible when it is possible for birds to get to them during their normal ranging and foraging activities. Birds may range a long way from their house or roost when there is shelter – either natural or man-made - but will stick close to the house if the area is very open and they feel threatened.

- 2.30.3 The ranging and foraging area for laying hens MUST be within 490 feet (150m) radius of the house.
- 2.30.4 Birds MUST have access to land that meets standard 2.30.1 2.30.3 for at least 50% of daylight hours.
- 2.30.5 Birds MUST be able to forage and seek nutrition from the range.
- 2.30.6 Clean drinking water MUST be continuously available to birds on range.
- 2.30.7 Birds MUST be protected from the immediate threat or fear of aerial predators.
- 2.30.8 Areas of retreat or cover MUST be available close to the birds and provided in a manner that encourages ranging behaviour and ensures maximum use of the ranging and foraging areas available.

Note: These can be natural (for example: trees, shrubs and cover crops) and/or artificial.

- 2.30.9 The colony or flocks MUST be moved before the land becomes damaged or contaminated.
- 2.30.10 Confinement systems, in-house or field-based pens or cages that restrict the birds' natural behaviours, are prohibited.
- 2.30.11 Birds MUST have space to fly, run and stretch their wings in pens on ranging and foraging areas.
- 2.30.12 The minimum pen size on ranging and foraging areas for chickens, ducks, turkeys and geese MUST be at least 18 ft (5.48 metres) by 10 ft (3.04 metres).

Note: For the purposes of this standard a pen is an enclosed area on the ranging and foraging area, usually attached to the poultry house, that allows chickens, ducks, turkeys and geese to range within a defined area.

This standard does not apply to individual hens naturally brooding chicks/poults/ducklings/goslings – see Standard 2.21.2.

- 2.30.13 **Recommended** The minimum pen size on ranging and foraging areas for ducks should be 27 ft (8.22 metres) by 15 feet (4.57 metres).
- 2.30.14 **Recommended** he minimum pen size on ranging and foraging areas for turkeys and geese should be 90 ft. (27.4 metres) by 50 feet (15.24 metres).
- 2.30.15 Fully enclosed (covered) pens on ranging and foraging areas may only be used when there is a predator risk that cannot be controlled by other means.
- 2.30.16 A fully enclosed pen on ranging and foraging areas for chickens, ducks, turkeys and geese MUST be at least 4 ft. (1.21 metres) high.
- 2.30.17 **Recommended** A fully enclosed pen on ranging and foraging areas for ducks should be at least 6 feet (1.82 metres) high.
- 2.30.18 **Recommended** A fully enclosed pen on ranging and foraging areas for turkeys and geese should be at least 8 feet (2.44 metres) high.

- 2.30.19 If pens on ranging and foraging areas are moved in the lifetime of the flock protocols MUST be in place to ensure no harm comes to birds during the move.
- 2.30.20 Meat chickens/ducks/geese/turkeys MUST have continuous daytime access to land that meets standard 2.30.1 2.30.3 for at least half their lives.

Note: For AWA, birds may be removed from pasture if the requirements of sections 2.32 and 2.32.1 are met. However, if this time exceeds more than half the bird's life the meat cannot be marketed as "Free Range."

- 2.30.21 After the brooding period each meat chicken MUST have continuous access to at least 11 sq ft (1 sq m) range and foraging area.
- 2.30.22 After the brooding period and up to point of lay each hen MUST have continuous access to at least 11 ft² (1 m²) range and foraging area.
- 2.30.23 From point of lay onwards each hen MUST have continuous access to at least 43 sq ft. (4 sq m.) range and foraging area.

Note: If at least 108 sq ft (10 sq m.) per bird is available, and where rotation is practiced such that hens are given even access to the entire area during their lives, each area in use need only provide at least 27 sq ft. (2.5 sq m.) per bird.

Note: For certification as AWA, birds may be removed from pasture if the requirements of sections 7.5 and 7.6 are met. However, unless the removal is mandated by regulation (for example in an outbreak of Avian Influenza) AND the time off pasture does not exceed 16 weeks, the eggs cannot be marketed as "Free Range."

- 2.30.24 After the brooding period each duck MUST have continuous access to at least 22 sq ft(2 sq m) range and foraging area.
- 2.30.25 After the brooding period each turkey/goose MUST have continuous access to at least 43 ft² (4 m²) range and foraging area.
- 2.31 Access to Water for Ducks and Geese

AWA Standards 2020 (7.4) (EU)2018/848, Annex II, Part II (1.9.4.4)

- 2.31.1 Ducks and geese MUST always have access to water for behavioural needs.
- 2.31.2 Note: Different species have different behavioural needs. All ducks and geese MUST have access to water such that they can dip their heads in water and spread water over their feathers. Mallard ducks additionally require water they can swim in, whereas Muscovy ducks do not. Geese should additionally have water they can swim in. Ducklings and goslings are included in the requirement above but they MUST be protected from the risk of drowning. This may necessitate excluding them from large bodies of water and/or deep water.
- 2.31.3 Water for swimming needs MUST be deep enough for birds to fully invert their bodies in the water and swim without their feet touching the bottom.
- 2.31.4 Natural and artificial water sources MUST be kept clean and well maintained.
- 2.31.5 Ponds and swimming water MUST be maintained and managed to prevent environmental pollution.

2.32 Exclusion from Pasture / Ranging and Foraging Areas

AWA Standards 2020 (7.5)

For the purposes of these standards Animal Welfare Approved defines exclusion from pasture/ranging and foraging areas as the following:

- Shutting animals into a house or barn.
- Keeping animals outdoors, outside of the growing season, on a sacrifice pasture (or similar).
- Keeping animals outdoors when pasture/ranging and foraging areas is/are covered to the point that animals cannot access vegetation (e.g. when pasture is snow covered).

Animals who have been properly selected for the specific climate conditions will voluntarily choose to go outdoors in all but the most extreme weather. However when exclusion is in the best interest of the animal the standards in the following section and those in 2.34 MUST be met.

- 2.32.1 Animals may only be removed from pasture/ranging and foraging areas when their welfare would otherwise be negatively affected.
- 2.32.2 Note: Acceptable reasons for removal from pasture/ranging and foraging areas could include the following: extreme weather, emergencies; for example wildfires, overnight removal from pasture for predator protection, ensuring piglets for up to four weeks post weaning have adapted to solid feed and are trained to fencing and allowing a hen/duck/goose to carry out natural brooding.
- 2.32.3 If there is planned removal of animals from pasture/ranging and foraging areas for any length of time OR in an emergency where removal from pasture/ranging and foraging areas exceeds 28 days, the farmer MUST put into place a written plan for animal management. It MUST include:
 - 2.32.3.1 Triggers for housing such as temperature, precipitation or soil condition.
 - 2.32.3.2 Space available to each housed animal.
 - 2.32.3.3 Facilities available to house the animals. These MUST include lying areas, loafing areas, feeding areas and space to enable animals to fulfill their behavioral needs.
 - 2.32.3.4 Triggers for animals to be returned to pasture.

Note: It is not acceptable to use a particular date during the year as a trigger for either housing or return to pasture/ranging and foraging areas. Triggers should relate to the identified risk to the welfare of the animals under particular climatic or environmental scenarios.

2.33 Exclusion from Ranging and Foraging Areas for Pigs and Poultry

(EU)2018/848, Annex II, Part II (1.9.4.4) AWA Standards 2020 (7.6)

- 2.33.1 When pigs are excluded from ranging and foraging areas they MUST be provided with sufficient material they can manipulate so that they can engage in rooting and foraging behavior.
- 2.33.2 If birds are excluded from daytime access to ranging and foraging areas they MUST be provided with vegetative material so that they can engage in foraging behavior.

2.34 General Housing Standards

```
(EU) 2018/848, Article 14 (3d)

(EU)2018/848, Annex II, Part II (1.5)

(EU)2018/848, Annex II, Part II (1.6)

(EU)2018/848, Annex II, Part II (1.7)

(EU)2018/848, Annex II, Part II (1.9.1.2)

(EU)2018/848, Annex II, Part II (1.9.2.2)

(EU)2018/848, Annex II, Part II (1.9.3.2)

(EU)2018/848, Annex II, Part II (1.9.4.4)

AWA Standards 2020 (8.0)
```

Shelter for beef and dairy cattle, sheep and goats and deer may be provided by natural features such as shade, trees, or by buildings. Housing may also be used as shelter.

- 2.34.1 In climatic regions where their thermal comfort may be negatively impacted, beef and dairy cattle, sheep and goats and deer MUST have continuous access as required to housing or shelter that protects them from weather extremes, including high winds, sleet and heavy snows, and sun.
 - 2.34.1.1 Goats MUST have shelter from the rain.
- 2.34.2 The thermal comfort of pigs and poultry MUST be protected by provision of housing or shelter with natural or mechanical temperature and humidity control as required. The needs of all ages and stages of production and local climatic extremes MUST be taken into account when planning housing or shelter.

Note [PIGS ONLY]: This standard does not supersede 2.12.15 which requires a hut, arc or pen for sows about to farrow. For other types of pig particular attention MUST be paid to predation and management of thermal stress if shelter without a roof is being considered.

Note: [PIGS ONLY]: If the temperature drops below 59F (15C) for more than 7 days in a row, natural shelter is not sufficient to protect pig thermal comfort and man made arks, huts or barns MUST be provided.

Note: [POULTRY ONLY]: If the temperature drops below 55F (13C) for more than 7 days in a row, natural shelter is not sufficient to protect bird thermal comfort and man made houses or shelters MUST be provided.

- 2.34.3 In extreme weather there MUST be a means to feed and water animals in a sheltered environment.
- 2.34.4 Shelters and housing MUST be positioned away from areas of run off or potential run off.
- 2.34.5 Shelters and housing MUST be well ventilated and allow fresh air to enter.
- 2.34.6 Shelters and housing MUST allow natural light to enter.

- 2.34.7 All housing, huts, arks and other facilities (such as feeders and water troughs) MUST be designed and maintained in such a way that they do not pose a risk or inflict injury or damage to the animals.
- 2.34.8 Animals MUST not be subjected to dim and/or continuous lighting or kept in permanent darkness.
- 2.34.9 In the daytime, the animals MUST always be able to see each other, their food and water sources, as well as their surroundings clearly.
- 2.34.10 Inspection of animals MUST be possible at any time day or night.
- 2.34.11 Use of artificial light MUST not extend the maximum day-length beyond 16 hours.
- 2.34.12 When animals are shut into housing or shelter any artificial light MUST be distributed evenly.
- 2.34.13 [POULTRY ONLY] Poultry housing MUST be kept at an average of at least 20 lux in daylight hours.
- 2.34.14 Shelters and housing for cattle, sheep, goats and pigs and deer MUST have solid floors.

Note for cattle, sheep, goats and pigs and deer: Floors may be natural - the surface of the ground or pasture - or artificial. An area of wire or slat under a drinker will be deemed drainage not a floor.

- 2.34.15 [POULTRY ONLY] Wire mesh flooring MUST not damage the birds' feet.
- 2.34.16 [POULTRY ONLY] When poultry are excluded from outdoor, vegetated ranging and foraging areas during daylight hours they MUST continue to have access to a solid floored foraging area.

Note for poultry: See Standard 2.25.3 for space allowances when birds are excluded from outdoor, vegetated ranging and foraging areas. Existing mesh or slatted flooring areas within the house may be covered to create the equivalent of a solid surface, or birds may be given access to a solid floored foraging area outside the house – for example a winter garden or barn - when conditions do not allow them to be outside on a vegetated ranging and foraging area.

- 2.34.17 Animals at all times MUST have an area available that provides dry footing so they are not forced to stand in mud or manure.
- 2.34.18 Accommodations MUST be constructed so that they can be easily and effectively cleaned.
- 2.34.19 Manure MUST be removed from housing or shelters on a regular basis.
- 2.34.20 [POULTRY ONLY] If a house is depopulated, bedding MUST be removed and the house completely cleaned and left for at least 24 hours before restocking.
- 2.34.21 [POULTRY ONLY] Houses MUST be fully dry before a new flock is introduced.
- 2.34.22 Products used for cleaning and disinfection of livestock buildings and installations MUST be approved by AGW in Annex 4.

Note: AGW may issue a derogation where no approved products are available within the region.

2.34.23 The house or shelter MUST be managed to eliminate ammonia, dampness and mould.

Note: The human nose can detect ammonia at levels of 5ppm upwards. If the farmer can smell ammonia action MUST be taken to eliminate the source.

- 2.34.24 Liquefaction of manure and liquefied manure handling systems are prohibited. NOT APPLICABLE FOR DAIRY
- 2.34.25 Close confinement in cages, crates or by tethering is prohibited.
- 2.34.26 The use of flat decks is prohibited.
- 2.34.27 Temporary close confinement or tying up (tethering), which may be required for vaccination, weighing, feeding, milking, marking or veterinary procedures, is permitted. This MUST be noted in the farm plan or recorded at the time.
- 2.34.28 Maintenance and housekeeping routines MUST be in place to minimize any potential problems from rats or mice.
- 2.34.29 Rodenticides MUST be covered and sited away from livestock access.
- 2.34.30 Products and substances used for the elimination of insects and other pests in buildings where livestock are kept MUST be approved by AGW in Annex 7.
- 2.35 Space Allowances in Housing and Shelter

(EU) 2018/848, Article 14 (3b) (EU) 2018/848, Article 14 (3c) (EU)2018/848, Annex II, Part II (1.6) (EU)2018/848, Annex II, Part II (1.7) AWA Standards 2020 (8.1)

Space allowances for housing and shelter have been set to allow all animals to move around freely and have sufficient space to lie down allowing for the behavioural structure of the herd or flock.

[Dairy cows] If farms have both free stalls (see 2.36) and loose housing, and cows have free access to both types of housing the total area provided can be considered towards the space required by the standards. For example a farm with 50 Jersey cows each weighing 1100 lbs live weight has 42 free stalls and a barn with loose housing that is 30' by 20' = 600 sq ft. The 42 free stalls can house 40 cows (40 cows plus 5% extra space = 42) which leaves 10 cows to be housed in the loose housing. A cow of 1100 lbs needs 54 sq ft. lying area and 40 sq ft. loafing area. 10 cows would therefore require 540 sq ft. lying area plus 400 sq ft. loafing area. If a suitably sized loafing area is available outside the loose housing, and the free stalls meet the requirements of 2.36 this farm could be in compliance.

2.35.1 The following space allowances are required in housing or shelter:

Beef and dairy minimum indoor bedded lying area:

Calves up to 220lbs (100kg)	16 sq feet	1.5 sq meters
Cattle between 220-440lbs (100-200kg)	27 sq feet	2.5 sq meters
Cattle between 440-770lbs (200-350kg)	43 sq feet	4.0 sq meters
Cattle between 770-1100lbs (350-500kg)	54 sq feet	5.0 sq meters
Cattle over 1100lbs (500 kg)	11 sq ft per 220 lb live weight	1.0 sq meters per 100kg live weight

Beef and dairy minimum additional loafing area when animals are excluded from pasture:

pasture.		
Calves up to 220lbs (100kg)	16 sq feet	1.5 sq meters
Cattle between 220-440lbs (100-200kg)	20 sq feet	1.9 sq meters
Cattle between 440-770lbs (200-350kg)	32 sq feet	3.0 sq meters
Cattle between 770-1100lbs (350-500kg)	40 sq feet	3.7 sq meters
Cattle over 1100lbs (500 kg)	8 sq ft per 220 lb live weight	0.75 sq meters per 100kg live weight

Sheep and goats minimum indoor bedded lying area:

sq ft.	0.4 sq meters
5 sq ft.	0.7 sq meters
sq ft.	1.0 sq meters
.5 sq ft	1.25 sq meters
sq ft.	1.5 sq meters
5	sq ft. sq ft. 5 sq ft

Sheep and goats minimum additional loafing area

encep and godes minimum add	onecp and godes miniman additional loaning area		
Up to 44 lb (Up to20kg)	5.4 sq ft.	0.5 sq meters	
44.1 lb to 88 lb (20.1kg to	11 sq ft.	1.0 sq meters	
40kg)			
88.1 lb to 132 lb (40.1 kg to	16.5 sq ft.	1.5 sq meters	
60kg)			
132.1 lb to 176 lb (60.1 kg to	22 sq ft	2.0 sq meters	
80kg)			
176.1 lb + (80.1kg +)	27 sq ft.	2.5 sq meters	

Minimum bedded lying area (for breeder pigs)

Sows	32 sq feet	3.0 sq meters
Boars	64 sq feet	6.0 sq meters
Farrowing sows	64 sq feet	6.0 sq meters

Minimum additional loafing area when animals are excluded from a ranging and foraging area- that need not be under cover or bedded (for breeder pigs)

Sows	32 sq feet	3.0 sq meters
Boars	86 sq feet	8.0 sq meters
Farrowing sows	48 sq feet	3.0 sq meters

Minimum indoor bedded lying area (for fattening pigs)

		P.307
Up to 66 lbs (30 kg) and over 40 days	6.5 sq feet	0.6 sq meters
Up to 110 lbs (50 kg)	8.5 sq feet	0.8 sq meters
Up to 187 lbs (85 kg)	12.0 sq feet	1.1 sq meters
Up to 242 lbs (110 kg)	14.0 sq feet	1.3 sq meters

Minimum additional loafing area when pigs are excluded from ranging and foraging areas - that need not be under cover or bedded (for fattening pigs)

ioraging areas that	. Heed hot be under cover of	bedded (for factering pigs)
Up to 66 lbs (30	4.5 sq feet	0.4 sq meters
kg) and over		
40 days		
Up to 110 lbs (50	6.5 sq feet	0.6 sq meters
kg)		
Up to 187 lbs (85	8.5 sq feet	0.8 sq meters
kg)		
Up to 242 lbs (110	11.0 sq feet	1.0 sq meters
kg)		

Deer: Minimum indoor bedded lying area required when animals are excluded from pasture.

Weaned calves	25-40kg	21.5 sq feet	2 sq meters
Calves 5-11 months	40-90kg	27 sq feet	2.5 sq meters
Yearlings / adults	75kg +	32 sq feet	3 sq meters
Stags	130kg +	54 sq feet	5 sq meters

2.35.2 When pigs have access to ranging and foraging areas the following space allowances for huts and ark and for shade and shelter areas are required.

Sows	16 sq feet	1.5 sq meters
Boars	16 sq feet	1.5 sq meters
Farrowing sows	42 sq feet	4.0 sq meters

Note: Farrowing huts constructed or purchased following AWA certification MUST meet the standard above. Smaller huts that were purchased or constructed before farm approval may be acceptable.

	I		
Up to 66 lbs (30	3.0 sq feet	0.27 sq meters	
	-		
kg) and over 40			
days			

Up to 110 lbs (50 kg)	4.5 sq feet	0.4 sq meters
Up to 187 lbs (85 kg)	7.0 sq feet	0.65 sq meters
Up to 242 lbs (110 kg)	8.5 sq feet	0.8 sq meters

2.35.3 The following space allowances are required in housing or shelter when birds are shut indoors during daylight hours. They do not apply when laying hens are kept in a roost.

A roost contains perches that meet the requirements of standard 2.41.1 and may contain nest boxes; where the birds have free access to the ranging and foraging area from sunrise to sunset and where the thermal comfort of the birds can be maintained – see also Standard 2.34.2 and associated note.

Chickens - minimum indoor area

Type of bird	Space per bird	Space per bird
Meat chicken	0.75 sq ft	0.07 sq meters
Pullet	0.75 sq ft	0.07 sq meters
Laying hen	1.8 sq ft	0.16 sq meters
Breeder	1.8 sq ft	0.16 sq meters

Chickens – minimum additional foraging area when birds are excluded from a ranging and foraging area.

Type of bird	Space per bird	Space per bird
Meat chicken	2.0 sq ft	0.18 sq meters
Pullet	2.0 sq ft	0.18 sq meters
Laying hen	4.0 sq ft	0.37 sq meters
Breeder	4.0 sq ft	0.37 sq meters

Ducks - minimum indoor area

Type of bird	Space per bird	Space per bird
Meat duck	1.0 sq ft	0.09 sq meters
Laying duck	2.7 sq ft	0.24 sq meters
Breeder bird	1.8 sq ft	0.24 sq meters

Ducks – minimum additional foraging area when birds are excluded from a ranging and foraging area

Type of bird	Space per bird	Space per bird
Meat duck	3.0 sq ft	0.27 sq meters
Laying hen	6.0 sq ft	0.55 sq meters
Breeder	6.0 sq ft	0.55 sq meters

Turkeys and geese - minimum indoor area

Meat Birds	5 sq ft per bird	0.5 sq m per bird
Breeding or laying birds	5 sq ft per bird	0.5 sq m per bird

Note: Turkey stocking rate in housing MUST not exceed 5 lbs per ft^2 (35 kg per m^2). Providing 5 sq ft per bird allows for birds that reach a maximum 25 lbs liveweight. If the birds weigh more than that, additional space MUST be provided.

Goose stocking rate in housing MUST not exceed 3 lbs per ft² (30 kg per m²). Providing 5 sq ft per bird allows for birds that reach a maximum 15 lbs liveweight. If the birds weigh more than that, additional space MUST be provided.

Turkeys and geese – minimum additional foraging area when birds are excluded from a ranging and foraging area.

Meat Birds	11 sq ft per bird	1.0 sq m per bird
Breeding or laying birds	11 sq ft per bird	1.0 sq m per bird

- 2.35.4 **Recommended** Chicks/poults/goslings/ducklings should have access to at least 0.25 sq ft. (0.02 sq meters) per bird when first placed in brooders and this space should be increased as the birds grow.
- 2.35.5 Ceiling heights for temporarily housed deer MUST be higher than 3.2m, to enable deer to exhibit their natural playful behaviour. [deer only]
- 2.36 Tie Stalls (and Free Stalls)

(EU)2018/848, Annex II, Part II (1.6) AWA Standards 2020 (8.2)

[DAIRY COWS] If farms have both free stalls and loose housing (see Section 2.35), and cows have free access to both types of housing the total area provided can be considered towards the space required by the standards. See example at Section 2.35.

- 2.36.1 Tie stalls MUST only be used for milking and/or feeding immediately pre or post milking.
- 2.36.2 If rubber mats or cow mattresses are used for bedding free-stall (cubicle) housing they MUST ensure cow comfort is maintained.

Note: Cow comfort will be assessed by review of free stall (cubicle) occupancy rates and using the AssureWel measurements [see: assurewel.org] for the occurrence of hair loss/lesions and/or any other injuries.

- 2.36.3 If free stall (cubicle) housing is used for dairy cows, there MUST be five percent more stalls than cattle.
- 2.36.4 If free stall (cubicle) housing is used for dairy cows the stalls MUST have enough space for the largest cows in the herd to lie down, stand up, and lunge forward comfortably.
- 2.36.5 The following dimensions for free stalls (cubicles) for dairy cows are required:

Weight of animal	Cubicle length	Cubicle clear width
		between partitions
770-1100lbs (350-500kg)	6.56 ft (2.00 m)	3.61 ft (1.1 m)
1100-1320lbs (500-600kg)	7.05 ft (2.15 m)	3.77 ft (1.15 m)
1320-1540lbs (600-700kg)	7.55 ft (2.30 m)	3.94 ft (1.2 m)
1540-1760lbs (700-800kg)	8.2 ft (2.5 m)	4.27 ft (1.3 m)

2.36.6 Electric cow trainers are prohibited.

2.37 Temporary Separation and Hospital Pens

```
(EU)2018/848, Annex II, Part II (1.6)
AWA Standards 2020 (8.3)
```

- 2.37.1 There MUST be provision of a safe place for sick or injured animals to recover, free of competition.
- 2.37.2 If injured animals are separated from the herd or flock they MUST only be kept apart until such time they can rejoin the group without adversely affecting either the health or welfare of the individual or the herd or flock.
- 2.37.3 Animals MUST not be kept in isolation unless briefly required for veterinary procedures or to recover from an illness or injury.

Note: Individual farrowing huts or pens where the sow still has visual and auditory contact with other pigs are acceptable.

- 2.37.4 The pen or enclosure for temporarily single-housed animals MUST meet the indoor space requirements in section 2.35.
- 2.37.5 **Recommended** Temporarily single-housed animals should have visual and auditory contact with others.
- 2.37.6 At minimum, pens used for the treatment of sick animals MUST be cleaned between each use.
- 2.37.7 Deer calves MUST not be kept in isolation unless they are hand reared orphan calves in which case they MUST have regular interaction with humans and/or suitable companion animal.

Note: The companion animal for an orphan calf need not necessarily be another deer.

2.38 Bedding

```
(EU)2018/848, Annex II, Part II (1.6)
(EU)2018/848, Annex II, Part II (1.9)
(EU)2018/848, Annex II, Part II (1.9.4.4)
AWA Standards 2020 (8.4)
```

- 2.38.1 In [stationary] housing, bedding MUST be available to cattle, sheep, goats and deer and pigs and meat poultry at all times.
- 2.38.2 When birds kept in mobile houses are excluded from ranging and foraging areas during daylight hours, bedding MUST be available to poultry at all times.

Note: Bedding is not required in stationary or mobile roosts for birds where birds are only kept inside at night while perching. For the house or shelter to be considered only as a roost birds MUST have access to sufficient perches [or raised platforms] for all to roost, birds MUST be let out at first light and have un-obstructive access to the foraging area during daylight hours.

- 2.38.3 Housing and shelter MUST be kept dry. [Poultry only].
- 2.38.4 Bedding MUST be clean, dry, mould-free and replenished as needed.

- 2.38.5 Bedding MUST not cause discomfort or harm to the animals. Particular attention MUST be paid if sand is chosen as bedding.
- 2.38.6 **Recommended** Bedding with straw or hay is preferred for cattle, sheep, goats, deer and pigs.
- 2.38.7 Bedding from timber-based products sourced from chemically treated wood is prohibited.
- 2.38.8 There MUST be enough bedding to ensure the comfort of all cattle, sheep, goats, pigs and deer.
- 2.38.9 In cold temperatures heat MUST be provided as necessary to keep animals comfortable.

2.39 Raised Platforms for Goats

AWA Standards 2020 (8.5)

- 2.39.1 When goats are excluded from pasture, raised platforms MUST be provided.
- 2.39.2 **Recommended** Goats on pasture should have access to structures they can jump or climb on.

2.40 Poultry Housing – General

```
(EU)2018/848, Annex II, Part II (1.6)
(EU)2018/848, Annex II, Part II (1.9.4.4)
AWA Standards 2020 (8.6)
```

2.40.1 Houses for poultry MUST be at least 4 ft. (1.22m) high.

Note: This standard does not apply when birds always have free access in and out of the house.

- 2.40.2 Birds MUST be able to exhibit their normal physical and social behaviours including self-isolation.
- 2.40.3 All poultry MUST have access to areas of retreat both in the house and out on range.

2.41 Poultry Housing - Perches

```
(EU)2018/848, Annex II, Part II (1.6)
(EU)2018/848, Annex II, Part II (1.9.4.4)
AWA Standards 2020 (8.7)
```

- 2.41.1 Once in lay, chicken breeder flocks and laying hens MUST have access to 7 in (18 cm) aerial perch per bird.
- 2.41.2 Once in lay, Muscovy ducks (breeder flocks and laying ducks) MUST have access to perches. The aerial perch space MUST provide a minimum of 15.7 in (40 cm) per bird.

- 2.41.3 Once in lay, turkey breeder flocks and laying hens MUST have access to 15.7 in (40 cm) aerial perch per bird.
- 2.41.4 Training perches MUST be provided to pullets/Muscovy duck breeders or layers/turkey breeders or layers by the time they are 10 days old through to point of lay.
 - 2.41.4.1 **Recommended** Pullets should have at least 1 inch (2.5 cm) per bird aerial perch space.
 - 2.41.4.2 **Recommended** To encourage use, low perches around 6 to 8 inches (15 to 20 cm) high should be provided for pullets aged from 10 days to 4 weeks.
 - 2.41.4.3 **Recommended** Perches provided for pullets ages from 4 weeks through to point of lay or placement in the laying house should meet the same requirements as for laying hens (see also standard 2.41.6).
- 2.41.5 Perches for pullets, layers and breeders MUST be built in such a way that the birds can securely grip the perch, be non-slip and have no sharp edges.
- 2.41.6 Perches MUST be at least 12" (30cm) off the floor; 18" (46cm) apart vertically in ladder perches; 12" (30cm) apart vertically in A frame or diagonal perches; 12" (30cm) apart horizontally and at least 8" (20cm) from a wall.
- 2.41.7 **Recommended** Perches should be rounded with a flat top.

2.42 Poultry Housing – Nest Boxes

```
(EU)2018/848, Annex II, Part II (1.6)
(EU)2018/848, Annex II, Part II (1.9.4.4)
AWA Standards 2020 (8.8)
```

- 2.42.1 Laying and breeding birds MUST have access to nest boxes.
- 2.42.2 Laying hens and ducks MUST have at least one individual nest box for every five birds.
- 2.42.3 [Chickens and ducks only] Where communal nests are used there MUST be at least 20 sq inches per laying hen.
- 2.42.4 Laying turkeys and geese MUST have at least one nest box for every four birds.
- 2.42.5 **Recommended** There communal nests are used there should be at least 400 sq inches (0.26 sq m) per laying turkey or goose.
- 2.42.6 **Recommended** TURKEYS AND GEESE] Communal nests should be 20 inches (51 cm) by 20 inches (51 cm).
- 2.42.7 Laying birds may only be excluded from nest boxes during the nighttime perching period.
- 2.42.8 Nest boxes MUST be in a dark and secluded area.
- 2.42.9 Each nest box for chickens MUST allow the bird to perch and alight.
- 2.42.10 **Recommended** Each nest box for ducks, turkeys and geese should allow the bird to perch or alight.

- 2.42.11 Nest boxes MUST be weatherproof.
- 2.42.12 Nest boxes MUST be dry with friable and manipulable nesting material.

Note: Nest boxes for ducks and geese MUST be dry (relative to waterfowl), and the nesting habit of the breed.

- 2.42.13 Nest boxes MUST be in an area that provides ventilation.
- 2.42.14 Nest boxes for waterfowl MUST have floors that provide free drainage.
- 2.42.15 Covered nest boxes MUST be provided for Muscovy ducks.
- 2.43 Poultry Entries / Exits from the House to the Ranging and Foraging Area

```
(EU)2018/848, Annex II, Part II (1.6)
(EU)2018/848, Annex II, Part II (1.9.4.4)
AWA Standards 2020 (8.9)
```

- 2.43.1 Structures and outdoor areas MUST encourage birds to go outside in the hours of daylight.
- 2.43.2 [CHICKENS AND DUCKS] In order to allow birds free access to the ranging and foraging area, if there are more than 75 birds in the flock there MUST be either more than one entry and exit open at any time or a single entry or exit that is double the minimum width described in standard 2.43.3.
- 2.43.3 [CHICKENS & DUCKS] The minimum width for any entry or exit is 18 inches (46cm).
- 2.43.4 In order to allow birds free access to the ranging and foraging area, if there are more than 40 turkeys or geese in the flock, there MUST either be more than one entry and exit open at any time or a single entry or an exit that is double the minimum width described in standard 2.43.3.
- 2.43.5 [TURKEYS & GEESE] The minimum width for any entry or exit is 24 inches (61 cm).
- 2.43.6 [CHICKENS AND DUCKS] Openings MUST be large enough to allow at least two birds to pass without touching.
- 2.43.7 The height of any entry or exit MUST be at least one inch more than the height of the tallest bird in the flock when the bird is upright.
- 2.43.8 There MUST be no obstructions that would prevent birds from seeing the exits.
- 2.43.9 There MUST be a total length of openings of at least 1.2 ft per 100 sq ft (4 m per 100 sq m) floor area of the house.

2.44 Removal of Animals from the Approved Farm – General Standards

(EU)2018/848, Annex II, Part II (1.4) AWA Standards 2020 (9.0)

These standards only apply to animals that the approved farmer retains ownership of when they are moved off the approved farm.

- 2.44.1 When certified livestock are removed from the approved farm they MUST be kept to these standards until such time they leave the ownership of the approved farm or farmer.
- 2.44.2 There MUST be a separate and specific plan for feeding, animal health and welfare, transport, biosecurity and continued compliance with these standards while animals are removed from the approved farm.

2.45 Temporary Removal of Certified Animals from the Approved Farm

(EU)2018/848, Annex II, Part II (1.4) AWA Standards 2020 (9.0)

- 2.45.1 Certified livestock will only retain their status when temporarily removed from the approved farm for the following reasons:
 - 2.45.1.1 Male animals used for breeding.
 - 2.45.1.2 Female animals taken to be naturally served.
 - 2.45.1.3 Movement of animals in an emergency.
 - 2.45.1.4 Movement of animals prepared for showing.
 - 2.45.1.5 Movement of animals for up to 24 hours for routine management practices.

Note: This could include movement for shearing, foot care or other similar practices.

- 2.45.2 Poultry taken to shows do not have to meet ranging and foraging access standards as long as they are only off the approved farm for a maximum of 72 hours.
- 2.45.3 Ruminants and pigs taken to shows do not have to meet pasture access standards as long as they are only off the approved farm for a maximum of five days.
- 2.45.4 Breeding females MUST only be taken to farmers certified to organic standards.
- 2.45.5 If breeding animals are hired or taken to farmers that are not certified the approved farm MUST ensure that the farm they are transferring the animals to is aware of the relevant standards for management and can meet them.
- 2.45.6 Showing animals MUST be conditioned to handling, loading and human contact before movement to a show can be permitted.

2.46 Protection from Predators

AWA Standards 2020 (10.0)

- 2.46.1 All animals MUST be protected from predators. [DEER and poachers].
- 2.46.2 If livestock guardian dogs are used their management MUST meet AGW guidelines for guardian or herding canine management.
- 2.46.3 If other guardian animals are used, they MUST be suitable for guardian duties.
- 2.46.4 Guardian animals MUST be chosen with consideration of their ability to thrive in the prevailing climatic conditions of the farm, in pasture-based, free range, outdoor systems.
- 2.46.5 In the event that exclusion is unsuccessful, and predation remains an issue, live trapping may be used.
- 2.46.6 Live traps MUST be checked twice daily.
- 2.46.7 All other forms of traps are prohibited.
- 2.46.8 All snares and leghold traps are prohibited.
- 2.46.9 The use of poisons against predators is prohibited.
- 2.46.10 If live trapping is not possible or is not successful then as a last resort lethal control of specific animals may be carried out when these are causing an immediate threat to farm livestock.
- 2.46.11 If there is a continuous threat from predators that cannot be managed by live trapping advice MUST be sought from AGW regarding a control program.
- 2.46.12 Lethal control/euthanasia of predators MUST result in instantaneous irreversible unconsciousness and death.
- 2.46.13 If a predatory animal has been euthanized to protect the animals on the farm, there MUST be records kept of the species in question, number of animals, and euthanasia method.

2.47 Records and Record Keeping

AWA Standards 2020 (11.0)

This section lists the records and plans that MUST be maintained on farm and the sections where they can be found. All records and plans MUST be in a physical form that can be shown to the *AGW* auditor. Verbal plans and records are not acceptable.

Note: For new farmers entering the program a period of 12 months will be provided to put the program plans and records in place. Please contact AGW if you require assistance. AGW also provides templates for plans and records.

- 2.47.1 Each farm MUST maintain, and provide the auditor access to, records to demonstrate compliance with these standards.
- 2.47.2 Records MUST be kept of the purchase, sale or transfer of certified animals and products (e.g. mohair, fibre, wool, hides, milk, eggs, meat etc).
- 2.47.3 Records MUST be kept of mortalities and culls including the cause for these where known.

2.48 Written Plans

AWA Standards 2020 (11.1)

AGW requires the following written plans in addition to the emergency plan detailed in this section. See the relevant standard number for more information:

- Health plan; standard 2.5.4
- Pasture management plan; standard 2.28.10
- Transport plan; standard 2.51.1
- 2.48.1 A plan to care for or house animals in emergency situations MUST be prepared and be understood by all of those working on the farm.
 - 2.48.1.1 The plan MUST consider the welfare of the animals during a fire. In shelters or housing with restricted access (a single door or doorways), a fire plan MUST be established with escape routes to the outdoors, available from the interior of the shelter, to allow all animals to be evacuated quickly. In shelters or housing with restricted access, a method to extinguish the fire (fire extinguisher, water source) MUST be readily accessed. Animals MUST be kept from direct access to electrical wiring and heat sources as a fire prevention measure.
 - 2.48.1.2 The plan MUST ensure welfare of the animals is maintained in any potential climatic extreme such as floods, snow storms, or drought.
 - 2.48.1.3 The plan MUST ensure welfare of the animals is maintained during any potential disruption of services or mechanical breakdown, such as water supply cutoff and breakdown of feeding or ventilation machinery.
 - 2.48.1.4 The plan MUST ensure the welfare of animals is maintained during transport to include actions to be taken in the event of an accident or vehicle breakdown.
- 2.48.2 **Recommended** All plans for animal management should be reviewed at least annually or whenever changes to farm management practices occur, whichever is most frequent.

Note: This standard applies to the health plan (standard 2.5.4); pasture management plan (standard 2.28.10); emergency plan (standard 2.48.1) and transport plan (standard 2.51.1).

2.49 Handling Cattle, Sheep, Goats, Deer and Pigs

(EU)2018/848, Annex II, Part II (1.7) AWA Standards 2020 (12.0)

2.49.1 Efforts MUST be made to develop positive relationships between the farmer and animals through gentle handling.

- 2.49.2 All handling areas accessed by the animals MUST provide good traction, be well drained and kept clean and free of ice in the wintertime.
- 2.49.3 The use of electric prods or electric shocks is prohibited.
- 2.49.4 Abuse or maltreatment of animals is prohibited.
- 2.49.5 All animals MUST be moved in a calm and consistent manner. Stress from loud noises and rapid movements MUST be minimised.
- 2.49.6 All chutes and other facilities for loading MUST be designed to minimize stress to the animal and ensure that animals can breathe normally as they proceed through the loading process.
- 2.49.7 Herding dogs MUST be well trained.

Note: Farmers who regularly train herding dogs MUST contact AGW to discuss compliance with the standard above.

2.49.8 If working dogs are used their management MUST meet the AGW guidelines for guardian or herding canine management.

Note: Working dogs include herding dogs and livestock guardian dogs.

- 2.49.9 Animals MUST not be used for sport.
- 2.49.10 All deer handling systems MUST be constructed to take account of the behaviour of the species, designed to encourage the free movement of deer, wide enough for deer to pass through side by side and at a height of not less than two meters to prevent deer escaping. [DEER ONLY]

2.50 Handling Poultry

```
(EU)2018/848, Annex II, Part II (1.7)
AWA Standards 2020 (12.1)
```

For some egg laying operations handling of birds will be the exception. However handling of birds MUST always be carried out with care whether it is of individual birds for examination or groups of birds for flock disposal at end of lay.

- 2.50.1 Abuse or maltreatment of birds is prohibited.
- 2.50.2 Planned catching (for example to take birds to slaughter) MUST be carried out in dusk or darkness.

Note: Individual birds may be caught in daylight for required treatments or inspections.

- 2.50.3 All chickens MUST be caught and carried round the body or by both legs. Single leg catching of chickens is prohibited.
- 2.50.4 Ducks, geese and turkeys MUST always be carried individually with two hands and lifted with support to the breast and with the head upward.
 - 2.50.4.1 Ducks and geese MUST not be picked up by their legs or feet.

Note: Please contact AGW if further information on appropriate methods of catching and handling is required.

- 2.50.5 Birds MUST be caught with a minimum of chasing.
- 2.50.6 Handling and catching MUST only be done by competent persons.
- 2.50.7 Hired catching teams MUST have completed training on humane methods of handling.
- 2.50.8 In the event a bird suffers accidental injury during catching, they MUST receive individual treatment to minimize pain and suffering immediately.
- 2.50.9 Sick, injured and/or suffering birds discovered during the catching process who are not expected to recover MUST be euthanized.
- 2.50.10 Birds MUST not be used for sport.

2.51 Transport – General Standards

(EU)2018/848, Annex II, Part II (1.7) AWA Standards 2020 (13.0)

This section applies to all transport of animals including to slaughter, around the farm, between farms or delivery to farm.

- 2.51.1 A plan MUST exist to ensure that welfare of the animals/birds is maintained during transport. The plan MUST include:
 - 2.51.1.1 Transport of animals/birds to the farm.
 - 2.51.1.2 Transport of animals/birds around the farm (including moving poultry houses during the lifetime of the birds).
 - 2.51.1.3 Transport of animals/birds off the farm to other farms, to receive veterinary attention or to slaughter.

Note: See Standard 2.48.2 for recommendations on review/update of plans

- 2.51.2 All animals MUST be healthy, ambulatory and uninjured to be transported unless they are being transported to receive veterinary treatment.
- 2.51.3 The person transporting the animals MUST ensure they are transported without delay to their destination.
- 2.51.4 A competent individual MUST take responsibility for ensuring that animals do not suffer any injury or distress at any point immediately before, during and after transport.
- 2.51.5 All subcontractors, handlers and lorry drivers MUST adhere to AWA standards.
- 2.51.6 If delays during transport or unloading upon arrival at destination are anticipated, loading and transport MUST not commence until those complications are resolved.
- 2.51.7 During transport, all animals MUST be protected from harm and thermal stress. (Pigs) Particular attention MUST be paid in temperatures below 60° F (+15.5° C) or above 80° F (+26.6° C).
- 2.51.8 In the event that any animals suffer injury or distress during transport they MUST be treated or euthanized as soon as practically possible.

2.51.9 Ventilation MUST be provided that allows the animals to breathe fresh air while on the transport vehicle.

Note: When transporting birds in crates particular attention MUST be paid to ventilation passages between crates.

2.51.10 Overcrowding during transport is prohibited. The following space allowances in transport are required:

Beef and dairy animals:

Weight of beef or dairy animal	Space per beef or dairy animal	
Up to 100lbs (45kg)	4 sq ft (0.37 sq m)	
Up to 240lbs (110kg)	6 sq ft (0.55 sq m)	
Up to 440lbs (200kg)	9 sq ft (0.84 sq m)	
Up to 1200lbs (545kg)	13 sq ft (1.20 sq m)	
Over 1200lbs (>545kg)	16 sq ft (1.50 sq m)	

Sheep

энеер		
Weight of Sheep	Shorn	Full Fleece
60 lbs (27 kg)	2.13 sq ft (0.20 sq m)	2.24 sq ft (0.21 sq m)
80 lbs (36 kg)	2.50 sq ft (0.23 sq m)	2.60 sq ft (0.24 sq m)
100 lbs (45 kg)	2.80 sq ft (0.26 sq m)	2.95 sq ft (0.27 sq m)
120 lbs (54 kg)	3.20 sq ft (0.30 sq m)	3.36 sq ft (0.31 sq m)

Goats

Weight of goat	Space per goat
Up to 77lbs (35kg)	2.70 sq ft (0.25 sq m)
Up to 100lbs (45kg)	3.75 sq ft (0.35 sq m)
Up to 120lbs (55kg)	6.00 sq ft (0.55 sq m)

Pigs

1 193	1		1
Weight of pig (lbs)	Weight of pig (kg)	Space required per pig (sq ft)	Space required per pig (sq m)
<50	<23	1.5	0.14
51-100	23-45	2.2	0.20
101-150	45-68	2.9	0.27
151-200	68-90	3.5	0.32
201-300	90-136	4.8	0.45
301-400	136-181	6.1	0.57

Space allowance should be increased by 10% when temperatures exceed 80°F (+26.6° C)

Poultry

In crates: 7lbs (3kg) per cubic foot (0.028 cubic meters)

In trailers (where the birds are loose in the trailer)

Weight (lbs)	Weight (kg)	Space per bird (sq ft)	Space per bird (sq m)
<3.5	<1.6	0.34	0.032
3.5-6.6	1.6-3.0	0.52	0.048
6.6-11.0	3.0-5.0	0.62	0.057
11.0-16.5	5.0-7.5	0.84	0.079

Red Deer

Calves to yearling hinds	3.2 - 5.4 sq ft	0.3 – 0.5 sq m
(45-74kg)		
Adult hinds & yearling	5.4 sq ft - 6.5 sq ft	0.5 – 0.6 sq m
stags (75-100kg)		-
Adult stags (100kg +)	10.8 sq ft	1 sq m

Fallow Deer

Female	3.8 sq ft	0.35 sq m
Male	5.4 sq ft	0.5 sq m

- 2.51.11 The transportation vehicle MUST be thoroughly cleaned and dried prior to loading.
- 2.51.12 All animals MUST have continuous access to water until the point of loading.
- 2.51.13 To avoid the spread of Malignant Catarrhal Fever it is prohibited to use a transportation vehicle for deer that has been used for ovine or caprine transportation less than 14 days prior to loading the deer [DEER ONLY].
- 2.52 Transport of Cattle, Sheep, Goats, Deer and Pigs

(EU)2018/848, Annex II, Part II (1.7) AWA Standards 2020 (13.1)

- 2.52.1 Transporting downed animals is prohibited.
- 2.52.2 **Recommended** Animals should not be transported in isolation.
- 2.52.3 The transport vehicle MUST be constructed or bedded to prevent animals slipping.
- 2.52.4 Injured or lame animals MUST not be sold at auctions and if sent off farm MUST go directly to slaughter.
- 2.52.5 Injured or lame animals who are able to travel MUST not be sent to slaughter in the same compartment as healthy animals.
- 2.52.6 Animals from different farms MUST be separated in transport.

2.52.7 **Recommended** Animals from different social groups (pens) should be separated in transport.

Note: For deer this applies to hinds only. [DEER ONLY]

2.52.8 Transport of animals MUST not exceed eight hours.

Note: A derogation may be granted if an approved abattoir is not available within eight hours travel from the farm.

Transport of breeding stock that are sourced or sold for genetic improvement is exempt from this standard.

- 2.52.8.1 Transport of calves/piglets/lambs and kids within seven days of weaning MUST not exceed three hours.
- 2.52.9 Cows MUST not be transported off the farm within 8 weeks of expected calving.
- 2.52.10 Sows MUST not be transported off the farm within 3 weeks of expected farrowing.
- 2.52.11 Ewes and does MUST not be transported off the farm within 4 weeks of expected lambing/kidding.

Note: Animals close to giving birth may be transported when it is in the best interests of their health and welfare.

- 2.52.12 Deer in velvet or rutting males over 24months MUST only be transported in emergencies. [DEER ONLY]
- 2.52.13 Male deer which have been grazing or housed together MUST be transported as a group. [DEER ONLY]
- 2.52.14 Entire stags which are under 24 months of age, when transported together, MUST have grazed as a group beforehand and not have been exposed to been exposed to females immediately prior to transport. [DEER ONLY]
- 2.52.15 All males with hard antlers MUST be penned separately during transport. [DEER ONLY]
- 2.52.16 Hinds in the last month of pregnancy MUST not be transported. [DEER ONLY]
- 2.52.17 Sufficient space between the floor and the roof MUST be provided to enable each animal to stand in its natural position. [DEER ONLY]

Deer <45kg	3.3ft	1.0m
Deer 45 – 74kg	4.0ft	1.22m
Deer 75 – 100kg	5.0ft	1.53m

2.53 Transport of Calves, Lambs, Kids or Piglets

(EU)2018/848, Annex II, Part II (1.7) AWA Standards 2020 (13.2)

2.53.1 Beef or dairy calves, kids or lambs MUST not be transported around the farm or off the farm until they are at least one week old.

Note: [FOR DAIRY ONLY]: calves may be moved from the calving barn to the calf rearing barn.

Note: [FOR SHEEP AND GOATS]: Lambs/kids may be moved from the lambing/kidding pen back to pasture.

- 2.53.2 **Recommended** Beef or dairy calves, kids or lambs should not be transported around the farm or off the farm until they are at least six weeks old.
- 2.53.3 In an emergency a beef or dairy calf, lamb or kid that cannot be reared on the approved farm may be transported to be reared off-farm at less than one week old as long as they have already been provided with colostrum.
- 2.53.4 Piglets MUST not be transported until they are at least six weeks old.
- 2.53.5 Beef or dairy calves, lambs, kids or piglets MUST be fit to travel.
- 2.53.6 Transportation of deer less than 5 months of age is prohibited. [DEER ONLY]
- 2.54 Transport of Poultry

(EU)2018/848, Annex II, Part II (1.7) AWA Standards 2020 (13.3)

- 2.54.1 The vehicle transporting the birds MUST be capable of providing protection from high wind currents or rain and snow.
- 2.54.2 **Recommended** Transport after dark is recommended as it helps keep the birds calm and quiet.
- 2.54.3 Birds destined for slaughter may be crated overnight provided that they have adequate ventilation, are not overcrowded, and are transported to their final destination within three hours of dawn.
- 2.54.4 Feed MUST not be withdrawn for more than eight hours before slaughter.

Note: If birds are crated overnight and go directly to slaughter in the morning, feed withdrawal may exceed eight hours.

2.54.5 Transport to slaughter MUST not exceed four hours.

Note: A derogation may be granted if an approved slaughter plant is not available within 4 hours travel from the farm.

2.55 Transport of Chicks, Pullets, Ducklings, Goslings and Poults

(EU)2018/848, Annex II, Part II (1.7) AWA Standards 2020 (13.4)

- 2.55.1 Young birds MUST be transported in chick boxes designed for the purpose.
- 2.55.2 Boxes MUST have non-slip pads on the bottom.
- 2.55.3 The number of day-old birds MUST be put in boxes according to box count.
- 2.55.4 Delivery containers MUST not cause crowding or packed conditions for young birds.

- 2.55.5 Chick boxes MUST not be stacked on one another unless specifically designed for the purpose. When stacking boxes, care MUST be taken to ensure that air flow to the young birds is not restricted.
- 2.55.6 Live day-old birds MUST only be transported in temperature-controlled vehicles.
- 2.55.7 A Record of Movement Form MUST be completed for each delivery of birds.

Note: The Record of Movement Form can be downloaded from the AGW website or contact AGW for further assistance.

2.55.8 If birds are to be delivered to a local collection point, the farm MUST contact the collection point in advance of birds being dispatched to ensure the collection point knows live birds will be delivered and has a means to contact the farm as soon as this happens.

Note: Collection points may include local farms, farm stores, local post offices or other businesses.

- 2.55.9 The number of chicks that are dead on arrival and/or injured or in poor condition MUST be recorded for each delivery.
- 2.55.10 If the dead-on-arrival figure exceeds 3 per cent for two consecutive deliveries in a 12-month period AGW MUST be informed.
- 2.56 Transport Containers for Poultry

(EU)2018/848, Annex II, Part II (1.7) AWA Standards 2020 (13.5)

Some laying hen operations will not transport birds after they have arrived on farm as day-old chicks. However, whenever containers are used they MUST meet the standards below.

2.56.1 Birds MUST be transported in containers of a suitable type for their age and size.

Note: Only newly hatched chicks may be transported in chick boxes.

- 2.56.2 Transport containers MUST be capable of being cleaned and disinfected.
- 2.56.3 The containers and vehicles in which birds are transported MUST be thoroughly cleaned, disinfected and dried between uses.
- 2.56.4 Containers MUST be designed to allow birds to be easily loaded and unloaded.
- 2.56.5 The use of thin wire transport cages is prohibited.
- 2.56.6 When poultry crates are used they MUST be designed so that the birds can sit comfortably next to each other, but not stand.

Note: This limited space helps the birds stay calm and avoid harming themselves or distressing others by banging into the surrounding walls.

- 2.56.7 Transport containers MUST be capable of providing the birds with adequate fresh air and protection from inclement weather.
- 2.56.8 Transport containers MUST allow for inspection of the birds.
- 2.56.9 Transport containers MUST be kept in an upright position and be easily identifiable as containing live birds.

2.56.10 If containers are stacked, extra care MUST be taken to ensure chickens have sufficient ventilation.

2.57 Transporting Breeder Poultry

```
(EU)2018/848, Annex II, Part II (1.7)
AWA Standards 2020 (13.6)
```

- 2.57.1 Adult breeder birds MUST be transported in individual crates or on a trailer.
- 2.57.2 In a trailer, birds MUST be separated according to sex, weight and age.
- 2.57.3 In a trailer flooring MUST consist of heavy bedding so birds are able to stand comfortably without slipping.

2.58 Transport of Poultry by Air

```
(EU)2018/848, Annex II, Part II (1.7)
AWA Standards 2020 (13.7)
```

- 2.58.1 Any birds transported by air MUST be delivered to and collected from the airport within 45 minutes of take-off and landing.
- 2.58.2 All containers used for transport by air MUST comply with section 2.57.
- 2.58.3 Records confirming the airline's commitment to air-condition the hold MUST be in hand prior to loading.
- 2.58.4 Receiving air handlers MUST have contact details of the person receiving birds.

2.59 Sale or Transfer of Cattle, Sheep, Goats, Pigs and Deer

AWA Standards 2020 (14.0)

- 2.59.1 **Recommended** All animals should be reared on their farm of birth/hatch.
- 2.59.2 Animals MUST not be knowingly sold into systems prohibited by these standards. (NOT POULTRY)
- 2.59.3 Routine sale to feedlots is prohibited. (NOT POULTRY)
- 2.59.4 The planned use of stockyards and auction houses to sell animals is prohibited. (NOT POULTRY)
- 2.59.5 Animals/birds MUST not be displayed or offered for sale or transfer at farmers markets, swap meets or similar venue.

Note: Delivery or exchange of animals/birds at a farmers market or similar venue when the sale or transfer has been pre-arranged may be acceptable.

2.59.6 Animals/birds sold live at the point of slaughter under the organic *Animal Welfare Approved* label or logo MUST only be sold to customers who will take them to organic *Animal Welfare Approved* abattoirs.

- 2.59.7 Sale of calves to farms that have confinement, crated or slatted veal systems is prohibited.
- 2.59.8 Sale or transfer to slaughter when calves are less than four months of age is prohibited.
- 2.59.9 **Recommended** Lambs/kids less than two months of age should not be sold or transferred to slaughter.
- 2.59.10 Euthanisation of healthy animals is prohibited. [DAIRY CALVES]
- 2.59.11 Note: New dairies seeking Certified Organic status that currently euthanise healthy bull calves MUST have a written plan to end this practice.
- 2.59.12 **Recommended** AGW recommends that even if animals/birds or animal/bird products are not sold under the label or logo they are sold to other Certified Organic by AGW or AWA farms and slaughtered at AWA recommended abattoirs.
- 2.59.13 Selling deer calves to new deer producers or growers without providing, with the animals, written information on deer husbandry and humane handling is prohibited. [DEER ONLY]
- 2.59.14 Sale or transfer of deer calves less than five months of age is prohibited. [DEER ONLY]
- 2.59.15 Where animals or poultry are sold to another organic or AWA holding, a copy of the Certified Organic certificate MUST be supplied.

2.60 Marketing Breeding Stock

AWA Standards 2020 (14.1)

If more than 50% of all animals/birds produced are marketed for breeding [or POULTRY ONLY as laying birds for eggs], the farm is primarily a breeding stock operation and MUST meet the standards below.

- 2.60.1 The Certified Organic by AGW breeding stock farm MUST produce birds that are suitable for pasture-based production.
- 2.60.2 The Certified Organic by AGW breeding stock farm MUST have a written breeding plan that covers the following points:
 - 2.60.2.1 The overall breeding aims.
 - 2.60.2.2 The protocol for selecting and matching sires and dams.
 - 2.60.2.3 The criteria used to assess whether birds are suitable to be marketed as laying birds or breeding stock.
- 2.60.3 The Certified Organic by AGW breeding stock farm MUST inform buyers about the AWA programme.

If the farm advertises that any of their animals produced are suitable as breeding stock, the farm is a breeding stock operation and MUST meet the standards below.

2.60.4 The Certified Organic by AGW breeding stock farm MUST produce animals/birds that are suitable for pasture-based production.

- 2.60.5 The Certified Organic by AGW breeding stock farm MUST have a written breeding plan that covers the following points:
 - 2.60.5.1 The overall breeding aims.
 - 2.60.5.2 The protocol for selecting and matching sires and dams.
 - 2.60.5.3 The criteria used to assess whether animals/birds are suitable to be marketed as breeding stock or pullets
 - 2.60.5.4 The Certified Organic by AGW breeding stock farm MUST inform buyers about the Certified Organic by AGW or AWA programmes.
- 2.61 Slaughter of Cattle, Sheep, Goats, Deer and Pigs

(EU)2018/848, Annex II, Part II (1.7) AWA Standards 2020 (16.0)

- 2.61.1 **Recommended** On-farm mobile slaughter is recommended.
- 2.61.2 **Recommended** Controlled Atmosphere Killing (CAK), in which pigs remain in groups and their oxygen is slowly replaced by a mixture of argon and/or nitrogen and carbon dioxide is recommended for pigs.
- 2.61.3 Note: On-farm mobile slaughter and CAK are not readily available. It is the goal of AGW to make these processes more widely available and acceptable.
- 2.61.4 Abattoirs receiving animals in the Certified Organic program, or the process of slaughtering on-farm, MUST pass a review by AGW for organic time and space separation, pre-slaughter handling, stunning, and killing.
- 2.61.5 Note: For further details of the review requirements see the Animal Welfare Approved Slaughter Guidelines for Red Meat.
- 2.61.6 **Recommended** The person delivering the animals to slaughter should stay with them to ensure that they are slaughtered according to *AWA* guidelines.
- 2.61.7 Downed animals MUST be euthanised where they lie in a manner that renders them immediately insensible to pain.
- 2.61.8 Note: Please contact AGW if further information on appropriate methods of euthanasia is required.
- 2.61.9 Meat from downed animals MUST not be sold or carry the Certified Organic by AGW or AWA seal.
- 2.61.10 Slaughter of calves for meat at less than four months of age is prohibited.
- 2.62 Slaughter of Poultry

(EU)2018/848, Annex II, Part II (1.7) AWA Standards 2020 (16.1) 2.62.1 **Recommended** On farm slaughter is recommended and Controlled Atmosphere Killing (CAK), in which birds remain in their crates and their oxygen is slowly replaced by a mixture of argon and/or nitrogen is the preferred slaughtering method.

Note: On-farm mobile slaughter and CAK are not readily available. It is the goal of AGW to make these processes more widely available and acceptable.

- 2.62.2 CAK and Controlled Atmosphere Stunning (CAS) using carbon dioxide may be used for chickens and turkeys.
- 2.62.3 CAK and CAS using carbon dioxide for ducks and geese MUST only be used in a two-phase process where birds are initially stunned by a mix of not more than 30% CO2 before moving into higher concentrations of this gas.

Note: Due to the highly aversive effect of CO2 on waterfowl AGW will keep this standard under review.

- 2.62.4 When an abattoir using CAK/CAS in a form that includes the use of anoxic gas is available, such a plant MUST have priority.
- 2.62.5 Abattoirs receiving birds in the Certified Organic by AGW programme, or the process of slaughtering on-farm, MUST pass a review by AGW for organic time and space separation, pre-slaughter handling, stunning, and killing.

Note: For further details of the review requirements see the AWA Slaughter Guidelines for Poultry.

- 2.62.6 **Recommended** The person delivering the birds to slaughter should stay with them to ensure that they are slaughtered according to AWA guidelines in 2.62.5.
- 2.62.7 Birds MUST be handled as little as possible up to the point of slaughter.
- 2.62.8 Birds MUST be unloaded and slaughtered within two hours of arrival at the abattoir.
- 2.62.9 At the slaughter plant, birds MUST be unloaded in a dimly lit room.
- 2.62.10 Crates MUST be unloaded in an upright position and MUST be handled with care to ensure they are not tipped.
- 2.62.11 No person MUST cause or permit a bird to sustain any avoidable excitement, pain or suffering.
- 2.62.12 Any person involved in the killing or slaughter process, including unloading and handling of the birds, MUST demonstrate the knowledge and skill to perform those tasks humanely and efficiently.
- 2.62.13 All birds MUST be restrained prior to stunning and slaughter in a manner that spares them any avoidable pain, suffering, agitation or injury.
- 2.62.14 Shackling of live birds is not permitted without prior written consent.

Note: Permission by AGW MUST be renewed annually and will not be granted once a facility within the maximum travel distance that does not use shackles is approved.

- 2.62.15 Stunning MUST be followed immediately by killing (bleeding).
- 2.62.16 When one person is responsible for both operations, they MUST be carried out consecutively on one bird before moving on to the next.

- 2.62.17 Killing birds without prior stunning is prohibited.
- 2.62.18 Stunning MUST render the birds immediately insentient to pain.
- 2.62.19 Cones may be used to restrain birds prior to stunning.
- 2.62.20 Birds MUST not leave the cone until dead.

It is the goal of AGW to obtain stunning for poultry that does not involve shackling and hoisting of birds. Currently, the plants that use better methods are so rare that it is not possible for all Certified Organic farmers to access a plant that does not shackle and hoist. We are moving toward securing the least stressful methods of slaughter for all birds in the Certified Organic by AGW and AWA programmes as quickly as possible.

3 BEE PRODUCTION STANDARDS

3.0 Conversion

```
(EU) 2018/848, Annex II, Part II (1.2)
```

- 3.0.1 The conversion period specific to bee production is twelve months.
- 3.0.2 During the conversion period, the wax MUST be replaced with wax coming from organic beekeeping.
- 3.0.3 Non-organic beeswax may be used with prior approval from AGW, where:
 - 3.0.3.1 Beeswax from organic beekeeping is not available on the market.
 - 3.0.3.2 It is proven free of contamination with products or substances prohibited in these standards.
 - 3.0.3.3 Provided that it comes from the cap.

3.1 Breeds and Origin

```
(EU) 2018/848, Annex II, Part II (1.3.4.2)
(EU) 2018/848, Annex II, Part II (1.9.6.1)
```

- 3.1.1 Preference MUST be given to the use of Apis mellifera and their local ecotypes.
- 3.1.2 For the renovation of apiaries, 20% per year of the queen bees and swarms may be replaced by non-organic bees and swarms, provided that the queen bees and swarms are placed in hives with combs or comb foundations coming from organic holdings. Prior approval MUST be obtained from AGW.

Note: In any case, one swarm or queen bee may be replaced per year by a nonorganic swarm or a queen bee.

3.2 Nutrition

```
(EU) 2018/848, Article 14 (2c)
(EU) 2018/848, Annex II, Part II (1.9.6.2)
```

- 3.2.1 At the end of the production season hives MUST be left with sufficient reserves of honey and pollen for the bees to survive in the winter.
- 3.2.2 Bee colonies may only be fed where the survival of the colony is endangered due to climatic conditions. In such case, bee colonies MUST be fed with organic honey, organic sugar syrups or organic sugar.

3.3 Health care

```
(EU) 2018/848, Article 14 (2d)
(EU) 2018/848, Annex II, Part II (1.9.6.3)
```

3.3.1 For the purposes of protecting frames, hives and combs, in particular from pests, only rodenticides used in traps, and appropriate products and substances approved by AGW in Annex 7 shall be used.

- 3.3.2 Physical treatments for disinfection of apiaries such as steam or direct flame are permitted.
- 3.3.3 The practice of destroying the male brood MUST only be carried out for the purpose of isolating the infestation *Varroa destructor*.
- 3.3.4 If colonies become sick or infested, they MUST be treated immediately, and, if necessary placed in isolation apiaries.
- 3.3.5 Formic acid, lactic acid, acetic acid and oxalic acid, as well as menthol, thymol, eucalyptol or camphor may be used in cases of infestation with *Varroa destructor*.
- 3.3.6 If a treatment is applied with chemically synthesised allopathic products, including antibiotics, other than products and substances approved by AGW in Annex 7, for the duration of that treatment, the treated colonies MUST be placed in isolation apiaries and all the wax MUST be replaced with wax from organic beekeeping.
 - 3.3.6.1 The conversion period of 12 months MUST apply to these colonies.

3.4 Animal Welfare

(EU) 2018/848, Annex II, Part II (1.9.6.4)

- 3.4.1 The destruction of bees in the combs as a method associated with the harvesting of apiculture products is prohibited.
- 3.4.2 Mutilation such as clipping the wings of queen bees is prohibited.

3.5 Housing and Husbandry Practices

(EU) 2018/848, Annex II, Part II (1.9.6.4)

- 3.5.1 Apiaries MUST be placed in areas which ensure the availability of nectar and pollen sources consisting essentially of organically produced crops or, where appropriate, of spontaneous vegetation or non-organically managed forests or crops that are only treated with low environmental impact methods.
- 3.5.2 Apiaries MUST be kept at sufficient distance from sources that may lead to the contamination of apiculture products or to the poor health of the bees.
- 3.5.3 The siting of apiaries MUST be such that, within 3km from the apiary site, nectar and pollen sources consist essentially of organically produced crops or spontaneous vegetation or crops treat with low environmental impact methods.

Note: This standard does not apply where flowering is not taking place, or the bee colonies are dormant.

- 3.5.4 The hives and materials used in beekeeping MUST be made basically of natural materials presenting no risk of contamination to the environment or the apiculture products.
- 3.5.5 The beeswax for new foundations MUST come from organic production units.
- 3.5.6 Only natural products such as propolis, wax and plant oils may be used in the hives.

- 3.5.7 Synthetic chemical repellents MUST not be used during honey extraction operations.
- 3.5.8 Brood combs MUST not be used for honey extraction.
- 3.5.9 Beekeeping MUST not be considered as organic when practiced in regions or areas where organic beekeeping is not practicable.

4 ALGAE PRODUCTION STANDARDS

(EU) 2018/848, Annex II, Part III

Not allocated – contact AGW.

5 AQUACULTURE PRODUCTION STANDARDS

(EU) 2018/848, Annex II, Part III

Not allocated – contact AGW.

6 PROCESSED FOOD PRODUCTION STANDARDS

6.0 General Requirements

- (EU) 2018/848, Annex II, Part IV (1) (EU) 2018/848, Article 16
- 6.0.1 Food additives, processing aids and other substances and ingredients used for processing food and any processing practice applied, such as smoking, MUST comply with the principles of good manufacturing practice.
- 6.0.2 Operators producing processed food MUST establish and update appropriate procedures based on a systematic identification of critical processing steps.
- 6.0.3 The application of the procedures referred to in 6.0.2 MUST ensure that the produced processed products comply with these standards at all times.
- 6.0.4 Operators MUST comply with and implement the procedures referred to in 6.0.2, and shall in particular:
 - 6.0.4.1 Take precautionary measures.
 - 6.0.4.2 Implement suitable cleaning measures, monitor their effectiveness and keep records of those operations.
 - 6.0.4.3 Guarantee that non-organic products are not placed on the market with an indication referring to organic production.
- 6.0.5 The preparation of processed organic, in-conversion and non-organic products MUST be kept separate from each other in time or space.
- 6.0.6 Where organic, in-conversion and non-organic products, in any combination are prepared or stored in the preparation unit concerned, the operator MUST:
 - 6.0.6.1 Notify AGW of the products and procedures involved.
 - 6.0.6.2 Carry out the operations continuously until the production run has been completed, separately in place or time from similar operations performed on any other kind of product (organic, in-conversion or non-organic).
 - 6.0.6.3 Store organic, in-conversion and non-organic products, before and after the operations, separate by place or time from each other.
 - 6.0.6.4 Keep available an updated register of all operations and quantities processed.
 - 6.0.6.5 Take the necessary measures to ensure identification of lots and to avoid mixtures or exchanges between organic, in-conversion and non-organic products.
 - 6.0.6.6 Carry out operations on organic or in-conversion products only after suitable cleaning of the production equipment.
- 6.0.7 Detailed records MUST be kept by operators of ingredients received.
 - 6.0.7.1 Date
 - 6.0.7.2 Ingredient / Product
 - 6.0.7.3 Quantity

- 6.0.7.4 Supplier
- 6.0.7.5 Organic Status, with valid organic certificate on file
- 6.0.8 Detailed processing records MUST be kept of all organic or in-conversion products produced.
- 6.0.9 Detailed dispatch records MUST be kept for all organic or in-conversion products sold / dispatched.
 - 6.0.9.1 Date
 - 6.0.9.2 Product
 - 6.0.9.3 Organic Status
 - 6.0.9.4 Batch number / processing information
 - 6.0.9.5 Recipient
- 6.0.10 Products, substances and techniques that reconstitute properties that are lost in the processing and storage of organic food, that correct the results of negligence in the processing of organic food, or that otherwise may be misleading as to the true nature of products intended to be marketed as organic food, MUST not be used.
- 6.1 Composition and Ingredients
 - (EU) 2018/848, Article 11
 - (EU) 2018/848, Article 16
 - (EU) 2018/848, Article 25
 - (EU) 2018/848, Article 30
 - (EU) 2018/848, Annex II, Part IV (2)
 - (EC) 1334/2008, Article 3 (2)
 - (EC) 1333/2008, Article 17
- 6.1.1 Single Ingredient Specifications (SIPS) and / or Multiple Ingredient Specifications (MIPS) MUST be submitted to AGW for all products intended to carry the Certified Organic by AGW seal.
- 6.1.2 The product MUST be produced mainly from certified agricultural ingredients or products intended for use as food listed in Annex 8.
- 6.1.3 At least 95% of the agricultural ingredients of the product by weight MUST be organic.
- 6.1.4 Where it is necessary in order to ensure access to certain agricultural ingredients, and where such ingredients are not available in organic form in sufficient quantity, AGW may at the request of the operator, provisionally approve the use of non-organic agricultural ingredients for a maximum of six months.

Note: AGW may prolong this approval two times for a maximum of six months each.

- 6.1.5 Preparations and substances referred to in 6.1.8, 6.1.9, 6.1.10, 6.1.11 and 6.1.12 shall not be calculated as agricultural ingredients.
- 6.1.6 Yeast and yeast products MUST be calculated as agricultural ingredients.
- 6.1.7 For the purposes of determining whether a product has been produced mainly from products in 6.1.2, added water and salt will not be taken into account.

- 6.1.8 An organic ingredient MUST not be present together with the same ingredient in non-organic form.
- 6.1.9 Only food additives, processing aids and non-organic agricultural ingredients approved for use by AGW in Annex 8 may be used in the processing of food.
- 6.1.10 Preparations of micro-organisms and food enzymes normally used in food processing may be used, provided that the food enzymes have been approved by AGW for organic production.
- 6.1.11 Only natural flavouring substances or natural flavouring preparations obtained by appropriate physical, enzymatic or microbiological processes from material of vegetable, animal or microbiological origin, either in the raw state or after processing for human consumption by a traditional food preparation process may be used.
- 6.1.12 Colours for stamping meat and eggshells must be approved for use by AGW in Annex 9.
- 6.1.13 Natural colours and natural coating substances may be used for the traditional decorative colouring of the shell of boiled eggs produced with the intention of placing them on the market at a given period of the year.
- 6.1.14 Drinking water and organic or non-organic salt (with sodium chloride or potassium chloride as basic components) may be used.
- 6.1.15 Minerals (trace elements included), vitamins, amino acids and micronutrients may be used provided that:
 - 6.1.15.1 Their use in food for normal consumption is directly legally required by national law, with the consequence that the food cannot not be placed on the market if they are not added.
 - 6.1.15.2 Their use is required for food placed on the market as having particular characteristics or effects in relation to health or nutrition or in relation to needs of specific groups of consumers.
- 6.1.16 Ionising radiation treatment of raw materials is prohibited.
- 6.1.17 The use of processing aids or ingredients containing GMOs is prohibited.
- 6.1.18 Where non-organic processing aids or ingredients are used, the operator MUST obtain written confirmation of the products non-GMO status.
- 6.2 Cleansing and Disinfection

(EU) 2018/848, Annex II, Part IV (2)

6.2.1 Only products approved for use by AGW in Annex 4 may be used for cleansing and disinfection.

Note: AGW may issue a derogation where no approved products are available within the region.

7 PROCESSED FEED PRODUCTION STANDARDS

7.0 General Requirements

- (EU) 2018/848, Article 17 (EU) 2018/848, Annex II, Part V (2)
- 7.0.1 Food additives, processing aids and other substances and ingredients used for processing food and any processing practice applied, MUST comply with the principles of good manufacturing practice.
- 7.0.2 Operators producing processed food MUST establish and update appropriate procedures based on a systematic identification of critical processing steps.
- 7.0.3 The application of the procedures referred to in 6.0.2 MUST ensure that the produced processed products comply with these standards at all times.
- 7.0.4 Operators MUST comply with and implement the procedures referred to in 6.0.2, and shall in particular:
 - 7.0.4.1 Take precautionary measures.
 - 7.0.4.2 Implement suitable cleaning measures, monitor their effectiveness and keep records of those operations.
 - 7.0.4.3 Guarantee that non-organic products are not placed on the market with an indication referring to organic production.
- 7.0.5 The preparation of processed organic, in-conversion and non-organic products MUST be kept separate from each other in time or space.
- 7.0.6 Where organic, in-conversion and non-organic products, in any combination are prepared or stored in the preparation unit concerned, the operator MUST:
 - 7.0.6.1 Notify AGW of the products and procedures involved.
 - 7.0.6.2 Carry out the operations continuously until the production run has been completed, separately in place or time from similar operations performed on any other kind of product (organic, in-conversion or non-organic).
 - 7.0.6.3 Store organic, in-conversion and non-organic products, before and after the operations, separate by place or time from each other.
 - 7.0.6.4 Keep available an updated register of all operations and quantities processed.
 - 7.0.6.5 Take the necessary measures to ensure identification of lots and to avoid mixtures or exchanges between organic, in-conversion and non-organic products.
 - 7.0.6.6 Carry out operations on organic or in-conversion products only after suitable cleaning of the production equipment.
- 7.0.7 Detailed records MUST be kept by operators of ingredients received.
 - 7.0.7.1 Date

- 7.0.7.2 Ingredient / Product
- 7.0.7.3 Quantity
- 7.0.7.4 Supplier
- 7.0.7.5 Organic Status, with valid organic certificate on file
- 7.0.8 Detailed processing records MUST be kept of all organic or in-conversion products produced.
- 7.0.9 Detailed dispatch records MUST be kept for all organic or in-conversion products sold / dispatched.
 - 7.0.9.1 Date
 - 7.0.9.2 Product
 - 7.0.9.3 Organic Status
 - 7.0.9.4 Batch number / processing information
 - 7.0.9.5 Recipient
- 7.0.10 Ionising radiation of raw materials is prohibited.
- 7.1 Composition and Ingredients
 - (EU) 2018/848, Article 11
 - (EU) 2018/848, Article 17
 - (EU) 2018/848, Article 24
 - (EU) 2018/848, Annex II, Part V (1)
- 7.1.1 Single Ingredient Specifications (SIPS) and / or Multiple Ingredient Specifications (MIPS) MUST be submitted to AGW for all products intended to carry the Certified Organic seal.
- 7.1.2 Organic feed materials, or in-conversion feed materials MUST not enter simultaneously with the same feed materials produced by non-organic means into the composition of the organic feed product.
- 7.1.3 Feed materials used or processed MUST not have been processed with the aid of chemically synthesised solvents.
- 7.1.4 Non-organic feed material of plant, algal, animal or yeast origin, feed material of mineral origin and processing aids MUST only be used in the following circumstances:
 - 7.1.4.1 Must be approved for use by AGW in Annex 5.
 - 7.1.4.2 Their use is necessary to maintain animal health, animal welfare and vitality and contributes to an appropriate diet fulfilling the physiological and behavioural needs of the species concerned, or their use is necessary to produce or preserve feed because the production or preservation of feed is not possible.
 - 7.1.4.3 Feed of mineral origin, trace elements, vitamins or provitamins are of natural origin, except in cases where products or substances from such sources are not available in sufficient quantity or quality, or where alternatives are not available.

- 7.1.4.4 The use of non-organic feed material of plant or animal origin is necessary because feed material of plant or animal origin produced in accordance with organic production rules is not available in sufficient quantity.
- 7.1.4.5 The use of non-organic spices, herbs and molasses is necessary because such products are not available in organic form. They MUST be produced or prepared without chemical solvents and their use is limited to 1% of the feed ration.
- 7.1.5 The use of processing aids or ingredients produced from or containing GMOs is prohibited.
- 7.1.6 Where non-organic processing aids or ingredients are used, the operator MUST obtain written confirmation of the products non-GMO status.

7.2 Cleansing and Disinfection

(EU) 2018/848, Annex II, Part V (2)

7.2.1 Only products approved for use by AGW in Annex 4 may be used for cleansing and disinfection.

Note: AGW may issue a derogation where no approved products are available within the region.

8 WINE PRODUCTION STANDARDS

(EU) 2018/848, Annex II, Part VI (2)

Not allocated – contact AGW.

9 YEAST (USED AS FOOD OR FEED) STANDARDS

9.0 General Requirements

- (EU) 2018/848, Article 19 (EU) 2018/848, Annex II, Part VII (1)
- 9.0.1 Organic substrates MUST be used.
- 9.0.2 Note: Until 31st December 2023, the addition of up to 5% non-organic yeast extract or autolysate to the substrate (calculated in weight of dry matter) is allowed, where operators are unable to obtain yeast extract or autolysate from organic production.
- 9.0.3 Organic yeast MUST not be present in organic food or feed together with non-organic yeast.
- 9.0.4 The following products and substances may be used in the production, confection and formulation of organic yeast:
 - 9.0.4.1 Processing aids approved for use by AGW.
 - 9.0.4.2 Only food additives, processing aids and non-organic agricultural ingredients approved for use by AGW in Annex 5 and Annex 8 may be used in the processing of food.
 - 9.0.4.3 Preparations of micro-organisms and food enzymes normally used in food processing may be used, provided that the food enzymes have been approved by AGW for organic production.
 - 9.0.4.4 Drinking water and organic or non-organic salt (with sodium chloride or potassium chloride as basic components).
- 9.0.5 The use of processing aids or ingredients produced from or containing GMOs is prohibited.
- 9.0.6 Where non-organic processing aids or ingredients are used, the operator MUST obtain written confirmation of the products non-GMO status.
- 9.0.7 Single Ingredient Specifications (SIPS) and / or Multiple Ingredient Specifications (MIPS) MUST be submitted to AGW for all products intended to carry the Certified Organic seal.
- 9.0.8 Detailed records MUST be kept by operators of ingredients received.
 - 9.0.8.1 Date
 - 9.0.8.2 Ingredient / Product
 - 9.0.8.3 Quantity
 - 9.0.8.4 Supplier

- 9.0.8.5 Organic Status, with valid organic certificate on file
- 9.0.9 Detailed processing records MUST be kept of all organic or in-conversion products produced.
- 9.0.10 Detailed dispatch records MUST be kept for all organic or in-conversion products sold / dispatched.
 - 9.0.10.1 Date
 - 9.0.10.2 Product
 - 9.0.10.3 Organic Status
 - 9.0.10.4 Batch number / processing information
 - 9.0.10.5 Recipient

9.1 Cleansing and Disinfection

(EU) 2018/848, Annex II, Part VII (1.4)

9.1.1 Only products approved for use by AGW in Annex 4 may be used for cleansing and disinfection.

Note: AGW may issue a derogation where no approved products are available within the region.

10 COLLECTION, PACKAGING, TRANSPORT AND STORAGE OF PRODUCTS (ALL AGRICULTURAL HOLDINGS, ALL PROCESSING, TRANSPORTATION AND STORAGE SITES)

(EU) 2018/848, Article 23

10.0 Collection of Products and Transport to Preparation Units

(EU) 2018/848, Annex III (1)

- 10.0.1 Operators may carry out the simultaneous collection of organic, in-conversion and non-organic products only where appropriate measures have been taken to prevent any possible mixture or exchange.
- 10.0.2 Organic and in-conversion products MUST be identified.
- 10.0.3 Records MUST be kept relating to collection days, hours, the circuit or route, date and time of the reception of and delivery of products.

10.1 Packaging and Transport of Products to Other Operators or Units (EU) 2018/848, Annex III (2)

- 10.1.1 Operators MUST ensure that organic and in-conversion products are transported to other operators or units, including wholesalers and retailers, only in appropriate packaging, containers or vehicles closed in such a manner that substitution of the content cannot be achieved without manipulation or damage of the seal.
- 10.1.2 The consignment MUST carry a label or be accompanied by a document stating:
 - 10.1.2.1 The name and address of the operator and, where different the owner or seller of the product.
 - 10.1.2.2 The name of the product or a description of the compound feedstuff accompanied by a reference to organic production.
 - 10.1.2.3 Reference to Certified Organic by A Greener World.
 - 10.1.2.4 Where relevant, the lot identification mark, which permits the linking of the lot with production or processing records.
- 10.1.3 The closing or sealing of packaging, containers or vehicles is not required where:
 - 10.1.3.1 The transport takes place directly between two operators, both of which are subject to the organic certification.
 - 10.1.3.2 The transport includes only organic or only in-conversion products.
 - 10.1.3.3 The products are accompanied by a document giving the information required in 10.1.2.
 - 10.1.3.4 Both the sender and recipient MUST keep documentary records of such transport operations.

10.2 Transporting Feed to Other Production Units or Storage Premises

(EU) 2018/848, Annex III (3)

- 10.2.1 When transporting feed to other production or preparation units or storage premises, operators MUST ensure that the following conditions are met:
 - 10.2.1.1 During transport, organically produced feed, in-conversion feed, and non-organic feed are effectively physically separated.
 - 10.2.1.2 Vehicles or containers which have transported non-organic products are only used to transport organic or in-conversion products if:
 - 10.2.1.2.1 Suitable cleaning measures, the effectiveness of which has been checked, have been carried out before commencing the transport of organic or in-conversion products and the operators keep records of those operations.
 - 10.2.1.2.2 All appropriate measures are implemented, depending on the risks evaluated in accordance with control arrangements, and where necessary, operators guarantee that non-organic products cannot be placed on the market with an indication referring to organic production.
 - 10.2.1.2.3 The operator keeps documentary records of such transport operations available for the control authority or control body.
 - 10.2.1.3 The transport of finished organic or in-conversion feed is separated physically or in time from the transport of other finished products.
 - 10.2.1.4 During transport, the quantity of products at the start and each individual quantity delivered in the course of a delivery round is recorded.

10.3 Transport of Live Fish

(EU) 2018/848, Annex III (4)

Not allocated - contact AGW.

10.4 Reception of Products from other Operators or Units

(EU) 2018/848, Annex III (5)

- 10.4.1 On receipt of an organic or in-conversion product, the operator MUST check the closing of the packaging, container or vehicle where it is required and the presence of the indications provided for in 10.1.
- 10.4.2 The operator MUST cross-check the information on the label referred to in 10.1 with the information on the accompanying documents. The result of those verifications MUST be recorded.

10.5 Reception of Products from a Third Country

(EU) 2018/848, Annex III (6)

10.5.1 Where organic or in-conversion products are imported from a third country, they MUST be transported in appropriate packaging or containers, closed in a manner that prevents the substitution of the content and bearing the identification of the exporter and any other marks and numbers used to identify the lot.

- 10.5.2 The products MUST be accompanied by the certificate of control for import from third countries where appropriate.
- 10.5.3 On receipt of an organic or in-conversion product imported from a third country, the operator MUST check the closing of the packaging or container.
- 10.5.4 The operator MUST check that the product complies with conditions laid down in relevant trade agreements.
- 10.5.5 The operator MUST check that the certificate of inspection covers the type of product contained in the consignment.
- 10.5.6 The result of these verifications MUST be recorded.

10.6 Storage of Products

(EU) 2018/848, Annex III (7)

- 10.6.1 Areas for the storage of products MUST be managed in such a way as to ensure identification of lots and to avoid any mixing or contamination with products or substances not in compliance with the organic production rules.
- 10.6.2 Organic and in-conversion products MUST be clearly identifiable at all times.
- 10.6.3 No input products or substances other than those authorised within these standards for use in organic production shall be stored in organic or in-conversion plant and livestock production units.
- 10.6.4 Allopathic veterinary medicinal products, including antibiotics, may be stored in agricultural and aquaculture holdings provided that they have been prescribed by a veterinarian in connection with the treatment of livestock, that they are stored in a supervised location and that they are entered in the medicine purchase records.
- 10.6.5 Where operators handle organic, or in-conversion or non-organic products in any combination and the organic or in-conversion products are stored in storage facilities in which also other agricultural products or foodstuffs are stored:
 - 10.6.5.1 The organic or in-conversion products MUST be kept separate from the other agricultural products or foodstuffs.
 - 10.6.5.2 Every measure MUST be taken to ensure identification of consignments and to avoid mixtures or exchanges between organic, in-conversion and non-organic products.
 - 10.6.5.3 Suitable cleaning measures, the effectiveness of which has been checked, MUST have been carried out before and recorded.

10.7 Cleansing and Disinfection

(EU) 2018/848, Annex III (7.5)

10.7.1 Only products approved for use by AGW in ANNEX 4 may be used for cleansing and disinfection.

Note: AGW may issue a derogation where no approved products are available within the region.

10.8 Labelling

Note: Refer to AGW policy document.

Annex 1 – Definitions

Note: Also refer to AGW Definitions Document.

Advertising Any presentation of products to the public, by any means other than a

label, that is intended or is likely to influence and shape attitudes, beliefs and behaviours in order to directly or indirectly promote the

sale of products.

Agricultural area Any area taken up by arable land, permanent grassland and

permanent pasture, or permanent crops.

Agricultural raw

material

An agricultural product that has not been subjected to any operation

of preservation or processing.

Aquaculture products

Aquatic organisms at any stage of their life cycle resulting from any

aquaculture activity or products derived therefrom.

Mixtures traditionally used in biodynamic farming.

Biodynamic preparations

Closed recirculation aquaculture facility

A facility on land or in a vessel where aquaculture takes place within an enclosed environment involving the recirculation of water and

which depends on permanent external energy input to stabilise the

environment for the aquaculture animals.

Conversion The transition from non-organic to organic production within a given

period, during which the provisions of these standards concerning

organic production apply.

Energy from renewable sources

Energy from renewable non-fossil sources such as wind, solar,

geothermal, wave, tidal, hydropower, landfill gas, sewage treatment

plant gas and biogases.

Engineered nanomaterial

Any intentionally produced material that has one or more dimensions

of the order of 100 nm or less or that is composed of discrete functional parts, either internally or at the surface, many of which have one or more dimensions of the order of 100 nm or less, including structures, agglomerates or aggregates, which may have a size above the order of 100 nm but retain properties that are characteristic of the

nanoscale.

Properties that are characteristic of the nanoscale include:

(i)those related to the large specific surface area of the materials

considered; and/or

(ii)specific physico-chemical properties that are different from those of

the non-nanoform of the same material.

Equivalence Meeting the same objectives and principles by applying rules which

ensure the same level of assurance of conformity.

Farmer A natural or legal person, or a group of natural or legal persons,

regardless of the legal status of that group and its members under

national law, who exercises an agricultural activity.

Feed Any substance or product, including additives, whether processed,

partially processed or unprocessed, intended to be used for oral

feeding to animals.

Feed additive Substances, micro-organisms or preparations, other than feed

material and premixtures, which are intentionally added to feed or

water.

Feed materials Products of vegetable or animal origin, whose principal purpose is to

> meet animals nutritional needs, in their natural state, fresh or preserved, and products derived from the industrial processing thereof, and organic or inorganic substances, whether or not containing feed additives, which are intended for use in oral animalfeeding either directly as such, or after processing, or in the

preparation of compound feed, or as carrier of premixtures.

Any substance or product, whether processed, partially processed or unprocessed, intended to be, or reasonably expected to be ingested

by humans.

Food additive Any substance not normally consumed as a food in itself and not

> normally used as a characteristic ingredient of food, whether or not it has nutritive value, the intentional addition of which to food for a technological purpose in the manufacture, processing, preparation, treatment, packaging, transport or storage of such food results, or may be reasonably expected to result, in it or its by-products becoming directly or indirectly a component of such foods.

A product obtained from plants, animals or micro-organisms or products thereof including a product obtained by a fermentation

process using micro-organisms:

(i)containing one or more enzymes capable of catalyzing a specific

biochemical reaction; and

(ii) added to food for a technological purpose at any stage of the manufacturing, processing, preparation, treatment, packaging,

transport or storage of foods.

A group of plants constituting a single step in the line of descent of

plants.

An organism, with the exception of human beings, in which the genetic material has been altered in a way that does not occur

naturally by mating and/or natural recombination.

A place for the breeding, hatching and rearing through the early life Hatchery

stages of aquaculture animals, in particular finfish and shellfish.

All the production units operated under single management for the Holding

purpose of producing live or unprocessed agricultural products, including products originating from aquaculture and beekeeping, referred to in these standards other than essential oils and yeast. A product that is produced during the conversion period referred to in

these standards.

A production unit, during the conversion period referred to in these production unit standards, which is managed in compliance with the requirements

applicable to organic production; it may be constituted of land parcels or other assets for which the conversion period referred to in these

standards starts at different moments in time.

Any substance or product, including flavourings, food additives and

food enzymes, and any constituent of a compound ingredient, used in the manufacture or preparation of a food and still present in the finished product, even if in an altered form; residues shall not be considered as 'ingredients', or for products other than food, any substance or product used in the manufacture or preparation of products that is still present in the finished product, even in altered

form.

Food

Generation

Genetically modified

organism (GMO)

In-conversion product In-conversion

Ingredient

Integrity of organic or in-converstion

products

The fact that the product does not exhibit non-compliance which:

(a) in any stage of production, preparation and distribution affects the organic or in-conversion characteristics of

the product; or

(b) is repetitive or intentional.

of a wavelength of 100 nanometres or less (a frequency of 3×10^{15} hertz or more) capable of producing ions directly or

indirectly.

Labelling Any words, particulars, trademarks, brand name, pictorial matter or

symbol relating to a product

that are placed on any packaging, document, notice, label, ring or

collar that accompanies or refers to that product.

Laying hens Animals of the Gallus gallus species that are intended for the

production of eggs for consumption and that are of an age of at least

18 weeks.

Livestock production Locally grown species

Mother plant

The production of domestic or domesticated terrestrial animals,

including insects.

Aquaculture species which are neither alien nor locally absent species.

An identified plant from which plant reproductive material is taken for the reproduction of new plants.

Non-organic production unit

Nursery

A production unit which is not managed in compliance with the requirements applicable to organic production.

requirements applicable to organic production

A place where an intermediate aquaculture production system is applied between the hatchery and grow-out stages. The nursery stage is completed within the first third of the production cycle, with the

exception of species undergoing a smoltification process.

Operator The natural or legal person responsible for ensuring that these

standards are complied with at every stage of production, preparation

and distribution that are under that person's control.

Organic heterogeneous material A plant grouping within a single botanical taxon of the lowest known rank which:

- (a) presents common phenotypic characteristics;
- (b) is characterised by a high level of genetic and phenotypic diversity between individual reproductive units, so that

that plant grouping is represented by the material as a whole, and not by a small number of units;

- (c) is not a variety within the from a plant grouping within a single botanical taxon of the lowest known rank, which grouping, irrespective of whether the conditions for the grant of a plant variety right are fully met, can be:
- defined by the expression of the characteristics that results from a given genotype or combination of genotypes,
- distinguished from any other plant grouping by the expression of at least one of the said characteristics, and
- considered as a unit with regard to its suitability for being propagated unchanged.
- (d) is not a mixture of varieties; and
- (e) has been produced in accordance with these standards;

Organic product

A product resulting from organic production, other than a product produced during the conversion period referred to in these standards. The products of hunting or fishing of wild animals are not considered as organic products.

Organic production

The use, including during the conversion period referred to in these standards, of production methods that comply with these standards at all stages of production, preparation and distribution,

Organic production unit

A production unit, excluding during the conversion period referred to in these standards which is managed in compliance with the

requirements applicable to organic production.

Organic variety suitable for organic production

A variety as defined within Organic heterogeneous material (a) is characterised by a high level of genetic and phenotypical diversity between individual reproductive units; and

(b) results from organic breeding activities referred to in these

standards.

Pen An enclosure that includes a part in which animals are provided with

protection from adverse weather

conditions.

Pest Any species, strain or biotype of pathogenic agents,

animals or parasitic plants injurious to plants or plant products

Placing on the market

Plant production

The holding of food or feed for the purpose of sale, including offering for sale or any other form of transfer, whether free of charge or not, and the sale, distribution, and other forms of transfer themselves. Production of agricultural crop products including harvesting of wild

plant products for commercial purposes.

Plant products

Products of plant origin in an unprocessed state or having undergone only simple preparation, such as milling, drying or pressing, but

excluding plants.

Plant protection products

products in the form in which they are supplied to the user, consisting of, or containing active substances, safeners or synergists, and intended for one of the following uses:

- protecting plants or plant products against all harmful organisms or preventing the action of such organisms, unless the main purpose of these products is considered to be for reasons of hygiene rather than for the protection of plants or plant products (e.g. fungicides, insecticides);
- influencing the life processes of plants, such as substances influencing their growth, other than as a nutrient (e.g. plant growth regulators, rooting hormones);
- preserving plant products, in so far as such substances or products are not subject to special Community provisions on preservatives (e.g. extending the life of cut flowers);
- destroying undesired plants or parts of plants, except algae unless the products are applied on soil or water to protect plants (e.g. herbicides/weedkillers to kill actively growing weeds);
- checking or preventing undesired growth of plants, except algae unless the products are applied on soil or water to protect plants (e.g. herbicides/weedkillers preventing the growth of weeds).

Plant reproductive material

Plants and all parts of plants, including seeds, at any stage of growth that are capable of, and intended for, producing entire plants.

Plants

Live plants and live parts of plants, including fresh fruit, vegetables and seeds.

Polyculture The rearing in aquaculture of two or more species, usually from

different trophic levels, in the same culture unit.

Poultry house A fixed or mobile building for accommodating flocks of poultry, which

includes all surfaces covered by roofs, including a veranda; the house may be subdivided into separate compartments, each accommodating

a single flock.

Precautionary measures

Measures that are to be taken by operators at every stage of production, preparation, and distribution to avoid contamination with products or substances that are not authorised for use in organic production in accordance with these standards, and to avoid the commingling of organic products with non-organic products.

Prepacked food Any single item for presentation as such to the final consumer and to

mass caterers, consisting of a food and the packaging into which it was put before being offered for sale, whether such packaging encloses the food completely or only partially, but in any event in such a way that the contents cannot be altered without opening or

changing the packaging; 'prepacked food' does not cover foods packed on the sales premises at the consumer's request or prepacked

for direct sale.

Preparation The operations of preserving or processing of organic or in-conversion

products, or any other operation that is carried out on an unprocessed product without altering the initial product, such as slaughtering, cutting, cleaning or milling, as well as packaging, labelling or

alterations made to the labelling relating to organic

production.

Preventative measures

Measures that are to be taken by operators at every stage of production, preparation and distribution in order to ensure the preservation of biodiversity and soil quality, measures for the

prevention and

control of pests and diseases and measures that are to be taken to

avoid negative effects on the environment, animal

health and plant health.

Processed products Foodstuffs resulting from the processing of unprocessed products.

These products may contain ingredients that are necessary for their

manufacture or to give them specific characteristics.

Processing aid Any substance which:

(i)is not consumed as a food by itself;

(ii)is intentionally used in the processing of raw materials, foods or their ingredients, to fulfil a certain technological purpose during

treatment or processing; and

(iii)may result in the unintentional but technically unavoidable presence in the final product of residues of the substance or its derivatives provided they do not present any health risk and do not

have any technological effect on the final product;

Processing aid Any action that substantially alters the initial product, including

heating, smoking, curing, maturing, drving, marinating, extraction,

extrusion or a combination of those processes.

Produced by GMOs Derived by using a GMO as the last living organism in the production

process, but not containing or consisting of GMOs nor produced from

GMOs.

Produced from

GMOs

Derived in whole or in part from GMOs but not containing or consisting

of GMOs.

Production cycle The lifespan of an aquaculture animal or alga, from the earliest life

stage (fertilised eggs, in the case of aquaculture animals) to

harvesting.

Production unit All assets of a holding, such as primary production premises, land

parcels, pasturages, open air areas, livestock buildings or parts thereof, hives, fishponds, containment systems and sites for algae or aquaculture animals, rearing units, shore or seabed concessions, and premises for the storage of crops, of crop products, of algae products, of animal products, of raw materials and of any other relevant inputs

managed as described in these standards.

Pullets Young animals of the Gallus gallus species that are of an age of less

than 18 weeks.

Soil-related crop cultivation

Production in living soil or in soil that is mixed or fertilised with materials and products that are allowed in organic production in

connection with the subsoil and bedrock;

Stage of production Any stage from the primary production of an organic product through

its storage, processing, transport, and sale or supply to the final consumer, including, where relevant, labelling, advertising, import,

export and subcontracting activities.

Traceability The ability to trace and follow food, feed or any product and any

substance intended or expected to be incorporated into food, feed or any product through all stages of production, preparation and

distribution.

Unprocessed products

Foodstuffs that have not undergone processing, and includes products that have been divided, parted, severed, sliced, boned, minced, skinned, ground, cut, cleaned, trimmed, husked, milled, chilled,

frozen, deep-frozen or thawed.

Veranda An additional, roofed, uninsulated, outdoor part of a building intended

for poultry, the longest side usually being equipped with wire fencing or netting, with an outdoor climate, natural and, where necessary,

artificial illumination, and a littered floor.

Veterinary

medicinal product

(a) any substance or combination of substances presented as having

properties for treating or preventing disease in animals; or

(b)any substance or combination of substances which may be used in or administered to animals with a view either to restoring, correcting or modifying physiological functions by exerting a pharmacological, immunological or metabolic action, or to making a medical diagnosis.]

Veterinary treatment All courses of a curative or preventive treatment against an

occurrence of a specific disease.

Water pollution The direct or indirect introduction, as a result of human activity, of

substances or heat into the air, water or land which may be harmful to human health or the quality of aquatic ecosystems or terrestrial ecosystems directly depending on aquatic ecosystems, which result in

damage to material property, or which impair or interfere with

amenities and other legitimate uses of the environment.

Annex 2 – Approved Fertilisers, Soil Conditioners and Nutrients

(EC) 889-2008, Annex I (EC) 2003/2003, Annex I

Name	Description, compositional requirement, conditions for use
Compound products or products containing only materials listed hereunder: • Farmyard manure	Product comprising a mixture of animal excrements and vegetable matter (animal bedding).
Tarmyara manare	Factory farming origin forbidden
Dried farmyard manure and dehydrated poultry manure	Factory farming origin forbidden
Composted animal excrements, including poultry manure and composted farmyard manure included	Use after controlled fermentation and/or appropriate dilution Factory farming origin forbidden
Composted or fermented household waste	Product obtained from source separated household waste, which has been submitted to composting or to anaerobic fermentation for biogas production Only vegetable and animal household waste Only when produced in a closed and monitored collection system Maximum concentrations in mg/kg of dry matter: • cadmium: 0.7 • copper: 70 • nickel: 25 • lead: 45 • zinc: 200 • mercury:0.4 • chromium (total): 70
Peat	chromium (VI): 0 Use limited to horticulture (market gardening, floriculture, arboriculture, nursery)
Mushroom culture wastes	The initial composition of the substrate shall be limited to products of this Annex
Dejecta of worms (vermicompost) and insects	
Guano	
Biogas digestate containing animal by- products co-digested with material of plant or animal origin as listed in this Annex	Animal by-products (including by-products of wild animals) of category 3 and digestive tract content of category 2.
	Must not be from factory farming origin.

	Not to be applied to edible parts of the
Products or by-products of animal origin as below:	Maximum concentration in mg/kg of dry matter of chromium (VI): 0 Not to be applied to edible parts of the crop
Products and by-products of plant origin for fertilisers	Examples: oilseed cake meal, cocoa husks, malt culms
Hydrolysed proteins of plant origin	As far as directly obtained by: 1) physical processes including dehydration, freezing and grinding 2) extraction with water or aqueous acid and/or alkaline solution 3) fermentation
Sawdust and wood chips	Wood not chemically treated after felling
Composted bark	Wood not chemically treated after felling
Wood ash	From wood not chemically treated after felling
Soft ground rock phosphate	Product obtained by grinding soft mineral phosphates and containing tricalcium phosphate and calcium carbonate as essential ingredients Cadmium content less than or equal to 90 mg/kg of P20 25 % P2O5 - Phosphorus expressed as P2O5 soluble in mineral acids, at least 55 % of the declared content of P2O5 being soluble in 2 % formic acid Particle size: • at least 90 % able to pass through a sieve with a mesh of 0,063 mm • at least 99 % able to pass through a sieve with a mesh of 0,125 mm
Aluminium-calcium phosphate	Product obtained in amorphous form by heat treatment and grinding, containing aluminium and calcium phosphates as essential ingredients Cadmium content less than or equal to 90 mg/kg of P205 Use limited to basic soils (pH > 7.5)

	1
	30 % P2O5 - Phosphorus expressed as P2O5 soluble in mineral acids, at least 75 % of the declared content of P2O5 being soluble in alkaline ammonium citrate (Joulie)
	Particle size: • at least 90 % able to pass through a sieve with a mesh of 0,160 mm • at least 98 % able to pass through a sieve with a mesh of 0,630 mm
Basic slag	Product obtained in iron-smelting by treatment of the phosphorus melts and containing calcium silicophosphates as its essential ingredients
	12 % P2O5 - Phosphorus expressed as phosphorus pentoxide soluble in mineral acids, at least 75 % of the declared content of phosphorus pentoxide being soluble in 2 % citric acid
	or P2O5 - Phosphorus expressed as phosphorus pentoxide soluble in 2 % citric acid
	Particle size: • at least 75 % able to pass through a sieve with a mesh of 0,160 mm • at least 96 % able to pass through a sieve with a mesh of 0,630 mm
Crude potassium salt or kainit	Product obtained from crude potassium salts
	9 % K 2 O - Potassium expressed as water-soluble K 2 O
	2 % MgO - Magnesium in the form of water-soluble salts, expressed as magnesium oxide
Potassium sulphate, possibly containing magnesium salt	Product obtained from crude potassium salt by a physical extraction process, containing possibly also magnesium salts
Stillage and stillage extract Calcium carbonate, for instance:	Ammonium stillage excluded Only of natural origin
phosphate chalk Mollusc waste	Only from sustainable fisheries or organic aquaculture
Egg shells	Factory farming origin forbidden
Magnesium and calcium carbonate	Only of natural origin Including
	 magnesian chalk

Magnesium sulphate (kieserite) Calcium chloride solution Calcium chloride solution Calcium sulphate (gypsum) Solium sulphate (gypsum) Calcium sulphate (gypsum) Fineness of grind: Calcium and sulphur expressed as total CaO + SO3 Fineness of grind: Calcium sulphate (gypsum) Syssa fyrid Calcium and sulphur expressed as total CaO + SO3 Fineness of grind: Calcium sulphate (gypsum) By-product of sugar production from sugar beet and sugar cane By-product of the vacuum salt production from brine found in mountains By-product of the vacuum salt production from brine found in mountains Elemental sulphur Sys S (245 %: SO3) - Sulphur expressed as total SO3 In mineral form only Calcium sulphate (gypsum) Calcium sulphate (gypsum) Calcium sulphate (gypsum) Sys S (245 %: SO3) - Sulphur expressed as total SO3 In mineral form only Calcium sulphate (gypsum) Calcium sulphate (gypsum) Sys S (245 %: SO3) - Sulphur expressed as total SO3 In mineral form only Calcium sulphate (gypsum) Calcium sulphate (gypsum) Sys S (245 %: SO3) - Sulphur expressed as total SO3 In mineral form only Calcium sulphate (gypsum) Calcium sulphate (gypsum) Sys S (245 %: SO3) - Sulphur expressed solution from sulphate (gypsum) Calcium sulphate (gypsum) Sys S (245 %: SO3) - Sulphur expressed as total SO3 In mineral form only Calcium sulphate (gypsum) Sys S (245 %: SO3) - Sulphur expressed as total SO3 In mineral form only Calcium sulphate		around magnesium
Magnesium sulphate (kieserite) Calcium chloride solution Foliar treatment of apple trees, after identification of deficit of calcium 25 % CaO 35 % SO3 - Calcium and sulphur expressed as total CaO + SO3 Fineness of grind: • at least 80 % to pass through a sieve with a 2 mm mesh width, • at least 99 % to pass through a sieve with a 10 mm mesh width Only of natural origin Industrial lime from sugar production Industrial lime from vacuum salt production sugar beet and sugar cane By-product of the vacuum salt production from brine found in mountains Elemental sulphur 98 % S (245 %: SO3) - Sulphur expressed as total SO3 Trace elements • Boron (B) • Cobalt (Co) • Copper (Cu) • Iron (Fe) • Manganese (Mn) • Molybdenum (Mo) • Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Only if obtained as a by-product of mining activities (e.g., by-product of mining activities (e.g., by-product of brown coal mining) Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Only if obtained sa a by-product of mining activities (e.g., by-product of mining activities (e.g., by-product of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
Calcium chloride solution Calcium sulphate (gypsum) Z5 % CaO 35 % S03 - Calcium and sulphur expressed as total CaO + S03 Fineness of grind: • at least 80 % to pass through a sieve with a 2 mm mesh width, • at least 99 % to pass through a sieve with a 2 mm mesh width, • at least 99 % to pass through a sieve with a 10 mm mesh width Only of natural origin Industrial lime from sugar production Industrial lime from vacuum salt product of sugar production from sugar beet and sugar cane By-product of sugar production from bring found in mountains Elemental sulphur 98 % S (245 %: S03) - Sulphur expressed as total S03 In mineral form only Trace elements • Boron (B) • Cobalt (Co) • Copper (Cu) • Iron (Fe) • Manganese (Mn) • Molybdenum (Mo) • Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids All obtained as a by-product of mining activities Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol	Magnesium sulphate (kieserite)	
identification of deficit of calcium		,
Calcium sulphate (gypsum) 25 % CaO 35 % SO3 - Calcium and sulphur expressed as total CaO + SO3 Fineness of grind: • at least 80 % to pass through a sieve with a 2 mm mesh width, • at least 99 % to pass through a sieve with a 10 mm mesh width Only of natural origin Industrial lime from sugar production By-product of sugar production from sugar beet and sugar cane By-product of the vacuum salt production from brine found in mountains Elemental sulphur Para elements • Boron (B) • Cobalt (Co) • Copper (Cu) • Iron (Fe) • Manganese (Mn) • Molybdenum (Mo) • Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Wylite Only if obtained as a by-product of mining activities Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
35 % SO3 - Calcium and sulphur expressed as total CaO + SO3 Fineness of grind: • at least 80 % to pass through a sieve with a 2 mm mesh width, • at least 89 % to pass through a sieve with a 10 mm mesh width Only of natural origin By-product of sugar production from sugar by-product of sugar production from brine found in mountains Elemental sulphur By-product of the vacuum salt production from brine found in mountains Elemental sulphur 98 % S (245 %: SO3) - Sulphur expressed as total SO3 Trace elements • Boron (B) • Cobalt (Co) • Copper (Cu) • Iron (Fe) • Manganese (Mn) • Molybdenum (Mo) • Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Only if obtained as a by-product of mining activities Only if obtained by inorganic salts/solutions excluding ammonium salts; or obtained from drinking water purification Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only sediments that are by-products of freshwater bodies formed under exclusion of oxygen Only geatinents that are by-products of freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol	Calcium sulphate (gypsum)	
expressed as total CaO + SO3 Fineness of grind: • at least 80 % to pass through a sieve with a 2 mm mesh width, • at least 99 % to pass through a sieve with a 10 mm mesh width Only of natural origin By-product of sugar production from sugar beat and sugar cane Industrial lime from vacuum salt production from brine found in mountains Elemental sulphur 98 % 5 (245 %: SO3) - Sulphur expressed as total SO3 Trace elements • Boron (B) • Cobalt (Co) • Copper (Cu) • Iron (Fe) • Manganese (Mn) • Molybdenum (Mo) • Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Only if obtained as a by-product of mining activities Only if obtained by inorganic salts/solutions excluding ammonium salts; or obtained from drinking water purification Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
Fineness of grind: • at least 80 % to pass through a sieve with a 2 mm mesh width, • at least 99 % to pass through a sieve with a 10 mm mesh width Only of natural origin By-product of sugar production from sugar beet and sugar cane Industrial lime from vacuum salt production from brine found in mountains Elemental sulphur Fineness of grind: • at least 80 % to pass through a sieve with a 10 mm mesh width Only of natural origin By-product of sugar production from sugar beet and sugar cane By-product of the vacuum salt production from brine found in mountains Elemental sulphur Fineness of grind: • at least 80 % to pass through a sieve with a 10 mm esh width Only of natural origin By-product of sugar production from sugar beet and sugar cane By-product of the vacuum salt production from brine found in mountains Fineness of grind: • at least 80 % to pass through a sieve with a 10 mm esh width Only of natural origin By-product of sugar production from sugar beet and sugar cane Fineness of grind: • at least 99 % to pass through a sieve with a 10 mm esh width Only of natural origin By-product of sugar production from sugar beet and sugar cane Fineness of grind: • at least 99 % to pass through a sieve with a 10 mm esh width Only of natural origin By-product of the vacuum salt production from brine found in mountains Fineness of grind: • at least 99 % to pass through a sugar cane Finenes of grind: • at least 99 % to pass through as sugar cane Finenes of grind: Only if obtained as a by-product of mining activities Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		•
• at least 80 % to pass through a sieve with a 2 mm mesh width, • at least 99 % to pass through a sieve with a 10 mm mesh width Only of natural origin By-product of sugar production from sugar beet and sugar cane By-product of the vacuum salt production from brine found in mountains Elemental sulphur By-product of the vacuum salt production from brine found in mountains Elemental sulphur By-product of the vacuum salt production from brine found in mountains Elemental sulphur By-product of sugar production from sugar beet and sugar cane By-product of sugar production from sugar beet and sugar cane By-product of sugar production from sugar beet and sugar cane By-product of sugar production from sugar beet and sugar cane By-product of sugar production from sugar beet and sugar cane By-product of sugar production from sugar beet and sugar cane By-product of sugar production from sugar base and sugar cane By-product of sugar production from sugar cane Only if obtained as a by-product of mining activities Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Organic rich sediment from freshwater purification Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		expressed as total CaO + SO3
• at least 80 % to pass through a sieve with a 2 mm mesh width, • at least 99 % to pass through a sieve with a 10 mm mesh width Only of natural origin By-product of sugar production from sugar beet and sugar cane By-product of the vacuum salt production from brine found in mountains Elemental sulphur By-product of the vacuum salt production from brine found in mountains Elemental sulphur By-product of the vacuum salt production from brine found in mountains Elemental sulphur By-product of sugar production from sugar beet and sugar cane By-product of sugar production from sugar beet and sugar cane By-product of sugar production from sugar beet and sugar cane By-product of sugar production from sugar beet and sugar cane By-product of sugar production from sugar beet and sugar cane By-product of sugar production from sugar beet and sugar cane By-product of sugar production from sugar base and sugar cane By-product of sugar production from sugar cane Only if obtained as a by-product of mining activities Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Organic rich sediment from freshwater purification Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
sieve with a 2 mm mesh width,		
• at least 99 % to pass through a sieve with a 10 mm mesh width Only of natural origin By-product of sugar production from sugar beet and sugar cane Industrial lime from vacuum salt production Froduction Elemental sulphur Sew S (245 %: S03) - Sulphur expressed as total S03 Trace elements Boron (B) Cobalt (Co) Copper (Cu) Iron (Fe) Manganese (Mn) Molybdenum (Mo) Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Xylite Orly if obtained as a by-product of mining activities activities Only if obtained by inorganic salts/solutions excluding ammonium salts; or obtained from drinking water purification Organic rich sediment from freshwater bodies formed under exclusion of oxygen Sapropel When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
Sieve with a 10 mm mesh width		·
Industrial lime from sugar production Industrial lime from sugar production By-product of sugar production from sugar beet and sugar cane By-product of the vacuum salt production from brine found in mountains By-product of the vacuum salt production from brine found in mountains By-product of the vacuum salt production from brine found in mountains By-product of the vacuum salt production from brine found in mountains By-product of the vacuum salt production from brine found in mountains Sodium chloride Stopper (Cu) Iron (Fe) Manganese (Mn) Molybdenum (Mo) Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Only if obtained as a by-product of mining activities Only if obtained from drinking water purification Xylite Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Organic rich sediment from freshwater bodies formed under exclusion of oxygen Sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
Industrial lime from sugar production Industrial lime from vacuum salt production Industrial lime from vacuum salt production Elemental sulphur Selemental sulphur By-product of the vacuum salt production from brine found in mountains 8% S (245 %: SO3) - Sulphur expressed as total SO3 In mineral form only In mineral form		Sieve With a 10 min mesh width
Industrial lime from vacuum salt production Elemental sulphur Boron (B) Cobalt (Co) Copper (Cu) Iron (Fe) Manganese (Mn) Molybdenum (Mo) Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Xylite Organic rich sediment from freshwater bodies formed under exclusion of oxygen sapropel Organic rich sediment from freshwater bodies formed under exclusion of oxygen sapropel Sugar beet and sugar cane By-product of the vacuum salt production from brine found in mountains By-product of the vacuum salt production from brine found in mountains By-product of the vacuum salt production from brine found in mountains Solly if obtail form only Only if obtained as a by-product of mining activities Only if obtained by inorganic salts/solutions excluding ammonium salts; or obtained from drinking water purification Only if obtained as a by-product of brown coal mining) Organic rich sediment from freshwater bodies formed under exclusion of oxygen sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
Industrial lime from vacuum salt production from brine found in mountains Elemental sulphur 98 % S (245 %: SO3) - Sulphur expressed as total SO3 Trace elements • Boron (B) • Cobalt (Co) • Copper (Cu) • Iron (Fe) • Manganese (Mn) • Molybdenum (Mo) • Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Xylite Only if obtained as a by-product of mining activities Only if obtained by inorganic salts; or obtained from drinking water purification Xylite Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only organic sediments that are by-products of freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol	Industrial lime from sugar production	
From brine found in mountains	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Elemental sulphur 98 % S (245 %: SO3) - Sulphur expressed as total SO3 Trace elements • Boron (B) • Cobalt (Co) • Copper (Cu) • Iron (Fe) • Manganese (Mn) • Molybdenum (Mo) • Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids All sulphur expressed as total SO3 In mineral form only Only if obtained form only Only if obtained as a by-product of mining activities Only if obtained as a by-product of mining activities Only if obtained by inorganic salts/solutions excluding ammonium salts; or obtained from drinking water purification Xylite Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
Trace elements Boron (B) Cobalt (Co) Copper (Cu) Iron (Fe) Manganese (Mn) Molybdenum (Mo) Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Nylite Only if obtained as a by-product of mining activities Only if obtained from drinking water purification Nonly if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Organic rich sediment from freshwater bodies formed under exclusion of oxygen sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol	•	
Trace elements	Liemental Sulphul	
Boron (B) Cobalt (Co) Copper (Cu) Iron (Fe) Manganese (Mn) Molybdenum (Mo) Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Only if obtained as a by-product of mining activities Only if obtained by inorganic salts/solutions excluding ammonium salts; or obtained from drinking water purification Xylite Organic rich sediment from freshwater bodies formed under exclusion of oxygen sapropel Organic rich sediment from freshwater bodies formed under exclusion of oxygen organic rich sediment from freshwater bodies formed under exclusion of oxygen Only organic sediments that are byproducts of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol	Trace elements	
Cobalt (Co) Copper (Cu) Iron (Fe) Manganese (Mn) Molybdenum (Mo) Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Stylite Only if obtained as a by-product of mining activities Only if obtained by inorganic salts/solutions excluding ammonium salts; or obtained from drinking water purification Xylite Organic rich sediment from freshwater bodies formed under exclusion of oxygen sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		,
 Iron (Fe) Manganese (Mn) Molybdenum (Mo) Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Only if obtained as a by-product of mining activities Only if obtained by inorganic salts/solutions excluding ammonium salts; or obtained from drinking water purification Xylite Organic rich sediment from freshwater bodies formed under exclusion of oxygen sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol 		
 Manganese (Mn) Molybdenum (Mo) Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Only if obtained as a by-product of mining activities Only if obtained by inorganic salts/solutions excluding ammonium salts; or obtained from drinking water purification Xylite Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Organic rich sediment from freshwater bodies formed under exclusion of oxygen sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol 	Copper (Cu)	
Molybdenum (Mo) Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Stylite Only if obtained as a by-product of mining activities Only if obtained by inorganic salts/solutions excluding ammonium salts; or obtained from drinking water purification Xylite Organic rich sediment from freshwater bodies formed under exclusion of oxygen sapropel Organic rich sediment from freshwater bodies formed under exclusion of oxygen Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
• Zinc (Zn) Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Only if obtained as a by-product of mining activities Only if obtained by inorganic salts/solutions excluding ammonium salts; or obtained from drinking water purification Xylite Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
Sodium chloride Stone meal and clays Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Only if obtained as a by-product of mining activities Only if obtained by inorganic salts/solutions excluding ammonium salts; or obtained from drinking water purification Xylite Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
Leonardite (Raw organic sediment rich in humic acids)		
Leonardite (Raw organic sediment rich in humic acids) Humic and fulvic acids Humic and fulvic acids Only if obtained by inorganic salts/solutions excluding ammonium salts; or obtained from drinking water purification Xylite Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
humic acids) Humic and fulvic acids Only if obtained by inorganic salts/solutions excluding ammonium salts; or obtained from drinking water purification Xylite Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		Only if obtained as a by-product of mining
Humic and fulvic acids Only if obtained by inorganic salts/solutions excluding ammonium salts; or obtained from drinking water purification Xylite Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol	` _	, ,
salts/solutions excluding ammonium salts; or obtained from drinking water purification Xylite Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
salts; or obtained from drinking water purification Xylite Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
Only if obtained as a by-product of mining activities (e.g., by-product of brown coal mining) Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only organic sediments that are byproducts of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol	Xylite	
Organic rich sediment from freshwater bodies formed under exclusion of oxygen • sapropel Only organic sediments that are by- products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
bodies formed under exclusion of oxygen	Organic rich sediment from freshwater	
 sapropel or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol 	I = =	
When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol	, -	
done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants, and petrol		
from contaminations of pesticides, persistent organic pollutants, and petrol		the aquatic system
from contaminations of pesticides, persistent organic pollutants, and petrol		Only and monta dominal frame assures for
persistent organic pollutants, and petrol		
		•
inc substances		

	_
	Maximum concentrations in mg/kg of dry
	matter:
	• cadmium: 0,7
	• copper: 70
	nickel: 25
	• lead: 45
	• zinc: 200
	mercury: 0,4
	chromium (total): 70
	 chromium (VI): not detectable
Biochar — pyrolysis product made from a wide variety of organic materials of plant origin and applied as a soil conditioner	Only from plant materials, untreated or treated with products included in Annex II.
	Maximum value of 4 mg polycyclic aromatic hydrocarbons (PAHs) per kg dry matter (DM). This value shall be reviewed every second year, taking into account the risk of accumulation due to multiple applications

Annex 3 – Approved Plant Protection Products

(EC) 889-2008, Annex II

1. Substances of crop or animal origin

Name	Description, compositional requirement, conditions for use
Adirachtin extracted from <i>Azadir-achta</i> indica (Neem tree)	Insecticide
Beexwax	Pruning agent
Gelatine	Insecticide
Hydrolysed proteins	Attractant, only in approved applications in combination with other appropriate products on this list
Lecithin	Fungicide
Plant oils (e.g. mint oil, pine oil, caraway oil)	Insecticide, acaricide, fungicide and sprout inhibitor
Pyrethrins extracted from <i>Chrysanthemum</i> cinerariaefolium	Insecticide
Quassia extracted from Quassia arnara	Insecticide, repellent
Rotenone extracted from <i>Derris</i> spp. And <i>Lonchocarpus</i> spp. And <i>Terphrosia</i> spp.	Insecticide

2. Micro-organisms used for biological pest and disease control

Name	Description, compositional requirement, conditions for use
Micro-organisms (bacteria, viruses and fungi)	

3. Substances produced by micro-organisms

Name	Description, compositional requirement, conditions for use
Spinosad	Insecticide – Only where measures are taken to minimise the risk to key parasitoids and to minimise the risk of development of resistance
	Not from GMO origin
Cerevisane	Insecticide – Only where measures are taken to minimise the risk to key parasitoids and to minimise the risk of development of resistance
	Not from GMO origin

4. Substances to be used in traps and/or dispensers

Name	Description, compositional requirement, conditions for use
	requirement, conditions for use
Diammonium phosphate	Attractant, only in traps

Pheromones	Attractant: sexual behaviour disrupter,
	only in traps and dispensers
Pyrethroids (only deltamethrin or	Insecticide: only in traps with specific
lambdacyhalothrin)	attractions, only against <i>Bactrocera oleae</i>
	and Ceratitis capitata.

5. Preparations to be surface spread between cultivated plants

Name	Description, compositional requirement, conditions for use
Ferric phosphate (iron (III)	Molluscicide
orthophosphate)	

6. Other substances from traditional use in organic farming

Name	Description, compositional
	requirement, conditions for use
Copper in the form of copper hydroxide, copper oxychloride, (tribasic) copper sulphate, cuprous oxide, copper octanoate	Fungicide. Up to 6 kg copper per ha per year For perennial crops, Member States may, by derogation from the previous paragraph, provide that the 6 kg copper limit can be exceeded in a given year provided that the average quantity actually used over a 5-year period consisting of that year and of the four preceding years does not exceed 6 kg
Ethylene	De-greening bananas, kiwis, and kakis; De-greening of citrus fruit only as part of a strategy for the prevention of fruit fly damage in citrus; Flower induction of pineapple; sprouting inhibition in potatoes and onions
Fatty acid potassium, salt (soft soap)	Insecticide
Potassium aluminium (aluminium sulphate) (Kalinite)	Prevention of ripening of bananas
Lime sulphur (calcium polysulphide)	Fungicide, insecticide, acaricide
Paraffin oil	Insecticide, acaricide
Mineral oils	Insecticide, fungicide. Only in fruit trees, vines, olive trees and tropical crops (i.e., bananas)
Potassium permanganate	Fungicide, bactericide; only in fruit trees, olive trees and vines.
Quartz sand	Repellent
Sulphur	Fungicide, acaricide, repellent

7. Other substances

Name	Description, compositional requirement, conditions for use	
Calcium hydroxide	Fungicide Only in fruit trees, including nurseries, to control <i>Nectria Galligena</i>	
Potassium bicarbonate	Fungicide	

Annex 4 – Products for Cleaning and Disinfection

(EC) 889-2008, Annex VII

Products for cleaning and disinfection of buildings and installations for livestock production.

- Potassium and sodium soap
- Water and steam
- Milk of lime
- Lime
- Quicklime
- Sodium hypochlorite (e.g., as liquid bleach)
- Caustic soda
- Caustic potash
- Hydrogen peroxide
- Natural essences of plants
- Citric, peracetic acid, formic, lactic, oxalic, and acetic acid
- Alcohol
- Nitric acid (dairy equipment)
- Phosphoric acid (dairy equipment)
- Formaldehyde
- Cleaning and disinfection products for teats and milking facilities
- Sodium carbonate

Annex 5 – Permitted Feed Materials and Additives

(EC) 889-2008, Annex V (EC) 889-2008, Annex VI

1. Feed materials of mineral origin

- Calcareous marine shells
- Maerl
- Lithotamn
- Calcium gluconate
- Calcium carbonate
- Defluorinated monocalcium phosphate
- Defluorinated dicalcium phosphate
- Magnesium oxide (anhydrous magnesia)
- Magnesium sulphate
- Magnesium chloride
- Magnesium carbonate
- Calcium magnesium phosphate
- Magnesium phosphate
- Monosodium phosphate
- Calcium sodium phosphate
- Sodium chloride
- Sodium bicarbonate
- Sodium carbonate
- Sodium sulphate
- Potassium chloride

2. Other feed materials

• Saccharomyces cerevisiae

• Saccharomyces carlsbergiensis

3. Technological additives

a) Preservatives

Substance	Description, conditions for use	
Sorbic acid		
Formic acid		
Sodium formate		
Acetic acid		
Lactic acid		
Propionic acid		
Citric acid		

b) Antioxidants

Substance	Description, conditions for use
Tocopherol extracts from vegetable oils	
Tocopherol-rich extracts from vegetable	
oils (delta rich)	

c) Emulsifiers, stabilisers, thickeners, and gelling agents

Substance	Description, conditions for use
Lecithins	Only when derived from organic raw material.
	Use restricted to aquaculture animal feed.

d) Binders and anti-caking agents

Substance	Description, conditions for use
Guar gum	
Sodium ferrocyanide	Maximum dose rate of 20 mg/kg NaCl calculated as ferrocyanide anion.
Colloidal silica	
Kieselgur (diatomaceous earth, purified)	
Bentonite	
Kaolinitic clays, free of asbestos	
Natural mixtures of steatites and chlorite	
Vermiculite	
Sepiolite	
Natrolite-Phonolite	
Clinoptilolite of sedimentary origin	
Perlite	

e) Silage additives

Substance	Description, conditions for use
Enzymes	
Micro-organisms	Use restricted to production of silage when weather conditions do not allow
Formic acid	for adequate fermentation.
Sodium formate	The use of formic, propionic acid and their sodium salts in the production of
Propionic acid	silage is only be permitted when weather conditions do not allow for adequate fermentation.
Sodium propionate	

4. Sensory additives

Substance	Description, conditions for use
Flavouring compounds	Only extracts from agricultural
	products
Castanea sativa Mill.: Chestnut extract	

5. Nutritional additives

a) Vitamins, pro-vitamins, and chemically well-defined substances having similar effect

Substance	Description, conditions for use
Vitamins and provitamins	Derived from agricultural products.
	If derived synthetically, only those identical to vitamins derived from agricultural products may be used for monogastric animals and aquaculture animals.
	If derived synthetically, only vitamins A, D and E identical to vitamins derived from agricultural products may be used for ruminants; the use is subject to prior approval by AGW based on the assessment of the possibility for organic ruminants to obtain the necessary quantities of the said vitamins through their feed rations.
Betaine anhydrous	Only for monogastric animals.
	Only from natural origin and when available from organic origin.

b) Compounds of trace elements

Substance	Description, conditions for use
Iron (II) carbonate (siderite)	
Iron (II) sulphate monohydrate	
Iron (II) sulphate heptahydrate	
Potassium iodide	
Calcium iodate, anhydrous	
Coated granulated calcium iodate	
anhydrous	
Cobalt (II) acetate tetrahydrate	
Cobalt (II) carbonate	
Cobalt (II) carbonate hydroxide (2:3)	
monohydrate	
Coated granulated cobalt (II)	
carbonate hydroxide (2:3)	
monohydrate	
Cobalt (II) sulphate heptahydrate	
Copper (II) carbonate dihydroxy	
monohydrate	
Copper (II) oxide	
Copper (II) sulphate pentahydrate	
Dicopper chloride trihydroxide (TBCC)	
Manganese (II) oxide	
Manganous sulphate, monohydrate	
Zinc oxide	
Zinc sulphate heptahydrate	
Zinc sulphate monohydrate	
Zinc chloride hydroxide monohydrate	
(TBZC)	
Sodium molybdate dihydrate	
Sodium selenite	
Selenised yeast inactivated	

6. Zootechnical additives

Substance	Description, conditions for use
Enzymes and microorganism in the	
category of "Zootechnical additives"	

Annex 6 – Livestock Nitrogen Production Figures

1 Nitrogen from livestock on holding

Livestock Type	Age range / average age	Litres of milk / weight	Kg N / animal
Dairy Cow		>9000	115
Dairy Cow		6000 - 9000	101
Dairy Cow		<6000	61
Dairy Heifer Replacement	0 - 3 months		1.4
Dairy Heifer Replacement	3 - <13 months		29
Dairy Heifer Replacement	13 months to first calf		61
Dairy Beef	0 - 3 months		1.4
Dairy Beef	3 - <13 months		28
Dairy Beef	13 - 24 months		50
Dairy Beef	+2 years		50
Beef Suckler Cow	+2 years	<500	61
Beef Suckler Cow	+2 years	>500	83
Beef Replacement	0 - 3 months		1.4
Beef Replacement	3 - 13 months		28
Beef Replacement	13 - 24 months		50
Grower Fattener	0 - 3 months	100	1.4
Grower Fattener	3 - 13 months	180	28
Grower Fattener	13 - 24 months	400	50
Grower Fattener	+2 years	500	50
Bulls - Non Breeding	>3 months		54
Bulls - Breeding	3 - 24 months		50
Bulls - Breeding	+2 years		48
Adult Ewes		<60	7.6

Adult Ewes		>60	11.9
Lambs	0 - 6 months	0-40	N/A
Lambs	6 - 9 months		N/A
Lambs - Fattener	9 months +	30-50	0.7
Rams - Breeding			9
Maiden Gilts		66+	11.1
Boars		150+	17.5
Sow and Litter – 2.3 lactations	Up to 7 piglets	130-225	18
Weaners	3 - 7.5 weeks	0-13	1
Growers	7.5 - 11 weeks	13-31	4.2
Light Cutters	11 - 20 weeks	31-66	7.7
Baconers	11 - 23 weeks	66+	10.6
Laying Hen		2.2	0.53
Pullet per crop	17 weeks	1.6	0.21
Broiler rearing	Up to 35 days	0.75	0.0185
Broilers per crop	73 days	2.2	0.077
Turkey male per crop	140 days	13.5	0.51
Turkey female per crop	120 days	6.5	0.34
Duck per crop	50 days	3.4	0.12
Geese			0.65
Guinea Fowl			0.65
Deer Hinds (breeding)			15.2
Deer calves and finishers			12
Adult Goats	+6 months		15
Kids	0 - 6 months		1.2
Llama/Alpaca			11
Rabbit – Breeding			1.7
Horse			21

Water Buffalo – Calves	0 – 6 months		13.5
Water Buffalo	+2 years	<500	61
Water Buffalo	+2 years	>500	83

2 Nitrogen from brought-in manures

Manure type	Kg N/tonne
Poultry Manure	16
Farmyard Manure	6
Stable Manure	7

Annex 7 – Approved Pest and Insect Control Products in Livestock Buildings

(EC) 889-2008, Annex II

1. Substances of crop or animal origin

Name	Description, compositional requirement, conditions for use
Adirachtin extracted from <i>Azadir-achta indica</i> (Neem tree)	Insecticide
Gelatine	Insecticide
Plant oils (e.g. mint oil, pine oil, caraway oil)	Insecticide
Pyrethrins extracted from <i>Chrysanthemum</i> cinerariaefolium	Insecticide
Quassia extracted from Quassia arnara	Insecticide, repellent
Rotenone extracted from <i>Derris</i> spp. And <i>Lonchocarpus</i> spp. And <i>Terphrosia</i> spp.	Insecticide

2. Substances to be used in traps and/or dispensers

Name	Description, compositional requirement, conditions for use
Diammonium phosphate	Attractant, only in traps
Pheromones	Attractant: sexual behaviour disrupter, only in traps and dispensers
Pyrethroids (only deltamethrin or lambdacyhalothrin)	Insecticide: only in traps with specific attractions, only against <i>Bactrocera oleae</i> and <i>Ceratitis capitata</i> .

Annex 8 – Approved Ingredients, Additives and Processing Aids for Food Production

(EC) 889-2008, Annex VIIII (EC) 889-2008, Annex IX

1) Food additives and carriers

Name	Preparation of foodstuffs of:		Specific conditions and	
Name	Plant origin	Animal origin	restrictions	
Vegetable carbon		✓	Ashy goat cheese	
			Morbier cheese	
Annatto, Bixin, Norbixin		√	Red Leicester cheese	
			Double Gloucester cheese	
			Cheddar	
			Mimolette cheese	
Calcium carbonate	✓	✓	Shall not be used for colouring or	
			calcium enrichment of products	
Sulphur dioxide	✓	✓ (Only	In fruit wines (wine made from	
		for	fruits other than grapes, including	
		mead)	cider and perry) and mead with	
			and without added sugar: 100	
			mg/l (Maximum levels available	
			from all sources, expressed as SO 2 in mg/l)	
Sodium metabisulphite		✓	Crustaceans	
Potassium	√	✓ (Only	In fruit wines (wine made from	
metabisulphite		for	fruits other than grapes, including	
,		mead)	cider and perry) and mead with	
		,	and without added sugar: 100	
			mg/l (Maximum levels available	
			from all sources, expressed as SO	
			2 in mg/l)	
Sodium nitrite		~	For meat products.	
			May only be used, if it has been	
			demonstrated to the satisfaction of	
			the AGW that no technological	
			alternative, giving the same	
			guarantees and/or allowing to	
			maintain the specific features of	
			the product, is available.	
			Not in combination with E252.	
			Indicative ingoing amount	
			expressed as NaNO 2 : 80 mg/kg,	
			maximum residual amount	
			expressed as NaNO 2 : 50 mg/kg	
Potassium nitrate		✓	For meat products.	

		1	_
			May only be used, if it has been demonstrated to the satisfaction of the AGW that no technological alternative, giving the same guarantees and/or allowing to maintain the specific features of the product, is available. Not in combination with E250.
			Not in combination with £250.
			Indicative ingoing amount expressed as NaNO 3:80 mg/kg, maximum residual amount expressed as NaNO 3:50 mg/kg
Lactic acid	✓	✓	
Carbon dioxide	✓	✓	
Malic acid	✓		
Ascorbic acid	√	✓	With regard to foodstuffs of animal origin: Meat products
Sodium ascorbate		√	With regard to foodstuffs of animal origin: Meat products in connection with nitrates and nitrites
Tocopherol-rich extract	✓	✓	Antioxidant
Lecithins	✓	~	With regard to foodstuffs of animal origin: Milk products.
			Only when derived from organic production.
Sodium lactate		√	Milk-based and meat products
Citric acid	✓	✓	
Sodium citrates	✓	✓	
Calcium citrates	✓		
Tartaric acid	√	✓ (Only for mead)	With regard to foodstuffs of animal origin: Mead.
Sodium tartrates	✓		
Potassium tartrates	✓		
Monocalcium phosphate	✓		Raising agent for self-raising flour
Extracts of Rosemary	✓	✓	Only when derived from organic production
Alginic acid	✓	✓	With regard to foodstuffs of animal origin: milk-based products
Sodium alginate	✓	✓	With regard to foodstuffs of animal origin: milk-based products
Potassium alginate	✓	✓	With regard to foodstuffs of animal origin: milk-based products
Agar	√	√	With regard to foodstuffs of animal origin: milk-based products and meat products
Carrageenan	✓	✓	With regard to foodstuffs of animal origin: milk-based products
Locust bean gum	√	✓	Only when derived from organic production.
Guar gum	✓	✓	Only when derived from organic production.

Production. Production.	Arabic gum	✓	✓	Only when derived from organic
Xanthan gum	7 a do le gain			•
Tara gum powder Conly when derived from organic production.	Xanthan gum	✓	✓	production
Gellan gum Only when derived from organic production. High-acyl form only Only when derived from organic production. Glycerol Only when derived from organic production. Only from plant origin Only when derived from organic production. For plant extracts, flavourings, humectant in gel capsules and as a surface coating of tablets With regard to foodstuffs of animal origin: milk-based products Hydroxypropyl methyl	•	✓	✓	Thickener
Gellan gum Production. High-acyl form only	Tara gam portae.			
Gellan gum Production. High-acyl form only				Only when derived from organic
Gellan gum Y High-acyl form only Only when derived from organic production. Only from plant origin Only when derived from organic production. For plant extracts, flavourings, humectant in gel capsules and as a surface coating of tablets With regard to foodstuffs of animal origin: milk-based products Hydroxypropyl methyl Y Encapsulation material for capsules Sodium carbonates Y Encapsulation material for capsules Sodium carbonates Y Milk coagulation Capsules Calcium carbonates Y Milk coagulation Carrier Sodium hydroxide Y Surface treatment of "Laugengebäck" and regulation of acidity in organic flavourings Silicon dioxide Y For herbs and spices in dried powdered form, flavourings and propolis For herbs and spices in dried powdered form, flavourings and propolis Susface treatment of sausages As a glazing agent for confectionary only. Beeswax from organic production As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon				
Glycerol	Gellan gum	✓	✓	
Glycerol Gonly from plant origin Only when derived from organic production. For plant extracts, flavourings, humectant in gel capsules and as a surface coating of tablets Pectin With regard to foodstuffs of animal origin: milk-based products Hydroxypropyl methyl cellulose Sodium carbonates Potassium carbonates Ammonium carbonates Ammonium carbonates Magnesium carbonates Galcium chloride Calcium sulphate Sodium hydroxide Calcium sulphate Sodium hydroxide Talc Glicon dioxide For herbs and spices in dried powdered form, flavourings For herbs and spices in dried powdered form, flavourings and propolis Talc With regard to foodstuffs of animal origin: surface treatment of sausages Beeswax As a glazing agent for confectionary only. Beeswax from organic production Carnauba wax As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium Argon Helium Y V Helium Nitrogen				,
Glycerol Glycerol Only from plant origin Only when derived from organic production. For plant extracts, flavourings, humectant in gel capsules and as a surface coating of tablets With regard to foodstuffs of animal origin: milk-based products Hydroxypropyl methyl viellulose capsules Sodium carbonates viellulose				Only when derived from organic
Only when derived from organic production. For plant extracts, flavourings, humectant in gel capsules and as a surface coating of tablets With regard to foodstuffs of animal origin: milk-based products Hydroxypropyl methyl cellulose Sodium carbonates Potassium carbonates Ammonium carbonates Ammonium carbonates Calcium chloride Calcium sulphate Sodium hydroxide Sulface treatment of "Laugengebäck" and regulation of acidity in organic flavourings Silicon dioxide For herbs and spices in dried powdered form, flavourings and propolis Talc V With regard to foodstuffs of animal origin: surface treatment of sausages As a glazing agent for confectionary only. Beeswax from organic production Carnauba wax As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Argon Argon Argon V V Nitrogen				
Pectin Pectin With regard to foodstuffs of animal origin: milk-based products Hydroxypropyl methyl cellulose Sodium carbonates Potassium carbonates Ammonium carbonates Calcium chloride Calcium sulphate Sodium hydroxide Soliucon dioxide For plant extracts, flavourings, humectant in gel capsules and as a surface coating of tablets With regard to foodstuffs of animal origin: milk-based products Encapsulation material for capsules Sodium carbonates Ammonium carbonates Ammoniu	Glycerol	✓	✓	Only from plant origin
Pectin Pectin With regard to foodstuffs of animal origin: milk-based products Hydroxypropyl methyl cellulose Sodium carbonates Potassium carbonates Ammonium carbonates Calcium chloride Calcium sulphate Sodium hydroxide Soliucon dioxide For plant extracts, flavourings, humectant in gel capsules and as a surface coating of tablets With regard to foodstuffs of animal origin: milk-based products Encapsulation material for capsules Sodium carbonates Ammonium carbonates Ammoniu				
For plant extracts, flavourings, humectant in gel capsules and as a surface coating of tablets Pectin Pectin With regard to foodstuffs of animal origin: milk-based products Hydroxypropyl methyl cellulose Sodium carbonates Ammonium carbonates Ammonium carbonates Ammonium carbonates Ammonium carbonates Calcium chloride Calcium sulphate Calcium sulphate Sodium hydroxide Wilk coagulation Carrier Surface treatment of "Laugengebäck" and regulation of acidity in organic flavourings Silicon dioxide For herbs and spices in dried powdered form, flavourings and propolis Talc With regard to foodstuffs of animal origin: surface treatment of sausages Beeswax As a glazing agent for confectionary only. Beeswax from organic production As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium V V Withregand Argon Argon Argon V V Helium V V Withregand Argon V V Helium V V Withregand Argon Argon V V Helium V V Withregand Argon Argon V V V Helium V V Withregand to foodstuffs of animal origin: surface treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production.				•
Pectin Pith regard to foodstuffs of animal origin: milk-based products Pith regard to foodstuffs of animal origin: milk-based products Potassium carbonates Potassium carbonates Pectin Potassium carbonates Pectin Magnesium carbonates Pectin Magnesium carbonates Pectin Magnesium carbonates Pectin Milk coagulation Calcium sulphate Calcium sulphate Pertin Surface treatment of "Laugengebäck" and regulation of acidity in organic flavourings Silicon dioxide Pertin Pertin With regard to foodstuffs of animal origin: surface treatment of saussages Beeswax Pertin Pertin As a glazing agent for confectionary only. Beeswax from organic production As a glazing agent for confectionary As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Argon Pectin Pectin Petitin Pe				production.
Pectin Pith regard to foodstuffs of animal origin: milk-based products Pith regard to foodstuffs of animal origin: milk-based products Potassium carbonates Potassium carbonates Pectin Potassium carbonates Pectin Magnesium carbonates Pectin Magnesium carbonates Pectin Magnesium carbonates Pectin Milk coagulation Calcium sulphate Calcium sulphate Pertin Surface treatment of "Laugengebäck" and regulation of acidity in organic flavourings Silicon dioxide Pertin Pertin With regard to foodstuffs of animal origin: surface treatment of saussages Beeswax Pertin Pertin As a glazing agent for confectionary only. Beeswax from organic production As a glazing agent for confectionary As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Argon Pectin Pectin Petitin Pe				
Pectin Pectin With regard to foodstuffs of animal origin: milk-based products Hydroxypropyl methyl cellulose Sodium carbonates Potassium carbonates Ammonium carbonates Ammonium carbonates Calcium chloride Calcium sulphate Sodium hydroxide Sodium hydroxide V Milk coagulation Carrier Sodium hydroxide Surface treatment of "Laugengebäck" and regulation of acidity in organic flavourings For herbs and spices in dried powdered form, flavourings and propolls Talc V With regard to foodstuffs of animal origin: surface treatment of sausages Beeswax As a glazing agent for confectionary only. Beeswax from organic production Carnauba wax V As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Argon Helium V With regard to foodstuffs of animal origin: surface treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production.				
Pectin Hydroxypropyl methyl cellulose Sodium carbonates Sodium carbonates Sodium carbonates Ammonium carbonates Calcium chloride Calcium sulphate Sodium hydroxide Silicon dioxide Beeswax Carnauba wax Carnauba wax Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Argon Arg				
Hydroxypropyl methyl cellulose Sodium carbonates Sodium sulphate Sodium sulp	Poctin	<i></i>	_/	
Hydroxypropyl methyl cellulose Sodium carbonates Potassium carbonates Ammonium carbonates Ammonium carbonates Amgnesium carbonates All Milk coagulation Calcium sulphate Calcium sulphate Sodium hydroxide Sodium hydroxide For herbs and spices in dried powdered form, flavourings and propolis Talc With regard to foodstuffs of animal origin: surface treatment of sausages Beeswax As a glazing agent for confectionary only. Beeswax from organic production Carnauba wax As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Argon Argon For herbs and spices in dried powdered form, flavourings and propolis With regard to foodstuffs of animal origin: surface treatment of sausages As a glazing agent for confectionary only. Beeswax from organic production As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium Y V Introgen	Pecun	•	•	
cellulose capsules Sodium carbonates / Potassium carbonates / Ammonium carbonates / Magnesium carbonates / Calcium chloride / Calcium sulphate / Sodium hydroxide / Silicon dioxide / Silicon dioxide / For herbs and spices in dried powdered form, flavourings and propolis Talc / With regard to foodstuffs of animal origin: surface treatment of sausages Beeswax / As a glazing agent for confectionary only. Beeswax from organic production Carnauba wax / As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon / Alelium / Nitrogen /	Hydroxypropyl mothyl	✓	_	
Sodium carbonates Potassium carbonates Ammonium carbonates Amgnesium carbonates Calcium chloride Calcium sulphate Sodium hydroxide Silicon dioxide For herbs and spices in dried powdered form, flavourings and propolis Talc With regard to foodstuffs of animal origin: surface treatment of sausages Beeswax As a glazing agent for confectionary only. Beeswax from organic production Carnauba wax As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Argon Argon Argon V Milk coagulation Carrier Surface treatment of "Laugengebäck" and regulation of acidity in organic flavourings Wilk regard to foodstuffs of animal origin: surface treatment of sausages As a glazing agent for confectionary only. Beeswax from organic production As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium V Nitrogen		•		· ·
Potassium carbonates Ammonium carbonates Magnesium carbonates Calcium chloride Calcium sulphate Sodium hydroxide Silicon dioxide Talc Beeswax Carriace treatment of "Laugengebäck" and regulation of acidity in organic flavourings With regard to foodstuffs of animal origin: surface treatment of sausages As a glazing agent for confectionary only. Beeswax from organic production Carnauba wax As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon A		√	✓	Capsules
Ammonium carbonates Magnesium carbonates Calcium chloride Calcium sulphate Sodium hydroxide Silicon dioxide Talc Talc With regard to foodstuffs of animal origin: surface treatment of sausages Beeswax As a glazing agent for confectionary only. Beeswax from organic production Carnauba wax As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon				
Magnesium carbonates Calcium chloride Calcium sulphate Sodium hydroxide Silicon dioxide For herbs and spices in dried powdered form, flavourings and propolis Talc Talc With regard to foodstuffs of animal origin: surface treatment of sausages Beeswax As a glazing agent for confectionary only. Beeswax from organic production Carnauba wax As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium Nitrogen				
Calcium chloride Calcium sulphate Sodium hydroxide Silicon dioxide Silicon dioxide Talc Seeswax Seesw				
Calcium sulphate Sodium hydroxide Sodium hydroxide Surface treatment of "Laugengebäck" and regulation of acidity in organic flavourings For herbs and spices in dried powdered form, flavourings and propolis Talc With regard to foodstuffs of animal origin: surface treatment of sausages Beeswax As a glazing agent for confectionary only. Beeswax from organic production Carnauba wax As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon		<u> </u>	✓	Milk coagulation
Sodium hydroxide Surface treatment of "Laugengebäck" and regulation of acidity in organic flavourings For herbs and spices in dried powdered form, flavourings and propolis Talc With regard to foodstuffs of animal origin: surface treatment of sausages Beeswax As a glazing agent for confectionary only. Beeswax from organic production As a glazing agent for confectionary As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon		√	†	
Silicon dioxide Silico	·	√		
Silicon dioxide Silico	Socialii ilyaroxiae			
Silicon dioxide V For herbs and spices in dried powdered form, flavourings and propolis Talc V With regard to foodstuffs of animal origin: surface treatment of sausages Beeswax V As a glazing agent for confectionary only. Beeswax from organic production Carnauba wax V As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon V V Helium V V With the powder of the production organic production. Argon V V With the powder of the po				
powdered form, flavourings and propolis Talc With regard to foodstuffs of animal origin: surface treatment of sausages Beeswax As a glazing agent for confectionary only. Beeswax from organic production As a glazing agent for confectionary As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium Nitrogen	Silicon dioxide	✓	✓	
Talc With regard to foodstuffs of animal origin: surface treatment of sausages Beeswax As a glazing agent for confectionary only. Beeswax from organic production As a glazing agent for confectionary As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Argon Helium V V Nitrogen				·
Talc With regard to foodstuffs of animal origin: surface treatment of sausages Beeswax As a glazing agent for confectionary only. Beeswax from organic production As a glazing agent for confectionary As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Argon Helium V V Nitrogen				
Beeswax ✓ Beeswax ✓ As a glazing agent for confectionary only. Beeswax from organic production As a glazing agent for confectionary As a glazing agent for confectionary As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium ✓ Nitrogen	Talc	✓	✓	
Beeswax As a glazing agent for confectionary only. Beeswax from organic production As a glazing agent for confectionary As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium Nitrogen				
Carnauba wax As a glazing agent for confectionary As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium Nitrogen Carnauba wax As a glazing agent for confectionary As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production.				sausages
Beeswax from organic production As a glazing agent for confectionary As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium Nitrogen	Beeswax	✓		As a glazing agent for
Carnauba wax As a glazing agent for confectionary As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium Nitrogen				confectionary only.
Carnauba wax As a glazing agent for confectionary As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium Nitrogen				
As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium Nitrogen As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms V	-		1	
As a mitigating method for mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium Nitrogen	Carnauba wax	✓		
mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium Nitrogen				confectionary
mandatory extreme cold treatment of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium Nitrogen				As a mailtimation of markland form
of fruit as a quarantine measure against harmful organisms Only when derived from organic production. Argon Helium Nitrogen Of fruit as a quarantine measure against harmful organisms V V V V V V V V V V V V V				
against harmful organisms Only when derived from organic production. Argon Helium Nitrogen Against harmful organisms Only when derived from organic production.				· ·
Only when derived from organic production. Argon Helium V V Nitrogen				
Argon Helium Nitrogen production.				agamse nammar organisms
Argon Helium Nitrogen production.				Only when derived from organic
Argon				•
Helium V Nitrogen V	Argon	✓	✓	
Nitrogen ✓ ✓		✓	✓	
		✓	✓	
	Oxygen	✓	✓	

Erythritol	✓	✓	Only when derived from organic
			production without using ion
			exchange technology

2) Processing aids and other products, which may be used for processing of ingredients of agricultural origin from organic production

Nama	Preparation of foodstuffs of:		Specific conditions and
Name	Plant origin	Animal origin	restrictions
Water	√	√	Drinking / potable water only
Calcium chloride	✓		Coagulation agent
Calcium carbonate	✓		-
Calcium hydroxide	✓		
Calcium sulphate	✓		Coagulation agent
Magnesium chloride (or nigari)	√		Coagulation agent
Potassium carbonate	√		With regard to foodstuffs of plant origin: drying of grapes
Sodium carbonate	√	✓	origini arymig or grapes
Lactic acid		√	With regard to foodstuffs of animal origin: for the regulation of the pH of the brine bath in cheese production
Lactic acid from fermentation	√		With regard to foodstuffs of plant origin: for the preparation of plant protein extracts
Citric acid	✓	✓	
Sodium hydroxide	√		With regard to foodstuffs of plant origin: for sugar(s) production; for oil production excluding olive oil production; for the preparation of plant protein extracts
Sulphuric acid	✓	√	Gelatine production Sugar(s) production
Hop extract	√		With regard to foodstuffs of plant origin: only for antimicrobial purposes in production of sugar. When available from organic production
Pine rosin extract	√		With regard to foodstuffs of plant origin: only for antimicrobial purposes in production of sugar. When available from organic production
Hydrochloric acid		✓	With regard to foodstuffs of animal origin: Gelatine production; for the regulation of the pH of the brine bath in the processing of Gouda-, Edam and Maasdammer cheeses, Boerenkaas, Friese and Leidse Nagelkaas

Ammonium hydroxide		✓	With regard to foodstuffs of animal
			origin: gelatine production
Hydrogen peroxide		✓	With regard to foodstuffs of animal
Caulana diamida	✓	✓	origin: gelatine production
Carbon dioxide	✓	∨ ✓	
Nitrogen	<u> </u>		
Ethanol	√	√	Solvent
Tannic acid	✓		Filtration aid
Egg white albumin	✓		
Casein	✓		
Gelatin	✓		
Isinglass	✓		
Vegetable oils	✓	√	Greasing, releasing or antifoaming agent.
			Only when derived from organic production
Silicon dioxide gel or colloidal solution	✓		
Activated carbon	✓		
Talc	✓		
Bentonite	✓	√	With regard to foodstuffs of animal origin: as a sticking agent for mead
Cellulose	✓	√	With regard to foodstuffs of animal origin: Gelatine production
Diatomaceous earth	✓	√	With regard to foodstuffs of animal origin: Gelatine production
Perlite	✓	√	With regard to foodstuffs of animal origin: Gelatine production
Hazelnut shells	✓		
Rice meal	✓		
Beeswax	✓		Releasing agent.
			Beeswax from organic production
Carnauba wax	✓		Releasing agent.
			Only when derived from organic production.
Acetic acid/vinegar		√	Only when derived from organic production.
			For fish processing only. From natural fermentation, Not to be produced by or from GMO
Thiamin hydrochloride	✓	√	Only for use in processing of fruit wines, including cider and perry and mead
Diammonium phosphate	√	√	Only for use in processing of fruit wines, including cider and perry and mead
Wood fibre	✓	√	The source of timber should be restricted to certified, sustainably harvested wood.

Wood used must not contain toxic components (post-harvest treatment, naturally occurring
toxins or toxins from micro-
organisms)

3) Processing aids for the production of yeast and yeast products

Name	Primary yeast	Yeast confections / formulations	Specific conditions
Calcium chloride	✓		
Carbon dioxide	✓	✓	
Citric acid	✓		For the regulation of the pH in yeast production
Lactic acid	✓		For the regulation of the pH in yeast production
Nitrogen	✓	✓	
Oxygen	✓	✓	
Potato starch	√	✓	For filtering Only when derived from organic production
Sodium carbonate	✓	✓	For the regulation of the pH
Vegetable oils	✓ -	✓	Greasing, releasing or anti-foaming agent Only when derived
			from organic production

- 4) Ingredients of agricultural origin which have not been produced organically
 - a) Edible fruits, nuts and seeds

Acorns	Quercus spp.
Cola nuts	Cola acuminata
Gooseberries	Ribes uva-crispa
Maracujas (passion fruit)	Passiflora edulis
Raspberries (dried)	Rubus idaeus
Red currants (dried)	Ribes rubrum

b) Edible spices and herbs

Pepper (Peruvian)	Schinus molle L.
Horseradish seeds	Armoracia rusticana
Lesser galanga	Alpinia officinarum
Safflower flowers	Carthamus tinctorius
Watercress herb	Nasturtium officinale

- c) Miscellaneous
 - Algae
 - Seaweed
- d) Fats and oils whether or not refined, but not chemically or genetically modified, derived from plants other than:

Cocoa	Theobroma cacao
Coconut	Cocos nucifera
Olive	Olea europaea
Sunflower	Helianthus annuus
Palm	Elaeis guineensis
Rape	Brassica napus, rapa
Safflower	Carthamus tinctorius
Sesame	Sesamum indicum
Soya	Glycine max

- e) The following sugars, starches and other products from cereals and tubers
 - Fructose
 - Rice paper
 - Unleavened bread paper
 - Starch from rice and waxy maize, not chemically or genetically modified
- f) Miscellaneous:
 - Pea protein Pisum spp.
 - Rum, only obtained from sugar cane juice
 - Kirsch prepared on the basis of approved fruits and flavourings
- g) Animal products
 - Aquatic organisms not originating from aquaculture
 - Gelatin
 - Whey powder "herasuola"
 - Casings

Annex 9 – Approved Colourings for Food Production

(EC) 1333/2008, Annex II

E-number	(EC) 1333/2008, Annex II Name
E 100	Curcumin
E 101	Riboflavins
E 102	Tartrazine
E 104	Quinoline Yellow
E 110	Sunset Yellow FCF/Orange Yellow S
F2E 120	Carminic acid, Carmine
E 122	Azorubine, Carmoisine
E 123	Amaranth
E 124	Ponceau 4R, Cochineal Red A
E 127	Erythrosine
E 129	Allura Red AC
E 131	Patent Blue V
E 132	Indigotine, Indigo carmine
E 133	Brilliant Blue FCF
E 140	Chlorophylls and chlorophyllins
E 141	Copper complexes of chlorophylls, chlorophyllins
E 142	Green S
E 150a	Plain caramel a
E 150b	Caustic sulphite caramel
E 150c	Ammonia caramel
E 150d	Sulphite ammonia caramel
F3E 151	Brilliant Black PN
E 153	Vegetable carbon
E 155	Brown HT
E 160a	Carotenes
F4E 160b(i)	Annatto bixin
E 160b(ii)	Annatto norbixin
E 160c	Paprika extract, capsanthin, capsorubin
E 160d	Lycopene
E 160e	Beta-apo-8'-carotenal (C 30)
E 161b	Lutein
E 161g	Canthaxanthin b
E 162	Beetroot Red, betanin
E 163	Anthocyanins
E 170	Calcium carbonate
E 171	Titanium dioxide
E 172	Iron oxides and hydroxides
E 173	Aluminium
E 174	Silver
E 175	Gold
E 180	Litholrubine BK