



ORGANIC FOOD FEDERATION



PRODUCTION STANDARDS

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SECTION 1

HOW TO USE THIS STANDARD AND OTHER GUIDANCE

1.1 Use of sections

- 1.1.1 This Standard has been written in sections to enable you to easily reference the parts required.
- 1.1.2 Sections 1 – 3 are applicable to all operators.
- 1.1.3 Section 4 is specific to your individual operation and is a general section of requirements. These points must be followed for all operations you undertake.
- 1.1.4 Section 5 onwards gives a breakdown of detailed points relating to your operation, some of which might not be applicable.
- 1.1.5 At the end of this Standard is the glossary that should explain any terms which need clarification.
- 1.1.6 This Standard will be amended from time to time and you must ensure that changes effecting your operation are implemented. This will include amendments made via communications from the Federation.

1.2 Specific terms used

- 1.2.1 This Standard has been laid out for ease of use.
- 1.2.2 Where the term “must” is used this point is a mandatory requirement to meet this Standard and must be followed by you.
- 1.2.3 Where the term “should” is used it is recommended that you fully comply with it to help ensure organic integrity, codes of conduct or good practice.
- 1.2.4 The term “may” in most cases means you must obtain prior permission, in writing, from us to carry out this specific operation or practice. This is usually in the form of a derogation.

1.3 Our website

- 1.3.1 www.orgfoodfed.com
- 1.3.2 Our website is easy to use and has lots of useful information on it.
- 1.3.3 Contact details, standards, forms, updates and links.

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INTRODUCTION

2.1 Introduction

- 2.1.1 The Organic Food Federation has been overseeing organic standards since 1986 and is registered with Department for Agriculture, Food and Rural Affairs (Defra) under the EU code of GB-ORG-04.

This is our Standard. Please take time to familiarise yourself with the various sections which cover production, processing, importing, trading, warehousing, non foods and aquaculture. They relate to the certification standard operated by the Federation for the purpose of determining conformity.

2.2 Organic principles

- 2.2.1 Organic production is an overall system of farm management and food production that combines best environmental practices, a high level of biodiversity, the preservation of natural resources, the application of high animal welfare standards and a production method in line with the preference of certain consumers for products produced using natural substances and processes.

2.3 Free movement

- 2.3.1 We believe in the principle of free movement for organically produced products. This means if a product is produced in accordance to this Standard under EC 834/2007 and 889/2008 we accept it as being equivalent to our Standard. This allows free movement within the UK and the European Union without the need to impose further restrictions or higher requirements.
- 2.3.2 Products brought in from outside the EU must be accompanied with a certificate of inspection (COI) issued by an EU recognised certification body which must be included on the EUR-lex website for the required category.

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GENERAL STANDARDS

3.1 Aims and scope

- 3.1.1 This Standard provides the basis for the sustainable development of organic production while ensuring the effective functioning of the internal market, guaranteeing fair competition, consumer confidence and protecting consumer interests.
- 3.1.2 It establishes common objectives and principles to underpin the rules set out in this Standard concerning:
- i. All stages of production, preparation and distribution of organic products and their control;
 - ii. The use of indications referring to organic production in labelling and advertising.
- 3.1.3 This Standard shall apply to the following products originating from agriculture, including aquaculture, where such products are placed on the market or are intended to be placed on the market:
- i. Live or unprocessed agricultural products;
 - ii. Processed agricultural products for use as food or food ingredients;
 - iii. Aquaculture products and seaweeds;
 - iv. Feed;
 - v. Vegetative propagating material and seeds for cultivation.
- 3.1.4 The products of hunting and fishing of wild animals shall not be considered as organic production.
- 3.1.5 This Standard shall also apply to yeasts used as food or feed.
- 3.1.6 This Standard ensures fair competition and a proper functioning of the internal market in organic products, and of maintaining and justifying consumer confidence in products labelled as organic. It should further aim at providing conditions under which the organic sector can progress in line with production and market developments.
- 3.1.7 This Standard provides rules with regard to plant, livestock, and aquaculture production, including rules for the collection of wild plants and seaweeds, rules on conversion, as well as rules on the production of processed food, including wine, feed and organic yeast.
- 3.1.8 Organic farming should primarily rely on renewable resources within locally organised agricultural systems in order to minimise the use of non renewable resources, wastes and by products of plant and animal origin should be recycled to return nutrients to the land.
- 3.1.9 Organic stock farming should respect high animal welfare standards and meet animals' species specific behavioural needs while animal health management should be based on disease prevention. In this respect, particular attention must be paid to housing conditions, husbandry practices and stocking densities. Moreover, the choice of breeds should take account of their capacity to adapt to local conditions.
- 3.1.10 Organic processed products must be produced by the use of processing methods which guarantee that the organic integrity and vital qualities of the product are maintained through all stages of the production chain.
- 3.1.11 For the sake of consumer protection and fair competition, the terms used to indicate organic products are protected from being used on non organic products throughout the Community

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and independently of the language used. The protection should also apply to the usual derivatives or diminutives of those terms, whether they are used alone or combined. The term “organic” must only be used on produce and products that have been certified as such by an approved organic certification body.

3.2 Requirements

- 3.2.1 You must comply with this Standard and keep an up to date copy on site at all times.
- 3.2.2 If you are planning to produce, prepare, store, import, trade or place on the market organic products you must notify us of your activity and submit your plans.
- 3.2.3 You must document and keep up to date operating procedures in accordance with the requirements of this Standard.
- 3.2.4 You must make available to us copies of all or any part of the documented system should we or Defra require them.
- 3.2.5 You must draw up and maintain:
 - i. A full description of your unit / premises;
 - ii. A full description of the operational activities at the above unit / premises;
 - iii. Precautionary measures to be taken in order to reduce the risk of contamination by non organic products or substances.
 - iv. Documentary evidence of NOP production methods if required.
- 3.2.6 If you no longer require organic certification you must inform us in writing with a minimum of three months' notice.
- 3.2.7 You must not deliver or knowingly permit the delivery or sale of non organic products as organic products.
- 3.2.8 You must not conduct operations in a manner that may have an adverse effect on the integrity and reputation of organics.
- 3.2.9 You must inform us of any current court orders or pending prosecutions against you or your operations that have a bearing on your organic activities.
- 3.2.10 In the event that you are prosecuted and it leads to a conviction, we reserve the right to reconsider our certification decision.

3.3 Confidentiality

- 3.3.1 During the course of your inspection and certification process we require you to supply us with information which might be of a confidential nature.
- 3.3.2 We treat all information given to us as confidential and it will not be disclosed to third parties unless it is in the public domain.
- 3.3.3 We are however obliged by law to pass information to authorised government bodies, local authorities and other certification bodies.

3.4 Inspection

- 3.4.1 Our inspectors are all approved and experienced in your type of operation. We will carry out an annual physical inspection.

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- 3.4.2 The inspections we carry out fall into four categories:
- i. Assessment is the initial approval inspection carried out by us;
 - ii. Surveillance is your annual inspection;
 - iii. Interim inspections are carried out for the following reasons:
 - You wish to move or change your premises;
 - You wish to add a new operation to your certificate;
 - You make a major change in your operation.
 - iv. Spot inspections are carried out if:
 - We receive a complaint in writing regarding you;
 - If we have to make sure of corrective action for a serious non compliance.
 - As part of our risk assessment procedure.
 - Random selection.
 - We are also required to spot inspect at least 10% of our operators.
- 3.4.3 You must give our representatives access during normal working hours to your holding and premises, with or without prior notice, for the purpose of carrying out inspections or collection of samples of production operations, which are subject to this Standard.
- 3.4.4 Sites that only handle pre packaged products may be able to be audited under a light touch approach.

3.5 Certificates of conformity

- 3.5.1 When you satisfy our requirements to this Standard you will receive a certificate.
- 3.5.2 Your certificate will remain our property and you may be requested to return it in extreme circumstances.
- 3.5.3 Initially certificates are valid for 12 calendar months:
- i. For producers from date of application;
 - ii. For all other operations from date of certification decision post inspection.
- 3.5.4 Certificates are renewable annually subject to satisfactory inspection and will run concurrently from the date of the previous certificate.
- 3.5.5 We reserve the right to shorten the period of certificates issued.
- 3.5.6 We are responsible for authorising or withholding certificates. Our certification panel is responsible for adjudicating on matters of interpretation and in cases where operators appeal against judgements made by us.
- 3.5.7 Our certification panel / officers are independent of our members and management committee when making decisions regarding certification.
- 3.5.8 You must not make alterations to the system of production, formulation (recipe), processing or manufacture under which the certificate is issued during the period of its validity unless agreed by us in writing.
- 3.5.9 If you fail to comply with these Standards, we will, as appropriate:
- i. Withdraw the certificate or reduce its scope;

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- ii. Refuse to grant or renew the certificate or extend its scope;
- iii. Communicate such decisions and the grounds for them to you and Defra.

- 3.5.10 If your business threatens to bring the Federation into disrepute we may withdraw or refuse to grant or renew your certificate. Such a decision and the grounds for it will be communicated to you in writing. We are required to inform Defra in these instances.
- 3.5.11 Extension certificates are only issued for 28 days after the date of inspection.
- 3.5.12 The word organic can only be used in respect of the production and supply of products that are listed on the certificate or schedule.
- 3.5.13 An electronic copy of your valid certificate may be found on the BioC website <https://www.bioc.info/> . Please note that the certificate is based on the Eu model and will there look different to the certificate that we issue.

3.6 Reports

- 3.6.1 After inspection we will issue a report stating compliance or non compliance to this Standard.
- 3.6.2 A notice will be raised for any non compliances identified at the inspection and a timescale agreed to complete the necessary corrective actions. This notice must be countersigned by you at the time of inspection.

3.7 Sampling and testing

- 3.7.1 Where organic integrity, production techniques or unauthorised products are suspected we will request the operator to take samples and / or our representative to obtain any such samples as deemed necessary.
- 3.7.2 We are required to take samples every year from 5% of our operators based on a general evaluation of the risk of non compliance with the organic production rules.
- 3.7.3 You must inform us of any positive results on tests of analysis for GM or pesticide residuals that you have received.
- 3.7.4 You may have to pay any costs relating to the samples taken and analysis performed by the Federation.
- 3.7.5 You must inform us in all cases where samples have returned positive results and provide copies of these results.

3.8 Fees

- 3.8.1 You will be charged a fee for inspection and certification which must be paid within 30 days of the date of our invoice.
- 3.8.2 Your certificate will not be issued until all fees have been paid.
- 3.8.3 A cancellation fee will be charged for postponing a pre arranged audit if you give less than four working days notice.
- 3.8.4 A fee will also be charged for certificates of inspection, export certificates or other documentation required showing our official stamp.
- 3.8.5 Additions to certificates can be added at time of the annual surveillance audit and up to 14 days after the date of inspection free of charge. This is not the case with spot inspections.

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- 3.8.6 A fee will be charged for any modifications to the certificate, including additions of recipes or land.
- 3.8.7 Extension certificates that are required due to an audit being delayed at your request will not be issued beyond 28 days from the original audit date without incurring a fee.

3.9 Exchange of information

- 3.9.1 Information may be exchanged to guarantee that operations are carried out in accordance with this Standard.
- 3.9.2 Information may be passed to the European Commission, Defra, other government departments and certification bodies.
- 3.9.3 No information will be given to anyone outside of this group without written permission from yourself.
- 3.9.4 If you leave us for an alternative certification body, we will transfer information that we hold on your operation to another certification body upon request in writing from yourself.
- 3.9.5 We are required to inform Defra of:
- i. Withdrawals from certification;
 - ii. Deletions;
 - iii. Manifest or critical infringements;
 - iv. Positive test results.

3.10 Infringements / non compliances

- 3.10.1 A non compliance is any point which is at variance to our Standards.
- 3.10.2 Non compliances fall into five categories:
- i. **Observation:** something noticed at inspection that may affect legality or food safety, and therefore requires attention;
 - ii. **Minor:** does not directly compromise the integrity of the product but needs correcting;
 - iii. **Major:** may compromise the integrity of the product if not corrected, or may result from not correcting a previous minor non compliance. A number of major non compliances may lead to suspension of certification for the products or enterprises affected where there are concerns over integrity of the product or system;
 - iv. **Critical:** directly affects the integrity of the product or may result from not correcting a previous major non compliance. A critical non compliance will normally result in us suspending certification for the products or enterprises affected or the whole certificate;
 - v. **Manifest infringement:** one in which organic integrity has been irrevocably lost as a result of fraud or failure to act to prevent the loss of integrity. It may also result from not correcting a previous critical non compliance. This will most likely result in termination of your certification and Defra being informed.

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- 3.10.3 Acceptable evidence for correction of non compliances:
- Copies of records;
 - Written confirmation of changes;
 - Photographic evidence;
 - Additional inspection (spot inspection);
 - Third party audit report (if this is relevant).
- 3.10.4 When non compliances are discovered (either during inspection or as a result of a complaint etc) a non compliance notice will be served on the spot by the inspector or by us whichever is appropriate.
- 3.10.5 This notice will be served regardless of the non compliance being due to ignorance of this Standard. The date of discovery, location and nature of the non compliance, products affected, quantities involved (if possible) and the corrective action required will be recorded in the report and summarised in the non compliance notice.
- 3.10.6 You must agree a time scale for correction of the non compliance, and sign and retain a copy of the notice. It is expected that all non compliances are resolved in a maximum of 28 days. Failure to do so could lead to your certification being suspended or terminated.
- 3.10.7 You must take immediate steps to prevent any further sales of non conforming stock (if necessary by recalling stock in trade and holding stock in hand) and to correct the non compliance.
- 3.10.8 Non compliances must be corrected before certification can be granted or renewed. When non compliances do not affect the organic integrity of a product, we may at our discretion issue a certificate before the non compliance has been cleared. This may be for a limited period until satisfactory evidence has been provided to correct the non compliance concerned and steps have been taken to prevent recurrences.
- 3.10.9 Your certification might be suspended until appropriate corrective action has taken place.
- 3.10.10 Our certification system allows suspension or deletion if no responses have been received to letters or if there has been a critical, manifest infringement or relevant prosecution against you. If this happens you must inform all of your customers that your certificate has been suspended or deleted. 63
- 3.10.11 If you have been suspended, deleted or withdrawn it is illegal to sell or trade in organic products.

3.11 Genetically modified organisms (GMOs)

- 3.11.1 Genetically modified organisms (GMOs) and products produced from or by GMOs are incompatible with the concept of organic production and consumers' perception of organic products. They must therefore not be used in organic farming or in the processing of organic products.
- 3.11.2 GMOs and products produced from or by GMOs shall not be used as food, feed, processing aids, plant protection products, fertilisers, soil conditioners, seeds, vegetative propagating material, micro-organisms and animals in organic production.
- 3.11.3 The use of GMOs is prohibited. It is not possible to label a product as organic where it has to be labelled as containing GMOs, consisting of GMOs or produced from GMOs.
- 3.11.4 In the case of products to which the GMO labelling rules apply, proof of compliance is the declaration on the labelling of inputs that they do not contain GMOs.

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- 3.11.5 For products to which the GMO labelling rules do not apply vendor declarations that the product has not been produced by or from GMOs are required from all of your suppliers. Visit our website www.orgfoodfed.com for a model of a GMO statement.
- 3.11.6 For a guide to products that are subject to GMO labelling see:
http://www.food.gov.uk/gmfoods/gm/gm_labelling
- 3.11.7 Where it is not specifically mentioned or is in question a statement of non GMO inclusion must be obtained for all products purchased from your suppliers.
- 3.11.8 Organic production must not take place for at least five years on land which has been planted with genetically modified crops.
- 3.11.9 You must not grow any GM crops on your holding.

3.12 Training

- 3.12.1 To help maintain organic integrity it is necessary to ensure that all staff involved with producing and processing have:
- i. A basic training in the task that they are performing;
 - ii. Have been made aware of the Standard relating to the task;
 - iii. Understand how their tasks relate to organic integrity and separation and the need to maintain them.
- 3.12.2 This training must be documented for all personnel involved in organics.

3.13 Product approval

- 3.13.1 All products and recipes must be approved by us and placed on your certificate and trading schedule before manufacture. For details on the requirements and permitted additives please see the relevant sections in this Standard.
- 3.13.2 All livestock and crops must be inspected, approved and placed on your certificate and trading schedule by us before sale.

3.14 Other statutory requirements

- 3.14.1 You must comply with all relevant legislation that applies to your unit and operation over and above this Standard. Examples can include:
- i. Health and safety legislation
 - ii. Environmental;
 - iii. Control of Substances Hazardous to Health (COSHH);
 - iv. Employment law;
 - v. Labelling;
 - vi. HACCP;
 - vii. Notification to local authority of business activity.

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3.15 Use of our logo and the EU logo

- 3.15.1 You must submit copies of all label artwork and proofs to us for approval before printing and use and if required to do so stop using any claims, statements or logos that are unacceptable or considered misleading by us.
- 3.15.2 You must immediately discontinue using our logo and the EU logo on related artwork and advertising material on withdrawal of your certificate. Any reference to organic accreditation by us must be removed from all documents in your possession.
- 3.15.3 You must discontinue use of our logo and the EU logo or any claim of compliance to our Standard with immediate effect if you are temporarily unable to comply with this Standard.
- 3.15.4 You must not use our logo and the EU logo in relation to products unless listed on your valid certificate and trading schedule.
- 3.15.5 You may only use our logo and the EU logo on products you have manufactured, including animal feeds, if the content is 95% organic or over.

Organic Food Federation logo

- 3.15.6 Our logo is a mark of recognition showing compliance to our Standards but is not a mandatory requirement. We will send copies of our logo to you on request.
- 3.15.7 You may only use our logo on products you have manufactured, including animal feeds, if they comply with this Standard.
- 3.15.8 You may, in addition, use our logo on your advertising material, company stationery, promotional literature and your website subject to our approval.
- 3.15.9 You must ensure our logo is not larger than the EU logo when used together.
- 3.15.10 If your product is approved for use in organic systems by us you are eligible to use our approved product logo.

The EU Logo

- 3.15.11 You must use the EU logo for all pre packaged food with over 95% organic content.
- 3.15.12 You must not use the logo if less than 95% of the content of agricultural ingredients of a product has been produced organically.
- 3.15.13 You may use the EU logo on a voluntary basis on non pre packaged 95% organic products that originate from outside the EU or that are imported from third countries.
- 3.15.14 For further information on the use of the EU logo and for copies of the logo please see the two websites listed below:

The website below shows the logo:

http://ec.europa.eu/agriculture/organic/files/eu-policy/logo/user_manual_logo_en.pdf

Frequently asked questions document can be downloaded from:

http://ec.europa.eu/agriculture/organic/files/eu-policy/logo/FAQ_logo_en.pdf

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EU logo design specification

3.15.15 You must comply with the following points and the model shown when using the EU logo.

- i. The logo should appear in light green pantone 376, CMYK 50/0/100/0 and RGB 169/201/56 but may also appear in black and white where a colour form is not practical.
- ii. You may also use the black and white symbol as shown only where it is not practical to apply in colour.
- iii. On dark packaging the logo may appear in negative format using the packaging colour instead of white.
- iv. If packaging is in a single colour then the logo may also appear in that colour rather than in green or black and white.
- v. If a symbol is used in colour on a coloured background, which makes it difficult to see, a delimiting outer line around the symbol can be used to improve contrast with the background colours.
- vi. The Organic logo of the EU shall comply with the model below:



- vii. The minimum height is 9mm. The height/width ration is 1:1.5 so minimum width is 13.5mm. For exceptionally small packaging such as small sweets the logo may be used with a height of 6mm. In such cases other logos should not appear larger than the EU logo, such use would be seen as evidence of misuse of the exception.
- viii. Other graphical or textual elements may be used along with the logo, i.e. national or private logos but they must not interfere with the logo or any of the required indications.
- ix. If a national or private logo is green then that colour green may be used for the European logo as well.
- x. You must ensure that the logo and our certification code are placed together. You may place them anywhere on the pack provided they are in a conspicuous place that is easily visible, clearly legible and indelible.

Required Wording

- i. All products packed and or labelled by our operators must carry our code.
- ii. The code for the Organic Food Federation is: GB – ORG – 04.
- iii. Our code must appear on labels in exactly that format in the same visual field as the EU logo.
- iv. You must indicate where the raw materials originate from where the Community logo is used as follows:
 - 'EU Agriculture', where the agricultural raw material has been farmed in the EU;
 - 'non-EU Agriculture' where the agricultural raw material has been farmed in third countries;
 - 'EU/non-EU Agriculture' where part of the agricultural raw materials has been farmed in the Community and a part of it has been farmed in a third country;

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v. If all raw materials have been farmed in only one country, the name of this specific country, in or outside the EU, can be indicated instead.

vi. Examples of the use of the logo:



GB-ORG-04
EU Agriculture



GB-ORG-04
Non-EU Agriculture



GB-ORG-04
EU/non-EU Agriculture



GB-ORG-04
UK Agriculture



GB-ORG-04
France Agriculture

3.16 Labelling

- 3.16.1 You must label products produced to this Standard as organic and use our code GB-ORG-04.
- 3.16.2 You must clearly label organic products at all times with an accurate description of the product and the label must not be misleading.
- 3.16.3 You must ensure that labelling is clear, concise and complies with all relevant UK legislation.
- 3.16.4 You must only describe products as organic and market them as organic products if the composition of the product is 95% organic or over.
- 3.16.5 You must ensure that your organic products are labelled stating:
 - i. Your name and address and, where different, the owner or seller of the product;
 - ii. The name of the product or a description of the compound feeding stuff accompanied by a reference to the organic production method;
 - iii. Our name and / or the code number;
 - iv. Where relevant the product should be labelled with an identification mark to enable traceability of the product to its manufacturer eg batch code, or use by / best before date.
- 3.16.6 If less than 95% of the content of agricultural ingredients has been produced organically the term organic can only be used to refer to the ingredients which have been organically produced in the list of ingredients on the product label. The ingredients list must also carry a declaration of the proportion of the content of organic agricultural ingredients.
- 3.16.7 You must use the reference GB-ORG-04 on all labels for products certified by us. This includes dispatch, transport and delivery documents.
- 3.16.8 You must not use our code if you import from the EU without breaking bulk. However, in these circumstances you may use our logo. Your labels must include the code of the certifier who licences the last process within the EU, for example EcoCert, AB Cert, etc.
- 3.16.9 You must use our code if you import and break bulk or carry out a further processing operation. You may also use our logo.

Feed Labelling

- 3.16.10 Animal feed products can be labelled organic as long as at least 95% of the dry matter content is comprised of organic ingredients. All ingredients of plant or animal origin contained in the processed feed must be from the organic production method.
- 3.16.11 Your labels for animal feeds should be:

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- i. Printed with the same colour, format and character font so as not to draw more attention to the organic reference than to the description or name of the feed;
 - ii. Accompanied, in the same field of vision, by an indication by weight of dry matter referring:
 - a) To the percentage of feed material from the organic production method;
 - b) To the percentage of feed material from products in conversion to organic farming;
 - c) To the percentage of feed material not organic or in conversion;
 - d) To the total percentage of animal feed of agricultural origin;
 - iii. Accompanied by a list of names of feed materials from the organic production method;
 - iv. Accompanied by a list of names of feed materials from products in conversion to organic production.
- 3.16.12 Where feed is comprised of in conversion and / or non organic ingredients as well as organic ingredients you may sell it with the designation “may be used in organic production in accordance with Regulations (EC) 834/2007 and (EC) 889/2008”, provided that it complies with this Standard.
- 3.16.13 Organic feed labelling must show the respective total percentages in the product of feed materials which are organic, in conversion and from non-organic production as well as the total percentage of the feed comprised of agricultural ingredients. The labelling must also list the ingredients which are organic and those which are in conversion products.

Under conversion

- 3.16.14 You may label products with the designation “product under conversion to organic farming”, provided that:
- i. When it was harvested the land on which it was grown had completed at least twelve months of its conversion period;
 - ii. The designation must not be more prominently displayed than any other indications the product is required to carry;
 - iii. It is comprised only of one crop ingredient;
 - iv. It bears our code number.

3.17 Complaints

- 3.17.1 We will inform you of any complaints in writing which concern your operations.
- 3.17.2 You are required to investigate and respond to us on any complaints that we receive.
- 3.17.3 You must have a procedure on how you handle complaints made against your business or products. You must also keep records of any complaints you receive and actions you have taken to resolve them.

3.18 Appeals

- 3.18.1 From the date of a certification decision you have 14 clear days to appeal.
- 3.18.2 You must notify us in writing of your decision to appeal stating your grounds.

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- 3.18.3 Once we receive your appeal request we will send you a copy of the appropriate procedure which shows how we will process your appeal.

3.19 Sales, purchases and record keeping

- 3.19.1 You must keep records relating to all products, chemicals, additives, seeds, livestock and raw materials that you sell or purchase.
- 3.19.2 When selling products, you must ensure all documentation that you supply with the product clearly states that the products are either organic or in certain cases in conversion. These products must also be listed on your current certificate of conformity and trading schedule issued by us.
- 3.19.3 When purchasing products, you must ensure not only the documentation supplied (delivery note) is marked organic but that it is also accompanied by a valid certificate of conformity and trading schedule issued by an EU recognised certification body.
- 3.19.4 On receipt of organic product, you must check that the items are fully packaged and that the packaging is sealed and intact so as not to risk contamination with non organic products.
- 3.19.5 Imported products from outside the EU must be certified by an EU recognised certification body.
- 3.19.6 Records of quantities sold and purchased must be kept and made available at your annual audit as part of your reconciliation.
- 3.19.7 You must ensure that verification of the status of organic goods is undertaken at reception and recorded.

3.20 Transport

- 3.20.1 Where simultaneous collection of organic and non organic products takes place you must ensure appropriate measures are taken to prevent any possible mixture or exchange with non organic products and to ensure the identification of the organic products. You must also keep information relating to collection days, hours, circuit and date and time of receipt.
- 3.20.2 You must ensure that organic products are transported to other 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.
- 3.20.3 The closing of packaging, containers or vehicles is not required where:
- i. Transportation is direct between two certified organic operators.
 - ii. You must ensure that documentation accompanying the delivery meets the requirements of labelling.
- 3.20.4 You must keep records on any transport operations, goods received or sent, and make sure they are available at our inspection.
- 3.20.5 You must ensure during transport that organically produced feed, in conversion feed, and non organic feed are effectively physically separated.
- 3.20.6 You must ensure that transport used for movement of products is clean, pest free and in suitable condition for its use especially where non organic products have been transported previously. This transport must be cleaned between loads, checked and records kept.
- 3.20.7 You must ensure organic products are separated physically or in time from non organic products during transport.
- 3.20.8 You should ensure vehicles used to transport chilled or frozen goods are not only clean and

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suitable but are the correct temperature for the goods that you are transporting.

3.20.9 You must keep detailed records of:

- i. Products transported;
- ii. Date transported;
- iii. Haulier or vehicle;
- iv. Cleaning between loads;
- v. Packaging integrity checks;
- vi. Correct documentation sent and received;
- vii. Products clearly labelled and identified.

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ORGANIC FARMING OVERVIEW

4.1 Specific principles

- 4.1.1 The specific principles to be followed for crop and livestock production are set out below.
- 4.1.2 For crops they emphasise the importance of maintaining soil health and fertility, the principle that the use of external inputs should be reduced to the minimum necessary, the importance of minimising waste and the need for production methods to be in harmony with the local environment.
- 4.1.3 For livestock they emphasise the importance of using breeds and strains of livestock appropriate to organic systems and the location of the holding, the importance of using management practices as the primary support for animal health and welfare, the principle that the use of external inputs should be reduced to the minimum necessary, minimising waste and the need for production methods to be in harmony with the local environment.
- 4.1.4 Organic production principles are:
- i. Maintaining and enhancing of soil life and natural soil fertility, soil stability and soil biodiversity preventing and combating soil compaction and soil erosion, and the nourishing of plants primarily through the soil ecosystem;
 - ii. Minimising the use of non renewable resources and off farm inputs;
 - iii. Recycling of wastes and by products of plant and animal origin as an input in plant and livestock production;
 - iv. Taking account of the local or regional ecological balance when taking production decisions;
 - v. Maintaining animal health by encouraging the natural immunological defence of the animal, as well as the selection of appropriate breeds and husbandry practices;
 - vi. Maintaining plant health by preventative measures, such as choosing appropriate species and varieties resistant to pests and diseases, appropriate crop rotations, mechanical and physical methods and the protection of natural enemies or pests;
 - vii. Practicing site adapted and land related livestock production;
 - viii. Observing a high level of animal welfare respecting species specific needs;
 - ix. Producing products from animals that have been raised on organic holdings since birth or hatching and throughout their life;
 - x. Choosing breeds having regard to the capacity of animals to adapt to local conditions, their vitality and their resistance to disease or health problems;
 - xi. Feeding livestock with organic feed composed of agricultural ingredients from organic farming and of natural non agricultural substances;
 - xii. Applying animal husbandry practices, which enhance the immune system and strengthen the natural defence against diseases, in particular including regular exercise and access to open air areas and pasture where appropriate;
 - xiii. Excluding the rearing of artificially induced polyploid animals.

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4.2 Unit descriptions

- 4.2.1 A full description of your unit, premises and activity must be drawn up prior to first inspection. This should include:
- i. A map showing the boundaries of your total holding outlined in blue with the organic area in green and any in transition land in red. Your map must also include buildings.
 - ii. Field numbers including their size, cropping and whether in transition 1, 2, 3 or organic.
 - iii. Livestock housing plans;
 - iv. The facilities used for the reception, preparation and storage of the products intended for animal feed before and after the operations concerning them;
 - v. The facilities used for the storage of other products used to prepare feedingstuffs;
 - vi. The facilities used to store products for cleaning and disinfection;
 - vii. The description of the compound feeding stuff that you intend to produce, in accordance with legislative requirements, and the livestock species or class for which the compound feeding stuff is intended;
 - viii. The name of the feed materials that you intend to prepare.
 - ix. Details of the measures you take to guarantee compliance with this organic Standard.

4.3 Annual audit

- 4.3.1 The purpose of your annual audit is to ensure that what you have done over the past year is in line with our Standards and that all your purchases and sales are consistent with what has occurred on the farm.
- 4.3.2 Before the inspector arrives, you should ensure that you have updated the following information:
- i. Farm map showing the organic area and farm plan showing the farm buildings;
 - ii. Rotational plan for the farm and a cropping plan by field or area;
 - iii. Details of seeds and transplants used including quantity purchased and their organic status or derogation;
 - iv. Field records showing the dates of all the activities on that field, including details of the quantities of all the inputs used (mineral fertilisers, pest and disease control products, manure);
 - v. A livestock management plan including management of feeding, health and reproduction;
 - vi. Records of livestock purchases, conversion period, all veterinary and treatment details and identification. Details of the livestock sold, age, weight, identification and destination. Details of animals lost and the reason;
 - vii. Records of animal feed purchased, the quantities fed to each type of stock and its organic status;
 - viii. Details of any veterinary products used on farm detailing stock treated, products used and withdrawal periods;

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- ix. Records of when milk or egg production starts;
 - x. A waste management plan for the manure and / or where necessary details of the organic unit where it is going;
 - xi. Complaints record;
 - xii. Details of the products sold, the quantities and the purchasers. If the sales are direct to the final consumer then these must be kept on a daily basis;
 - xiii. Details of any conventional production and proof of separation;
 - xiv. Records of all derogations issued showing their start and end dates.
- 4.3.3 Failure to provide any of this information (if it is relevant to your operation) will result in a non compliance. If the absence of information results in failure to carry out an acceptable reconciliation it becomes a serious non compliance and your continued certification is at risk. We will have to charge if further inspections are required due to a serious non compliance.

4.4 Storage

- 4.4.1 You must manage storage areas in such a way as to ensure identification of lots and to avoid any mixing with or contamination by products and / or substances not in compliance with our Standards. Organic products shall be clearly identifiable at all times.
- 4.4.2 You must not store products other than those authorised in this Standard.
- 4.4.3 You may store allopathic veterinary medicinal products and antibiotics provided they have been prescribed by a veterinarian in connection with treatment. They must be stored in a controlled location and entered in the livestock record.
- 4.4.4 Where you store non organic and organic products in the same storage facility you must:
- i. Store the organic products separate from the other agricultural products and / or foodstuffs;
 - ii. Take every measure to ensure identification of consignments and avoid mixtures or exchanges with non organic products;
 - iii. Prior to storage ensure suitable cleaning measures have been taken and the effectiveness of them has been checked and recorded.
- 4.4.5 The use of ionising radiation and synthetic chemical treatments as an aid to preservation of stored product is prohibited.

4.5 Addition of land

- 4.5.1 If you want to have land added to your certificate and schedule you must provide us with all the details pertaining to the parcel of land concerned. This can be done by downloading from our website the form for the addition of land to enter transition 1.
- 4.5.2 Where this land is rented from another farmer you should have a land rental agreement in place. This agreement should provide you with an assurance that the owner will not treat the land in any way as to invalidate the land's organic status or conversion.

4.6 Labelling in conversion crops

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4.6.1 You can label crops as in conversion provided that:

- i. A conversion period of at least 12 months before the harvest has been complied with;
- ii. The indication shall appear in a colour, size and style of lettering which is not more prominent than the sales description of the product. The entire indication shall have the same size of letters;
- iii. The product contains only one crop ingredient of agricultural origin;
- iv. Our certification code Organic Certification UK4 is marked clearly on the label.
- v. You do not use the EU logo.

4.7 Record keeping

4.7.1 You must keep farm, activity and financial records on your unit or premises to enable us to audit your operation to this Standard. These records will include but not exclusively as applicable:

- i. Derogations:
 - a) Derogation document issued by us or by Defra;
 - b) What the derogation is issued for;
 - c) Start and finish dates.
- ii. Animal manure export and import details.
- iii. Imported fertilizer details.
- iv. Other authorised farm inputs.
- v. Seed purchases and home saved seed.
- vi. Farm plan, showing all buildings.
- vii. Field records.
- viii. Livestock management records.
- ix. Purchase records (for example stock, feed).
- x. Sales (for example grain, stock).
- xi. Storage records.
- xii. Veterinary medicine usage.
- xiii. Pest control records.
- xiv. Cleaning records.
- xv. Financial records.

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- xvi. Any sub contractor agreements.
- xvii. Any land rental agreements.
- xviii. Training records.
- xix. Detailed descriptions of these records will be found in the relevant sections of this Standard.

4.8 Horses on organic land

- 4.8.1 If you keep horses on organic land that are not being bred for meat production (when normal organic rules would apply) then the following rules must be implemented to allow them to stay on organic land without affecting its status.
- 4.8.2 You should feed any horses on organic land with organic or approved non organic feed. In cases where this is not possible then feed must be GM free and records kept of purchases and quantities.
- 4.8.3 If you have more than five horses you must carry out a faecal egg count prior to treating a horse for worms.
- 4.8.4 If ivermectin based wormers are used the animals must be housed for two days or the dung they produce during that period must be removed from the pasture.
- 4.8.5 Any manure produced by the animals will be classed as non organic and if it is to be returned to the organic land it must be composted for at least 6 months.
- 4.8.6 You must provide a health plan for your animals showing how you intend to control worms and diseases etc.

4.9 Pest control

- 4.9.1 You should maintain good housekeeping, cleanliness and regular turnaround of goods and materials to ensure ways of minimising problems associated with rodents, insects and birds.
- 4.9.2 You should clear up all spillages surrounding waste storage facilities as soon as possible.
- 4.9.3 Pest control activities may be carried out by a licensed contractor or yourself having completed an appropriate training course.
- 4.9.4 If you use a pest contractor you must make them aware your unit is organic and must obtain a letter stating acknowledgement of your status.
- 4.9.5 General pest control should be maintained for areas of your farm including buildings, stores, animal housing, yards and field boundaries where appropriate. You can use all legal methods of controlling vermin.
- 4.9.6 You must keep an updated map to show the position of all baits and monitors as well as electric fly killers and insect traps. All bait stations must be labelled to correspond with the map.
- 4.9.7 You must keep records of all treatments carried out, detailing the date, type of infestation, control method, materials used, the area receiving the treatment and the name of the person carrying out the treatment.

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- 4.9.8 Traps can be used but their operation must be humane and not cause unnecessary suffering to the animal.
- 4.9.9 For products used in traps and dispensers, except pheromone dispensers, the traps and dispensers, should prevent the substances from being released into the environment and prevent contact between the substances and the crops being cultivated. The traps should be collected after use and disposed off safely.
- 4.9.10 You must clearly label all pest control chemicals and store in a controlled lockable area that is adequately proofed.
- 4.9.11 You must keep COSHH safety sheets and material safety data sheets for all pest control chemicals.
- 4.9.12 On farms where organic and conventional materials are stored or processed, you must only use the methods permitted in this Standard.
- 4.9.13 You must not store insecticides and / or rodenticides inside food production or storage areas.
- 4.9.14 No rodenticides should be used in on farm packing / processing areas, although non poisonous monitoring baits may be used providing there is no risk of contamination
- 4.9.15 You must not use any synthetic insecticide in your premises where materials are stored. Only natural pyrethrins can be used when the need arises. If you use any other insecticide the organic materials in the vicinity will be de-classified to non organic, and no organic materials can be brought into the vicinity where spraying took place for at least 7 days.
- 4.9.16 If fumigation of organic materials is necessary as a last resort to prevent further contamination, they will lose their organic status and the event must be recorded, dated and signed. You must inform us with full details of the proposed treatment, prior to the event.
- 4.9.17 **Permitted materials**

Name	Description, compositional requirements, conditions for use
Freezing, heating & vacuum, nitrogen and carbon dioxide	For treatment of products and packaging.
Mechanical barriers, sound and light, including UV	
Electrical insect killers	
Licensed rodent baits	For rodent control, tamper proof bait stations containing legally approved pesticides. In locations where there is no risk of contamination.
Pheromone traps and sticky boards, not containing pesticides	Where the latter are used for rodent control, they must be in accordance with British Pest Control Association Code of Practice.
Diatomaceous earth and amorphous silica	Dessicant dusts derived from naturally occurring sources.

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Bait stations for crawling insects containing insecticides	
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4.9.18 Restricted materials

Name	Description, compositional requirements, conditions for use
Pyrethrins, extracted from a natural botanical source and synergised using Piperonyl butoxide (BPO) derived from a natural source eg oil and sassafras.	<p>These must not come into contact with any organic material or packaging which must be removed or protected to form an effective barrier to contact with the spraying agent.</p> <p>This barrier is to remain in place for 24 hours after the spraying has taken place.</p> <p>Adequate ventilation and cleaning of product contact surfaces must take place after the 24 hour withdrawal period and prior to resumption of organic activities within the treated area.</p>
Synthetic pyrethroids.	Band spraying wall / floor joints, machinery bases and entrances.

4.9.19 Forbidden

Name	Description, compositional requirements, conditions for use
Organo phosphorous based products	These must not be used on site.

4.9.20 You must ask us permission to use restricted treatments under any other circumstance. The application should detail reasons for use, substance and details of the procedures to avoid product contamination. In exceptional circumstances, treatment may be carried out and we must be notified within two working days.

4.9.21 No control substance can be used unless it is specifically permitted or there has been a documented case of need to justify the use of a restricted substance.

4.9.22 You must not use loose grain bait in traps due to potential contamination issues.

4.9.23 For pest and disease control of crops see section 5.9.

4.10 Catastrophic circumstances

4.10.1 Defra may authorise measures, on a temporary basis, to allow organic production to continue or recommence in the case of catastrophic circumstances as follows:

- i. In the case of high mortality of animals caused by health or catastrophic circumstances, the renewal or reconstitution of the herd or flock with non organic animals, when organically reared animals are not available;
- ii. In cases of high mortality of bees caused by health or catastrophic circumstances, the reconstitution of the apiaries with non organic bees, when organic apiaries are not available;
- iii. The use of non organic feedingstuffs for a limited period and in relation to a specific area by individual operators, when forage production is lost or when restrictions are imposed, in particular as a result of exceptional meteorological conditions, the

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outbreak of infectious diseases, the contamination with toxic substances, or as a consequence of fires;

- iv. The feeding of bees with organic honey, organic sugar or organic sugar syrup in case of long lasting exceptional weather conditions or catastrophic circumstances, which hamper the nectar or honeydew production.
- v. For grapes if the exceptional climatic conditions of a given harvest year deteriorate the sanitary status of organic grapes in a specific geographical area because of severe bacterial attacks or fungal attacks, which oblige the winemaker to use more sulphur dioxide than in previous years to obtain a comparable final product up the maximum content to be fixed in accordance with regulations.

4.10.2 In cases where Defra authorises a derogation for any of the above you must keep records and details including a copy of the derogation.

4.11 Hydroponic production

4.11.1 Hydroponic Production is prohibited.

4.12 On farm processing

4.12.1 Whilst this section contains general rules for on farm processing you must consult our processing Standard, which is available on line at www.orgfoodfed.com, prior to starting processing.

4.12.2 You must complete a processing application form if you carry out simple on farm processing.

4.12.3 You may carry out simple processing on a dedicated organic site, once you have been inspected for this operation. It is a separate inspection to your farm audit.

4.12.4 On farm processing is normally defined as where raw materials are processed in such a way that traceability and reconciliation is not difficult to follow.

4.12.5 Examples of on farm processing are:

- i. Cleaning;
- ii. Peeling,
- iii. Chopping and slicing;
- iv. Packing (including bought in certified products) eg box schemes;
- v. Blending (including bought in certified products) where the nature of the product is not changed e.g. muesli;
- vi. Processing of a single organic ingredient where nature is not changed eg flour milling; simple butchery.

SECTION 5

CROP AND LAND HUSBANDRY

5.1 Converting land and crops to organic production

- 5.1.1 The essential elements of an organic plant production management system are soil fertility management, choice of species and varieties, multiannual crop rotation, recycling organic materials and cultivation techniques. Additional fertilisers, soil conditioners and plant protection products should only be used if they are compatible with the objectives and principles of organic production.
- 5.1.2 Your conversion will start from the date of application provided adequate records are submitted.
- 5.1.3 You must follow this Standard throughout your conversion period to full organic status and beyond.
- 5.1.4 Only crops planted on land which has completed its conversion period may be sold as organic.
- 5.1.5 Your land must complete a conversion period prior to becoming fully organic of:
- i. Not less than two years before sowing;
 - ii. For grassland at least two years before it can be harvested as feedingstuffs for organic livestock;
 - iii. For perennial crops other than grassland at least three years before harvest of products.
- 5.1.6 Where part of your holding is already organic and you are converting more land to organic you must keep organically produced product and in conversion products separated and keep records to prove this separation.

5.2 Planning conversion

Conversion Plan

- 5.2.1 You must submit a written conversion plan at the start of your conversion. This must cover the period of a complete rotation and should include the following information.
- i. **Unit description** showing operations covering your entire holding and any planned expansion that you might undertake;
 - ii. **Schedule of fields** showing field numbers and size. This should also show cropping and whether the field is in transition 1, 2, 3, organic or conventional and areas which are not under agricultural crops;
 - iii. **Cropping plan** showing a complete rotation with the cultivation of legumes, incorporation of livestock manure and other organic material to ensure the supply of essential nutrients to the plants;
 - iv. **Crop storage facility description** showing the changes you will make to maintain separation of organic, in conversion and non organic crops to avoid cross contamination.
 - v. **Livestock management plans** for any livestock enterprise containing details of conversion management and dates for proposed sales of animals / produce;

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- vi. **Map** showing the boundaries of your total holding outlined in blue with the organic area in green and any in transition land in red. Your map must also include any buildings;
- vii. **Environmental conservation measures** showing measures intended to increase diversification and pest control through natural predators;
- viii. **Separation** of buildings, equipment, access, cropping and livestock between organic and non organic production. This is to include physical barriers.
- ix. **Soil management plan** showing the use of organic manures, cultivation procedures (eg soil aeration using subsoiler, avoidance of deep ploughing and early ploughing) and use of winter cover crops;
- x. **Weed and pest control measures** showing the programme for the control of weeds, pests and diseases;
- xi. **Farm waste management** showing storage and application of farmyard manure and silage effluent to avoid pollution of water courses. This should also show nitrogen production at the start of your conversion and proposed future production.
- xii. **Fertiliser records** showing uses of permitted inputs and soil conditioners;
- xiii. **Records** of how you manage these aspects of the plan must be kept up to date and current and will form part of your annual audit.

5.2.2 Shortened conversion

Defra may decide to shorten conversion periods retroactively subject to satisfactory proof being supplied allowing them to justify conditions have been met for a period of at least three years:

- i. Where land parcels have been previously subject to measures to ensure no unauthorised inputs have been used;
- ii. Where land parcels are natural or agricultural areas that have not been treated with products not authorised for organic production;
- iii. Your justification for a shortened conversion period must be supported by us and include independently produced, verifiable documentary evidence that the required conditions have been met. If we are able to support an application we will forward it to Defra for decision. However, the maximum length of time that will be permitted to be taken into account under these provisions is twelve months.

5.2.3 In cases where land has been contaminated or other incidents the conversion period might be extended by either us or Defra.

5.2.4 Parcels of land which have already been converted or are in the process of being converted that are treated with a non approved product might not have conversion time increased in the following cases:

- i. Where a compulsory disease or pest control measure has been imposed by Defra and where degradation of the product concerned shall 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;
- ii. Where parcels of land have been authorised for treatment with non authorised products as part of scientific tests approved by Defra the harvest following the treatment may not be sold with reference to organic production methods.

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5.3 Parallel cropping and organic separation

- 5.3.1 Parallel production is the production of organic and non organic crops on the same unit.
- 5.3.2 As a general principle where there is parallel production of organic and non organic crops the holding shall be entirely under organic management.
- 5.3.3 However as an exception to this general principle holdings that comprise both organic and non organic units are allowed provided that there is effective separation between them as follows:
- i. Physical, financial and operational;
 - ii. Measures are in place to prevent cross contamination or substitution of non organic products for organic products.
- 5.3.4 With our permission you may run organic and non organic production units in the same area where:
- i. Organic and non organic varieties of the same perennial crops, where varieties cannot be easily differentiated provided the following conditions are met:
 - a) You must give a firm undertaking in your conversion plan that the non organic area will take no longer than five years to convert. You must submit this plan to us for approval and keep it updated at all times.
 - b) You must take appropriate measures to ensure the permanent separation of the products concerned;
 - c) You must notify us at least 48 hours before harvest of each of the products concerned;
 - d) Upon completion of the harvest you must inform us of the exact quantities harvested and the measures applied to separate the products;
 - e) The conversion plan and control measures have been approved by us each year after the start of the conversion plan;
 - ii. In the case of production of seed vegetative propagating material and transplants; provided a, b, c, d and e above are met:
 - iii. Areas intended for agricultural research or formal education agreed by Defra;
 - iv. In the case of grassland exclusively used for grazing.
- 5.3.5 You must ensure a physical boundary or 10 meter buffer zone between organic and non organic production in order to prevent cross contamination

5.4 General farm environmental management

- 5.4.1 **Hedge and ditch maintenance**
You should avoid cutting hedges and carrying out ditch maintenance between 1 March and 31 August. This is to encourage a diversity of wildlife and plants.
- 5.4.2 **Members of any environmental schemes**
You should inform us if you are a member of an agri environmental scheme.

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5.5 Soil management

- 5.5.1 Organic plant production should contribute to maintaining and enhancing soil fertility as well as to preventing soil erosion. Plants should preferably be fed through the soil eco system and not through soluble fertilisers added to the soil.
- 5.5.2 The essential elements of an organic plant production management system are soil fertility management, choice of species and varieties, multiannual crop rotation, recycling organic materials and cultivation techniques. Additional fertilisers, soil conditioners and plant protection products should only be used if they are compatible with the objectives and principles of organic production and this Standard.
- 5.5.3 You should use tillage and cultivation practices that maintain or increase soil organic matter, enhance soil stability and soil biodiversity, and prevent soil compaction and soil erosion.
- 5.5.4 You should maintain and increase the fertility and biological activity of the soil by multiannual crop rotation including legumes and other green manure crops, and by the application of livestock manure or organic material, both preferably composted, from organic production.
- 5.5.5 You should use plant production techniques to prevent or minimise any contribution to the contamination of the environment.
- 5.5.6 You should rely primarily on the protection by natural enemies, the choice of species and varieties, crop rotation, cultivation techniques and thermal processes for the prevention of damage caused by pests, diseases and weeds.
- 5.5.7 You must only use products for cleaning and disinfection in plant production if they are listed in this Standard.
- 5.5.8 You may be asked for appropriate soil analyses to be taken the results of which must be submitted to us.

5.6 Farm waste management

- 5.6.1 You must produce a farm waste management plan covering all aspects of use of manure including storage, silage effluent, applications, treatments and the total produced.
- 5.6.2 Your plan for spreading manure must be agreed by us and you must keep it up to date. You must record any applications including type of manure used, time of year and quantity.
- 5.6.3 You must ensure that storage facilities for livestock manure are large enough to manage the greatest amount of manure that you will store in any one year to preclude the pollution of water by direct discharge or by run off and infiltration into the soil.
- 5.6.4 Your waste management plan including storage must be developed in line with all current legislation and codes of practice.
- 5.6.5 Manure produced on your organic holding must not be exported to a non organic holding.
- 5.6.6 The total amount of manure applied on your holding must not exceed 170 kg of nitrogen per year, per hectare. Where necessary you will be asked to reduce your stocking density to avoid exceeding this limit or you must export surplus manure to another organic holding.
- 5.6.7 You must keep records of any manure movements.

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5.7 Imported fertiliser materials

- 5.7.1 You may use fertilisers and soil conditioners listed below.
Substances of crop or animal origin

Name	Description, compositional requirement, conditions for use
<i>Compound products or products containing only materials listed hereunder:</i>	
△ Farmyard manure	Product comprising a mixture of animal excrements and vegetable matter (animal bedding). 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.	Factory farming origin forbidden.
△ Liquid animal excrements	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, accepted by the Defra. 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): 0
△ Peat	Use limited to horticulture (market gardening, floriculture, arboriculture, nursery)
Mushroom culture wastes	Initial composition of the substrate shall be limited to products in this Standard.
Dejecta of worms (vermicompost) and insects	
Guano	
△ Composted or fermented mixture of vegetable matter	Product obtained from mixtures of vegetable matter, which have been submitted to composting or to anaerobic fermentation for biogas production.
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 (categories 2 and 3 as defined in Regulation (EC) No 1069/2009 of the European Parliament and of the Council) (2) must not be from factory farming origin. The Processes have to be in

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	<p>accordance with Commission Regulation (EU) No 142/2011 (3).</p> <p>Not to be applied to edible parts of the crop</p>
<p>▲ Products or by-products of animal origin as below:</p> <p>blood meal</p> <p>hoof meal</p> <p>horn meal</p> <p>bone meal or degelatinised bone meal</p> <p>fish meal</p> <p>meat meal</p> <p>feather, hair and “chiquette” meal</p> <p>wool</p> <p>fur (1)</p> <p>hair</p> <p>dairy products</p> <p>Hydrolysed proteins (2)</p>	<p>(1) Maximum concentration in mg/kg of dry matter of chromium (VI): 0</p> <p>(2) Not to be applied to edible parts of the crop.</p>
<p>Products and by-products of plant origin for fertilisers</p> <p>Seaweeds and seaweed products</p>	<p>Examples: oilseed cake meal, cocoa husks, malt culms</p> <p>As far as directly obtained by:</p> <ol style="list-style-type: none"> physical processes including dehydration, freezing and grinding. Extraction with water or aqueous acid and/or alkaline solution 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	Obtained in amorphous form by heat treatment and grinding, containing aluminium and calcium phosphates as essential ingredients. Product as specified in point 7 of Annex 1A.2 to Regulation EC No 2003/2003 of the European Parliament and of the Council relating to fertilisers, 7
Aluminium-calcium phosphate	<p>Obtained in amorphous form by heat treatment and grinding, containing aluminium and calcium phosphates as essential ingredients. Product as specified in point 6 of Annex 1A.2 of Regulation 2003/2003.</p> <p>Cadmium content less than or equal to 90 mg/kg of Phosphorous oxide</p> <p>Use limited to basic soils (pH>7.5)</p>
<p>▲ Basic slag</p> <p>- Thomas phosphates</p> <p>- Thomas slag</p>	<p>Products as specified in point 1 of Annex 1A.2 of Regulation 2003/2003.</p> <p>Obtained in iron-smelting by treatment of the phosphorus melts and containing calcium silicophosphates as its essential ingredients.</p>
▲ Crude potassium salt or kainit	<p>Products as specified in point 1 of Annex 1A.3 of Regulation 2003/2003.</p> <p>From crude potassium salts</p>
▲ Potassium sulphate, possible	Product obtained from crude potassium salt

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containing magnesium salt	by a physical extraction process, containing possibly also magnesium salts.
Stillage and stillage extract	Ammonium stillage excluded
Calcium carbonate (chalk, marl, ground limestone, Breton ameliorant, (maerl), phosphate chalk)	Only of natural origin
Magnesium and calcium carbonate	Only of natural origin eg magnesian chalk, ground magnesium, limestone
Magnesium sulphate (kieserite)	Only natural origin
▲ Calcium chloride solution	Foliar treatment of apple trees, after identification of deficit of calcium
Calcium sulphate (gypsum)	Natural or industrial origin containing calcium sulphate at various degrees of hydration. Only of natural origin. Products as specified in point 1 of Annex 1D of Regulation 2003/2003
▲ Industrial lime from sugar production	By-product of sugar production from sugar beet and sugar cane.
▲ Industrial lime from vacuum salt production	By-product of the vacuum salt production from brine found in mountains.
▲ Elemental sulphur	Comparatively refined natural or industrial product. Products as specified in Annex 1D3 of Regulation 2003/2003
Trace elements as follows:	Inorganic micronutrients listed in part E of Ann1 to Regulation 2003/2003
➤ Boric acid	Obtained by the action of an acid on a borate
➤ Sodium borate	Chemically obtained product containing as its essential component a sodium borate
➤ Calcium borate	Product obtained from colemanite or pandermite containing as its essential ingredient calcium borate.
➤ Boron ethanol amine	Obtained by reacting a boric acid with an ethanol amine
➤ Borated fertiliser in solution	Obtained by dissolving boric acid and/or sodium borate and or boron ethanol amine.
➤ Borated fertiliser in suspension	Obtained by suspending boric acid and/or sodium borate and or boron ethanol amine in water.
Sodium chloride	Only mined salt
Stone meal and clays	
Leonardite (Raw organic sediment rich in humic acids)	Only if obtained as a by-product of mining activities
Xylite	Only if obtained as a by Product of mining activities (e.g. by products of brown coal mining)
Chitin (Polysaccharide obtained from the shell of crustaceans)	Only if obtained from sustainable fisheries or organic aquaculture
Organic rich sediment from fresh water bodies formed under exclusion of oxygen (e.g. sapropel)	Only organic sediments that are by-products of fresh water body management or extracted from former freshwater areas

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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 like 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

- 5.7.2 You must request a derogation form from us and have it authorised before you can use any products marked above with **Δ**.
- 5.7.3 You may use biodynamic preparations.
- 5.7.4 You must not use mineral nitrogen fertilisers.
- 5.7.5 You must keep the following records:
- i. Date of application;
 - ii. Type and amount of fertiliser;
 - iii. Fields
- 5.7.6 You may not store any fertilisers or inputs other than those listed in this section on your agricultural holding.

5.8 Weed control methods

- 5.8.1 You must not use traditional herbicides and methods.
- 5.8.2 Weeds shall be controlled by a combination of the following measures:
- i. Choice of appropriate species and varieties;
 - ii. Appropriate crop rotation programme;
 - iii. Mechanical cultivation procedures;
 - iv. Thermal weeding such as flame;
 - v. Manual control – hand weeding;
 - vi. Companion planting;
 - vii. Mulches;
 - viii. Under-sowing and intercropping;
 - ix. Livestock in orchards, etc.

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5.8.3 All activities must be recorded.

5.9 Pest and disease control

- 5.9.1 The prevention of damage caused by pests, diseases and weeds shall rely primarily on the protection by natural enemies, the choice of species and varieties, crop rotation, cultivation techniques and thermal processes.
- 5.9.2 Where plants cannot be adequately protected from pests and disease only products listed in this Standard can be used.
- 5.9.3 For products used in traps and dispensers, except pheromone dispensers, the traps and dispensers, must prevent the substances from being released into the environment and prevent contact between the substances and the crops being cultivated. The traps must be collected after use and disposed off safely. You must keep records of this.
- 5.9.4 When spraying records must be kept of each spray application including:
- i. Date;
 - ii. Field;
 - iii. Crop;
 - iv. Stage of growth;
 - v. Reasons for application;
 - vi. Product;
 - vii. Permitted dose rates;
 - viii. Pesticide and water application rates;
 - ix. Start and finish times;
 - x. Wind speed and direction;
 - xi. Harvest interval;
 - xii. Operator.
- 5.9.5 You must ensure that any person conducting spray treatments is aware of your organic status and is fully trained in accordance with UK law. Records must be kept of this training.
- 5.9.6 All equipment used for pest and disease control, with emphasis on spray equipment, must be free of non permitted materials that may endanger your organic status. A full cleaning record must be kept.
- 5.9.7 You must ensure that pesticides are stored in their original containers clearly labelled.
- 5.9.8 Pesticide storage areas should be dedicated, clearly labelled and secure. The storage area must not allow accidental leakage of products to endanger the environment.
- 5.9.9 You must keep records of products and quantities purchased and all relevant material safety data sheets and COSHH records.

5.10 Pesticides – plant protection products

5.10.1 Substances of crop or animal origin

Name	Description, compositional requirement,
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	conditions for use
Allium sativum (Garlic extract)	
Azadirachtin extracted from Azadirachta indica (neem tree)	
Basic Substances (Including Lecithins sucrose, fructose, vinegar, whey, chitosan hydrochloride ⁽¹⁾ and Equisetum arvense etc)	Only those basic substances as defined by Article 23 of Regulation (EC) No 1107/2009 ⁽²⁾ which are food as defined in Article 2 of Regulation (EC) No 178/2002 and have Plant or animal origin Substances not to be used as herbicides, but only for the control of pests and diseases
Beeswax	Only as pruning agent / wound protection
COS-OGA	
Hydrolysed proteins excluding gelatine	
Laminarin	Kelp shall be either grown organically in accordance with Article 6d or harvested in a sustainable way in accordance with Article 6c.
Plant oils	All uses authorised except herbicide
Pyrethrins extracted from Chrysanthemum cinerariaefolium	
Quassia extracted from Quassia amara	Only as Insecticide, repellent
Salix SPP Cortex (aka willow bark extract)	

⁽¹⁾ Obtained for sustainable fisheries of organic aquaculture

⁽²⁾ Regulation (EC) No 1107/2009 of European parliament and of the council of 21 October 2009 concerning the placing of plant protection products on the market

5.10.2 Micro-organisms used for biological pest and disease control

Micro-organisms	Not from GMO origin
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5.10.3 Substances produced by micro-organisms

Spinosad	
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5.10.4 Substances to be used in traps and / or dispensers

Pheromones	Only in traps and dispensers
Pyrethroids (only deltamethrin or lambdacyhalothrin)	Only in traps with specific attractants; only against <i>Bactrocera oleae</i> and <i>Ceratitis capitata</i> Wied.

5.10.5 Preparations to be surface-spread between cultivated plants

Ferric phosphate (iron (III) orthophosphate)	Preparations to be surface-spread between cultivated plants.'
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5.10.6 Other substances from traditional use in organic farming

▲ Copper compounds in the form of copper hydroxide, copper oxychloride, copper oxide, Bordeaux mixture, and tribasic copper sulphate	Only uses as bactericide and fungicide up to 6kg copper per hectare per year For perennial crops, Member States may, by derogations from the previous paragraph, provide that the 6kg copper limit can be exceeded in a given year provided that the average quantity actually used over
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	a 5-year period consisting of that year and of the four preceding years does not exceed 6kg.
Diammonium Phosphate	Only at attractant in traps
Ethylene	Only indoor uses as plant growth regulator may be authorised. Authorisation shall be limited shall be limited to Professional users
Fatty acid	All uses authorised except herbicide
▲ Lime sulphur (calcium polysulphide)	
Paraffin oil	
Quartz sand	
Sulphur	
Repellents by smell of animal or plant origin/sheep fat	Only on non-edible parts of the crop and where crop material is not ingested by sheep or goats.

5.10.7 Other substances

Aluminium silicate (Kaolin)	
Calcium hydroxide	When used as a fungicide, Only in fruit trees, including nurseries, to control <i>Nectria galligena</i>
Carbon dioxide	
Kieselgur (diatomaceous earth)	
Potassium hydrogen carbonate (aka potassium bicarbonate)	

5.10.8 You must request a derogation form from us and have it authorised before you may use any products marked above with ▲.

5.10.9 You must only use plant protection products that are listed in this Standard in the case of an established threat to a crop.

5.11 Crop harvesting and storage – including cleaning

Harvest

5.11.1 You must keep records showing:

- i. Harvest date;
- ii. Crop harvested;
- iii. Quantity harvested as organic or in conversion;
- iv. Pre cleaning of machinery before harvesting.

5.11.2 You may if necessary dry crops using indirect heated air or other appropriate systems

Storage

5.11.3 Organic materials must be kept separated from non organic materials.

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- 5.11.4 Stored products must be clearly labelled and identified in sufficient detail to allow correlation between product and the harvest date and field data. Organic products must be clearly identifiable at all times.
- 5.11.5 You must take every measure to ensure identification of consignments and avoid mixtures or exchanges with non organic products.
- 5.11.6 Stores must be clean, dry, well ventilated and pest free.
- 5.11.7 You must ensure that machinery and equipment used in connection with storage facilities and processes are clean and free of contaminants.
- 5.11.8 For cleaning and disinfection you may use:
- i. Sweeping;
 - ii. Vacuuming;
 - iii. Steam cleaning
 - iv. High pressure water treatment;
 - v. Sodium hypochlorite (eg as liquid bleach). If this is used it must be rinsed with plain water after application.
- 5.11.9 You must keep records of all cleaning operations for stores, equipment and machinery. Records should include:
- i. Frequency of cleaning;
 - ii. Date of cleaning;
 - iii. Method of cleaning used;
 - iv. Operative responsible for cleaning and signed assurance of completion.
- 5.11.10 You must ensure that your stores are pest free and adequately proofed. All pest control measures that are taken must be recorded and clearly documented in accordance with this Standard.
- 5.11.11 All off site storage facilities must hold a current organic accreditation certificate and you must have a copy for your records.

SECTION 6

CROP ROTATIONS

6.1 Arable and horticultural crop rotations

- 6.1.1 Crop rotation is the cornerstone of your organic production. A balanced system will help build fertility, vary the demands on the soil and provides nutrients for the crops whilst helping limit the spread of disease and weeds.
- 6.1.2 You must supply us with a breakdown of crops produced on a field by field basis at your annual inspection.
- 6.1.3 Soil analysis should be carried out to establish current nutrient levels and to help manage the land effectively, ensuring that you do not build up excessively high nutrient indices (eg phosphate, potash etc) or deplete the soil of nutrients.
- 6.1.4 Your crop rotation must be based on the principles outlined below and also be documented to show proposed cropping for future years. It must include:
- i. The use of fertility building crops (eg peas, clover), green manures and farmyard manure to enhance the soil nutrient status;
 - ii. The soil must be managed to enhance structure and composition via the use of crops with varying rooting characteristics ie deep rooting, shallow rooting and dense root system.;
 - iii. Maintaining soil cover throughout the year, reducing the risk of run off, erosion and leaching;
 - iv. Sufficient time left in between similar crops that can harbour the same pests and diseases;
 - v. No continuous cropping is allowed.
- 6.1.5 All fields are different and should be managed according to their needs, utilising a balanced crop rotation to maintain good soil fertility ie fertility building, followed by nutrient depleting crops.
- 6.1.6 When producing crops that do not fit into a rotation ie perennials – vines, orchards, permanent pasture or protected cropping etc, they must still be managed in accordance with these Standards.

6.2 Seeds, transplants and vegetative materials

- 6.2.1 You must use organic seed and seed potatoes. To check organic seed availability you must visit the UK organic seed database at www.organicxseed.co.uk. If organic seed is unavailable you should then apply to us for a derogation to use non organic untreated and GM free seed.
- 6.2.2 Any derogation will only be valid for one growing season.
- 6.2.3 For the production of organic seed the mother plant must be produced in accordance with this Standard for at least one generation.
- 6.2.4 For the production of vegetative propagating material the parent plant must be produced in accordance with these Standards for at least two growing seasons.
- 6.2.5 You must keep records of seed and transplant material including:

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- i. Sources, varieties and quantities;
 - ii. Details of quantities purchased, sown and field records;
 - iii. Status of any seed used or purchased;
 - iv. Justifications for requesting the use of non organic seeds;
 - v. Derogations issued to you for the use of non organic seed;
 - vi. Declarations of non GM inclusion;
 - vii. Evidence that the seed is untreated.
- 6.2.6 You must ensure that all forage seed mixes are sourced from organic suppliers and have a minimum organic seed content required by the Control Authority for the year of planting.
- 6.2.7 Only in extreme circumstances might you be given a derogation for purchasing forage seed mixes at a lower percentage and you must prove that every element of the seed mix is unavailable in an organic form.

SECTION 7

GRASSLAND AND FORAGE

7.1 Grassland management

- 7.1.1 Grassland should contain sufficient clover to provide the required soil fertility and quality of forage required in an organic system.
- 7.1.2 Field operations should be carried out at appropriate times of year to minimise the impact on wildlife eg ground nesting birds.
- 7.1.3 Soil analysis should be carried out to establish current nutrient levels and to help manage the land effectively, ensuring that you do not build up excessively high nutrient indices (eg phosphate, potash etc) or deplete the soil of nutrients.
- 7.1.4 Permanent pasture must be growing for at least five years.

7.2 Forage production

- 7.2.1 You must comply with all current legislation regarding the making and storage of silage.
- 7.2.2 You must ensure that you have sufficient storage capacity for all effluent produced and ensure that no effluent pollutes ground water or watercourses. This obviously applies to clamped silage but also to any other form of storage eg silage bags, bales, etc.
- 7.2.3 The following preservatives must only be used for silage when weather conditions do not allow for adequate fermentation.
 - i. E236 Formic acid
 - ii. E260 Acetic acid
 - iii. E270 Lactic Acid
 - iv. E280 Propionic acid
- 7.2.4 The use of enzymes, yeasts and bacteria can be used as silage additives.

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SPECIALIST OPERATIONS

8.1 Mushrooms

8.1.1 You must only use substrates for mushroom production if they are composed of the following components.

- i. Farmyard manure and animal excrements:
 - a) Either from holdings producing according to the organic production method;
 - b) Or you can use 25% of the weight of total components of the substrate, excluding the covering material and any added water, before composting from the list below:

Substances of crop or animal origin

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). 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.	Factory farming origin forbidden.
△ Liquid animal excrements	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, accepted by the Defra. 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): 0
△ Peat	Use limited to horticulture (market gardening, floriculture, arboriculture, nursery)
Mushroom culture wastes	Initial composition of the substrate shall be limited to products in this Standard.
Dejecta of worms (vermicompost) and insects	
Guano	
△ Composted or fermented mixture of vegetable matter	Product obtained from mixtures of vegetable matter, which have been submitted to composting or to anaerobic fermentation for biogas production.
△ Products or by-products of animal origin as below: blood meal hoof meal horn meal bone meal or degelatinised bone meal	Maximum concentration in mg/kg of dry matter of chromium (VI): 0

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meal fish meal meat meal feather, hair and “chiquette” meal wool fur hair dairy products	
Products and by-products of plant origin for fertilisers	Examples: oilseed cake meal, cocoa husks, malt culms
Seaweeds and seaweed products	As far as directly obtained by: a) physical processes including dehydration, freezing and grinding. b) Extraction with water or aqueous acid and/or alkaline solution c) 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	Obtained in amorphous form by heat treatment and grinding, containing aluminium and calcium phosphates as essential ingredients. Product as specified in point 7 of Annex 1A.2 to Regulation EC No 2003/2003 of the European Parliament and of the Council relating to fertilisers, 7
Aluminium-calcium phosphate	Obtained in amorphous form by heat treatment and grinding, containing aluminium and calcium phosphates as essential ingredients. Product as specified in point 6 of Annex 1A.2 of Regulation 2003/2003. Cadmium content less than or equal to 90 mg/kg of Phosphorous oxide Use limited to basic soils (pH>7.5)
<p>▲ Basic slag</p> <p>-Thomas phosphates - Thomas slag</p>	Products as specified in point 1 of Annex 11A.2 of Regulation 2003/2003. Obtained in iron-smelting by treatment of the phosphorus melts and containing calcium silicophosphates as its essential ingredients.
▲ Crude potassium salt or kainit	Products as specified in point 1 of Annex 1A.3 of Regulation 2003/2003. From crude potassium salts
▲ Potassium sulphate, possible containing magnesium salt	Product obtained from crude potassium salt by a physical extraction process, containing possibly also magnesium salts.
Stillage and stillage extract	Ammonium stillage excluded
Calcium carbonate (chalk, marl, ground limestone, Breton ameliorant, (maerl), phosphate chalk)	Only of natural origin
Magnesium and calcium carbonate	Only of natural origin eg magnesian chalk, ground magnesium, limestone
Magnesium sulphate (kieserite)	Only natural origin
▲ Calcium chloride solution	Foliar treatment of apple trees, after identification of deficit of calcium
Calcium sulphate (gypsum)	Natural or industrial origin containing calcium sulphate at various degrees of hydration. Only of natural origin.

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	Products as specified in point 1 of Annex 1D of Regulation 2003/2003
▲ Industrial lime from sugar production	By-product of sugar production from sugarbeet
▲ Industrial lime from vacuum salt production	By-product of the vacuum salt production from brine found in mountains.
▲ Elemental sulphur	Comparatively refined natural or industrial product. Products as specified in Annex 1D3 of Regulation 2003/2003
Trace elements as follows:	Inorganic micronutrients listed in part E of Ann1 to Regulation 2003/2003
➤ Boric acid	Obtained by the action of an acid on a borate
➤ Sodium borate	Chemically obtained product containing as its essential component a sodium borate
➤ Calcium borate	Product obtained from colemanite or pandermite containing as its essential ingredient calcium borate.
➤ Boron ethanol amine	Obtained by reacting a boric acid with an ethanol amine
➤ Borated fertiliser in solution	Obtained by dissolving boric acid and/or sodium borate and or boron ethanol amine.
➤ Borated fertiliser in suspension	Obtained by suspending boric acid and/or sodium borate and or boron ethanol amine in water.
Sodium chloride	Only mined salt
Stone meal and clays	

- ii. Products of agricultural origin, other than those referred to in point (a), from holdings producing according to organic production method;
- iii. Peat not chemically treated;
- iv. Wood, not treated with chemical products after felling;
- v. Mineral products referred to in the above list, water and soil;
- vi. You must request a derogation form from us and have it authorised before you may use any products marked above with ▲.

8.1.2 You must not grow organic and non organic mushrooms in the same house.

8.1.3 You must keep records of the following:

- i. Composition of your substrate;
- ii. Declarations that the components have not been chemically treated or contain GM;
- iii. Sales and purchases;
- iv. Any other records required in other parts of this Standard for the production of organic produce.

8.2 Wild

8.2.1 Wild land has not had any agricultural inputs applied to it and is free from any human inputs other than basic environmental management. Parks and parkland are not considered as wild.

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- 8.2.2 The collection of wild plants and their parts, growing naturally in natural areas, forests and agricultural areas is considered an organic production method provided that:
- i. Those areas have not, for a period of at least three years before the collection, received treatment with products other than those authorised for use in this Standard;
 - ii. The collection does not affect the stability of the natural habitat or the maintenance of the species in the collection area.
- 8.2.3 You must produce a map detailing your collection, processing, storage and packing areas.
- 8.2.4 You must draw up a full description of the activity and practical measures to ensure that you comply with all relevant parts of this Standard.
- 8.2.5 Wild plants, tree products and edible fungi must be collected from an uncultivated area of land or forest which is not within the curtilage of any source of pollution.
- 8.2.6 You are only permitted to collect wild plants when there is a sufficient number of the target species available so as not to compromise sustainability as follows:
- i. Tree products, plants and fungi which grow in the wild habitat are not cultivated and are isolated from any polluting effects of the activities in farming, industry or road traffic.
 - ii. Wild plants, trees, bushes etc and their produce is not treated with agrochemicals.
- 8.2.7 When products have a wild and an organic content any labelling suggesting that the product is organic or contains organic ingredients must comply in fully with this Standard.
- 8.2.8 **Gathering wild plants, tree products and edible fungi**
Gathering of wild plants, tree products and edible fungi must be supervised or carried out by a person who is fully trained and qualified to correctly identify the species and circumstances under which it may be gathered. They should also be able to demonstrate expert knowledge of the identification of species of these, their growth characteristics, mycology and safety (of consumption).
- 8.2.9 The quantity of material gathered must not endanger the sustainability of the species or the normal growth of other nearby vegetation. You must not gather any species that are rare or endangered. It is also forbidden to disturb nesting birds or animals in the course of gathering wild fare.
- 8.2.10 You must keep records of the date, location, species and the quantity gathered. This must be signed by the person carrying out or supervising the gathering.
- 8.2.11 It is essential that everyone responsible for gathering of wild plant products and edible fungi work within the framework of an agreed Collection and Conservancy Plan (CCP) and that they are conversant with local and national conservation plans and with the Convention on International Trade in the Endangered Species of Wild Flora and Fauna (CITES)
- 8.2.12 You must ensure that the species are held in pre cleaned bins or boxes without mixing species. Each box must be labelled to show species and date of gathering and traceability with the gathering record.
- 8.2.13 After gathering the wild fare must be transported to a clean, dry, infestation free store to await further processing or sale to a retailer or caterer. The optimum temperature will be 7-10°C. Wild plants and edible fungi quality deteriorates fairly quickly after gathering so storage should be maximum 24 - 36 hours after gathering.

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- 8.2.14 When wild harvest is sold to retailers and handlers (processors, restaurants etc), you must retain its identity and a record must be kept of the customer, the commodity and quantity sold.
- 8.2.15 This Standard allows wild plants to be used in organic products as organic ingredients providing that they can be proved to be wild.
- 8.2.16 **Collection/Culling and Environmental Management Plan (CEMP).** A plan must be drawn up by the personnel responsible for management of the wild habitat which shows the species of flora or fauna that inhabit it, the approximate density or population, the growing or breeding season and from this they should determine the quantity of wild produce that can be gathered without causing depletion of stocks or having any impact on biodiversity.

8.3 Watercress

- 8.3.1 Section not in use

8.4 Yeast

- 8.4.1 You must only use organically produced substrates for the production of organic yeast.
- 8.4.2 Organic yeast must not be present in organic food or feed together with non organic yeast.
- 8.4.3 For the production, confection and formulation of yeast only the following substances may be used:
preparations of micro-organisms and enzymes normally used in food processing; however, enzymes to be used as food additives have to be listed in 6.5.2;

drinking water and salt (with sodium chloride or potassium chloride as basic components) generally used in food processing;

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

- 8.4.4 The addition of up to 5 % non-organic yeast extract or autolysate to the substrate (calculated in dry matter) is allowed for the production of organic yeast, where operators are unable to obtain yeast extract or autolysate from organic production.

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- 8.4.5 The availability of organic yeast extract or autolysate shall be re-examined with a view to withdrawing this provision.

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GENERAL LIVESTOCK HUSBANDRY REQUIREMENTS

9.1 Management and welfare of organic livestock

- 9.1.1 Livestock production provides the necessary organic matter and nutrients for cultivated land and accordingly contributes towards soil improvement and the development of sustainable agriculture.
- 9.1.2 In order to preserve natural resources organic production of livestock should in principle provide a close relationship between such production and the land, suitable multiannual rotation systems and the feeding of livestock with organic farming crop products.
- 9.1.3 Welfare of livestock is of paramount importance to us. As part of this we support unreservedly the Five Freedoms.
- i. Freedom from thirst, hunger and malnutrition;
 - ii. Freedom from discomfort;
 - iii. Freedom from pain, injury or disease;
 - iv. Freedom from fear and distress;
 - v. Freedom to display most normal patterns of behaviour.
- 9.1.4 Livestock must be fed with organic feed that meets the animal's nutritional requirements at the various stages of its development.
- 9.1.5 You must ensure that any suffering, including mutilation, shall be kept to a minimum during the entire life of the animal including at the time of slaughter.
- 9.1.6 You must not tether or isolate livestock unless justified on the grounds of safety, welfare or veterinary reasons and then only for a limited period of time.
- 9.1.7 Landless production of livestock is not allowed. If you do not have land you can rent organic land for the purposes of grazing your livestock as long as you have a written agreement.
- 9.1.8 You should when selecting breeds and strains of livestock choose an appropriate stock for organic systems and the location of the holding.
- 9.1.9 You must not use substances to promote growth or production (including antibiotics, coccidiostats and other artificial aids for growth promotion purposes), hormones or similar substances to control reproduction or for other purposes (eg induction or synchronisation of oestrus).
- 9.1.10 You should give preference to indigenous breeds and strains of livestock in your selection.
- 9.1.11 You must ensure that the number of livestock is limited with a view to minimising overgrazing, poaching of soil, erosion, or pollution caused by animals or by the spreading of their manure.
- 9.1.12 With regard to husbandry practices and housing conditions:
- i. Personnel keeping animals must possess the necessary basic knowledge and skills as regards the health and the welfare needs of the animals;

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- ii. Husbandry practices, including stocking densities, and housing conditions must ensure that the developmental, physiological and ethological needs of animals are met;
- iii. The livestock must have permanent access to open air areas, preferably pasture, whenever weather conditions and the state of the ground allow this unless restrictions and obligations related to the protection of human and animal health are imposed on the basis of Community legislation.

9.2 Conversion

- 9.2.1 Your conversion period will start from the date you applied to us.
- 9.2.2 During conversion you must follow all the rules in this Standard.
- 9.2.3 As a rule for livestock to be organic it must be born and raised on organic holdings. However, by exception livestock on the holding at the start of its conversion and livestock brought in to start an organic enterprise may be converted to organic in certain circumstances. You must consult with us on managing this provision.
- 9.2.4 Animals or animal products produced during the conversion period must not be marketed as organic.
- 9.2.5 It is possible to convert your unit in a number of ways and you must decide which method of conversion you will undertake and enter it into your management plan prior to start of conversion.
- 9.2.6 All land used for organic livestock production must be subject to a conversion period. These are:
 - i. Two years in the case of land for ruminants and herbivores;
 - ii. One year in the case of land for non ruminants.
- 9.2.7 The conversion period for the land associated with non ruminant production will be one year for pasture and open air areas. This period may be further reduced to six months where the land concerned has not during the last year, received treatments with products not authorised for organic production and you can submit evidence and records to us to prove this. 37
- 9.2.8 Simultaneous conversion is where the entire production unit goes through conversion including livestock, grassland and any land used for animal feed. The conversion period for this is usually two years if the animals are mainly fed with products from your unit.
- 9.2.9 Where animals existing on the holding at the beginning of simultaneous conversion their products may be deemed organic after compliance with the conversion period.
- 9.2.10 You can introduce organic stock on to your land at the end of the conversion period.
- 9.2.11 Non organic livestock for breeding purposes may be brought on to your holding only when organic animals are not available in sufficient number. The animals and their products will be deemed to be organic after compliance with this Standard and the relevant conversion periods.
- 9.2.12 In order to determine how long your conversion will take a period immediately preceding the start of the conversion time may be taken into account in so far as certain conditions occur.

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9.3 Bringing in livestock

- 9.3.1 You must take into account the choice of breeds or strains when bringing livestock on to your unit including:
- i. The capacity of animals to adapt to local conditions;
 - ii. Their vitality and their resistance to disease;
 - iii. Selection to avoid specific diseases or health problems associated with some breeds or strains used in intensive production, such as porcine stress syndrome, PSE Syndrome (pale soft exudative), sudden death, spontaneous abortion and difficult births requiring caesarean operations.
 - iv. Preference is to be given to indigenous breeds and strains.
- 9.3.2 For the purpose of breeding, non organically raised animals may be brought onto your holding only when there is not sufficient organic livestock available and under specific conditions. Such animals and their products may be deemed organic after compliance with the conversion period. This will be reviewed with a view to phasing it out.
- 9.3.3 When a herd or flock is constituted for the first time non organic young mammals will be reared in accordance with this Standard immediately after they are weaned subject to restrictive conditions in the particular livestock section. This will be reviewed with a view to phasing it out.
- 9.3.4 For the renewal of a herd or flock non organic adult male and nulliparous females may be used and must be reared subsequently in accordance with this Standard. Renewals are subject to restrictive conditions and percentages as shown in the particular livestock section of this Standard. This will be reviewed with a view to phasing it out.
- 9.3.5 Reproduction of animals must use natural methods. However artificial insemination is allowable.
- 9.3.6 You must not induce reproduction by treatment with hormones or similar substances, unless as a form of veterinary therapeutic treatment in case of an individual animal.
- 9.3.7 Other forms of artificial reproduction, such as cloning and embryo transfer, must not be used.
- 9.3.8 Where you obtain livestock from non organic units, special measures such as screening tests or quarantine periods may apply, depending on local circumstances.

9.4 Parallel production of livestock and organic separation

- 9.4.1 If your unit has both organic and in conversion livestock you must ensure that organic and in conversion livestock are clearly separate and records are kept showing details of the separation.
- 9.4.2 Non organic livestock may be present on your holding provided they are reared on units where the buildings and parcels are separated clearly from the organic units covered by this Standard and a different species is involved.
- 9.4.3 With our approval and provided that the following conditions are met your non organic holding can be allowed not to be subject to this Standard. These conditions are:
- i. Physical, financial and operational separation;

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- ii. Necessary measures are taken to prevent cross contamination or substitution.

9.5 Livestock management plans

- 9.5.1 You must provide us with a plan of your holding including a full description of:
- i. Livestock buildings,
 - ii. Pasture, open air areas, etc;
 - iii. Where applicable, the premises for the storage, packaging and processing of livestock, livestock products, raw materials and inputs.
- 9.5.2 You must produce a management plan for all livestock on your holding, covering all aspects of production. Part of this should contain a veterinary health plan, specific to each livestock species. Suggested headings for this document are:
- i. Name and address of the holding;
 - ii. Veterinary surgeon name and contact details;
 - iii. Membership of schemes eg farm assurance, etc;
 - iv. General overview covering disease prevention, species rotation, grassland management and crop rotation;
 - v. Stocking policy;
 - vi. Replacement policy;
 - vii. Feeding;
 - viii. Housing;
 - ix. Bio security;
 - x. Routine animal health procedures;
 - xi. Animal parasite control – internal and external;
 - xii. Treatment records.
- 9.5.3 You may find it useful to develop your health plan in conjunction with the template produced by the Bristol Welfare Assurance Programme.
- 9.5.4 Your plan must contain records of inputs and outputs to enable us to carry out a satisfactory audit.
- 9.5.5 You should base disease prevention on breed and strain selection, husbandry management practices, high quality feed and exercise, appropriate stocking density and adequate and appropriate housing maintained in hygienic conditions.
- 9.5.6 Management practices must be the primary support for animal health and welfare, keeping the use of external inputs to the minimum.
- 9.5.7 You must not routinely carry out mutilations such as attaching elastic bands to the tails of sheep, tail docking, cutting teeth, trimming beaks and dehorning. However, we may authorise some of these operations for reasons of safety, health, welfare or hygiene on a

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case by case basis on recommendation by your veterinarian.

- 9.5.8 You must reduce any suffering to your animals to a minimum by applying adequate anaesthesia and / or analgesia and by carrying out the operation only at the most appropriate age by qualified personnel. Any treatments must be recorded in your veterinary medicine records.
- 9.5.9 Physical castration is allowed in order to maintain the quality of products and traditional production practices but only under the conditions set out in 9.1.10.

9.6 Veterinary treatments

- 9.6.1 You must treat immediately any sick or injured animals to avoid their suffering, if necessary in isolation and in suitable housing.
- 9.6.2 You must give a good reason for using veterinary treatments and justifications could include:
- i. Faecal egg counts
 - ii. Soil or feed analysis
 - iii. Veterinarian recommendation
- 9.6.3 You may use phytotherapeutic, homoepathic products, trace elements and products listed below in preference to chemically synthesized allopathic veterinary treatment or antibiotics, provided that their therapeutic effect is effective for the species of animal, and the condition for which the treatment is intended.

Feed materials of mineral origin

Calcareous marine shells
Maerl
Lithotamn
Calcium gluconate
Calcium carbonate
Defluorinated monocalciumphosphate
Defluorinated dicalciumphosphate
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

- 9.6.4 You may use feed additives and certain products used as in animal nutrition and processing aids and non organic feed materials of plant origin if they are listed in our processing Standard under the feed section.
- 9.6.5 You must not use chemically synthesised allopathic veterinary medicinal products or antibiotics for preventive treatment.

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- 9.6.6 Chemically synthesised allopathic veterinary medicinal products including antibiotics may be used where necessary and under strict conditions, when the use of phytotherapeutic, homeopathic and other products are ineffective.
- 9.6.7 If you use chemically synthesised allopathic veterinary medicinal products or antibiotics these must be used under the responsibility of a veterinarian.
- 9.6.8 With the exception of vaccinations, treatments for parasites and compulsory eradication schemes where livestock receives:
- i. more than three courses of treatments with chemically synthesised allopathic veterinary medicinal products or antibiotics within 12 months, or more than one course of treatment if their productive lifecycle is less than one year;
 - ii. the livestock concerned, or produce derived from them, may not be sold as organic products;
- the livestock shall undergo reconversion.
- 9.6.9 You must not use substances to promote growth or production (including antibiotics, coccidiostats and other artificial aids for growth promotion purposes), hormones or similar substances to control reproduction or for other purposes (eg induction or synchronisation of oestrus).
- 9.6.10 You must ensure that the withdrawal period for medicinal products used on livestock is twice the legal withdrawal period. In cases where this period is not specified the withdrawal period is 48 hours.
- 9.6.11 You may store allopathic veterinary products and antibiotics on holdings providing they have been prescribed by your veterinarian.
- 9.6.12 You must clearly label all veterinary products, including drugs and medicines, and store in a controlled locked area. These items must be entered into the relevant records.
- 9.6.13 You must clearly identify treated livestock individually in the case of large animals or by batch in the case of poultry and small animals.
- 9.6.14 You must notify us of treatments to your animals and they must have completed the statutory and organic withdrawal period before they can be marketed as organic.
- 9.6.15 You must keep records for disease prevention and treatment and veterinary care. The records should include:
- i. Date of treatment;
 - ii. Identification of animal or group of animals;
 - iii. Details of the diagnosis;
 - iv. Dosages (posology);
 - v. Type of treatment product;
 - vi. Active ingredients involved;
 - vii. Method of treatment;
 - viii. Veterinary prescription for veterinary care with reasons;

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- ix. Withdrawal periods applying before livestock products can be marketed labelled as organic.
- 9.6.16 You may use immunological veterinary medicines.
- 9.6.17 You must carry out treatments related to the protection of human and animal health that are imposed by Defra.

9.7 Control of specific ailments

- 9.7.1 Organophosphates are permitted for controlling ectoparasites only when you can show that no suitable alternative is available.
- 9.7.2 Before you use an OP product you must apply to us in writing for approval.
- 9.7.3 You must send us a copy of a letter from your veterinary surgeon confirming why non OP treatments are not suitable or are ineffective.
- 9.7.4 When we have approved the treatment we will confirm it in writing to you.
- 9.7.5 If you use OP dip some certification bodies will not allow their operators to accept animals/meat that has been treated with organophosphate based products.

9.8 Grazing and feeding of livestock

- 9.8.1 Your livestock must have access to areas of open air that may be partially covered as described in the relevant sections of this Standard.
- 9.8.2 You may use organic pasturage for 120 days each year to graze non organic livestock provided that such animals come from non intensive farming systems and that organic animals are not present at the same time on that pasture.
- 9.8.3 **Common land:** Organic animals may be grazed on common land, providing that:
 - i. The land has not been treated with products not authorised for organic production for at least three years;
 - ii. Any non organic animals which use the land concerned are derived from a non intensive farming system;
 - iii. Any livestock products from organic animals, whilst using this land, shall not be regarded as being from organic production, unless adequate segregation from non organic animals can be proved;
 - iv. You must consult us if you intend to use common land and record this in your farm management plan;
 - v. Organic livestock shall be kept separate from other livestock. However, grazing on common land by organic animals and of organic land by non organic animals is permitted under certain restrictive conditions.
- 9.8.4 During transhumance animals may graze on non organic land provided they are being moved on foot from one grazing area to another. The uptake of non organic feed, in the form of grass and other vegetation on which the animals graze, during this period shall not exceed 10 % of the total feed ration per year. This figure shall be calculated as a percentage of the dry matter of feedingstuffs from agricultural origin and records must be kept. **17**

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- 9.8.5 You must keep records of all feed and grazing.
- 9.8.6 Your feed must be from organic feed materials unless it is not available on the market in organic form or external catastrophic circumstances such as (e.g. weather, infectious disease) make it impossible to obtain. Where feed is not available organically it might be possible to get a derogation for the use of non organic feed from us.
- 9.8.7 Your feed should mainly come from your holding where the animals are kept or from other organic holdings in the same region and may comprise feed from holdings that are in conversion.

In conversion feeds

- 9.8.8 For feed rations formula you may use up to 30 % on average of in conversion feedingstuffs. When the in conversion feedingstuffs comes from you own unit this percentage may be increased to 100 %.
- 9.8.9 You may also use up to 20% of the total average amount of feedingstuffs fed to the livestock from grazing or harvesting of permanent pastures or perennial forage land in its first year of conversion provided it comes from part of the holding itself and has not been part of an organic production unit of that holding in the last five years.
- 9.8.10 When you use both in conversion feedingstuffs and feedingstuffs from land in its first year of conversion, the total combined percentage of such feedingstuffs shall not exceed the maximum percentage fixed in para 9.8.8.
- 9.8.11 The amounts of in conversion feed should be calculated annually as a percentage of the dry matter of feedingstuffs of plant origin.
- 9.8.12 You should use feed sourced from organic production and other natural substances, to reduce the use of additives and processing aids and keep the use of external inputs to a minimum.
- 9.8.13 Livestock must have permanent access to pasture or roughage.
- 9.8.14 You may only use non organic feed materials from plant origin, feed materials from animal and mineral origin, feed additives, certain products used in animal nutrition and processing aids if they are listed in this Standard or authorised by us in writing.
- 9.8.15 You must not feed your livestock growth promoters and synthetic amino acids.
- 9.8.16 Suckling mammals must be fed with natural, preferably maternal, milk.
- 9.8.17 You must not keep livestock in conditions, or on a diet, which may encourage anaemia.
- 9.8.18 You must not force feed animals. The fattening practices shall be reversible at any stage of the rearing process.
- 9.8.19 Where sufficient quantities of vitamins A, D and E cannot be obtained through animal feed you may request a derogation from us to allow the addition of synthetic vitamins A, D and E. However you must be able to present documented veterinary evidence to support the derogation request.

9.9 Compound feed records

- 9.9.1 You must keep full and detailed records of:
- i. Any feeds brought in;

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- ii. Production records (date, quantity, ingredients and labelling);
- iii. Raw materials used (quantities, supplier and organic status);
- iv. Sales figures;
- v. Records of composition (dry matter inclusion, supplements added).

9.10 General housing requirements of livestock

- 9.10.1 Housing for livestock should include insulation, heating and ventilation of the building that ensures air circulation, dust level, temperature, relative air humidity and gas concentration, are kept within limits which are not harmful to the animals.
- 9.10.2 The building shall have ample natural ventilation and light to enter.
- 9.10.3 You do not need to house livestock in areas with appropriate climatic conditions to enable animals to live outdoors.
- 9.10.4 Your stocking densities in buildings must provide for:
 - i. Comfort;
 - ii. Well being;
 - iii. Species specific needs of the animals which, in particular, shall depend on the species;
 - iv. Breed and the age of the animals;
 - v. Behavioural needs of the animals, which depend in particular on the size of the group and the animals' gender;
 - vi. The density shall ensure the animals' welfare by providing them with sufficient space to stand naturally, lie down easily, turn round, groom themselves, assume all natural postures and make all natural movements such as stretching and wing flapping.
- 9.10.5 You must observe the minimum surface for indoor and outdoor areas, and other characteristics of housing for different species and categories of animals, are laid down in the individual livestock section of this Standard.
- 9.10.6 Your livestock housing must have smooth, but not slippery floors and at least half of the indoor surface area as specified in relevant sections of this Standard must be solid, that is, not of slatted or of grid construction.
- 9.10.7 **Your housing must provide:**
 - i. Comfortable, clean and dry laying / rest areas of sufficient size, consisting of a solid construction which is not slatted;
 - ii. Ample dry bedding strewn with litter material in the rest area;
 - iii. The litter shall comprise straw or other suitable natural material;

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- iv. The litter may be improved and enriched with any mineral product listed below:

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	Obtained in amorphous form by heat treatment and grinding, containing aluminium and calcium phosphates as essential ingredients. Product as specified in point 7 of Annex 1A.2 to Regulation EC No 2003/2003 of the European Parliament and of the Council relating to fertilisers, 7
Aluminium-calcium phosphate	Obtained in amorphous form by heat treatment and grinding, containing aluminium and calcium phosphates as essential ingredients. Product as specified in point 6 of Annex 1A.2 of Regulation 2003/2003. Cadmium content less than or equal to 90 mg/kg of Phosphorous oxide Use limited to basic soils (pH>7.5)
<p>▲ Basic slag</p> <p>-Thomas phosphates</p> <p>- Thomas slag</p>	Products as specified in point 1 of Annex 1A.2 of Regulation 2003/2003. Obtained in iron-smelting by treatment of the phosphorus melts and containing calcium silicophosphates as its essential ingredients.
▲ Crude potassium salt or kainit	Products as specified in point 1 of Annex 1A.3 of Regulation 2003/2003. From crude potassium salts
▲ Potassium sulphate, possible containing magnesium salt	Product obtained from crude potassium salt by a physical extraction process, containing possibly also magnesium salts.
Stillage and stillage extract	Ammonium stillage excluded
Calcium carbonate (chalk, marl, ground limestone, Breton ameliorant, (maerl), phosphate chalk)	Only of natural origin
Magnesium and calcium carbonate	Only of natural origin eg magnesian chalk, ground magnesium, limestone
Magnesium sulphate (kieserite)	Only natural origin
▲ Calcium chloride solution	Foliar treatment of apple trees, after identification of deficit of calcium
Calcium sulphate (gypsum)	Natural or industrial origin containing calcium sulphate at various degrees of hydration. Only of natural origin. Products as specified in point 1 of Annex 1D of Regulation 2003/2003
▲ Industrial lime from sugar production	By-product of sugar production from sugarbeet
▲ Industrial lime from vacuum salt production	By-product of the vacuum salt production from brine found in mountains.
▲ Elemental sulphur	Comparatively refined natural or industrial product. Products as specified in Annex 1D3 of Regulation 2003/2003
Trace elements as follows:	Inorganic micronutrients listed in part E of

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	Ann1 to Regulation 2003/2003
Boric acid	Obtained by the action of an acid on a borate
Sodium borate	Chemically obtained product containing as its essential component a sodium borate
Calcium borate	Product obtained from colemanite or pandermite containing as its essential ingredient calcium borate.
Boron ethanol amine	Obtained by reacting a boric acid with an ethanol amine
Borated fertiliser in solution	Obtained by dissolving boric acid and/or sodium borate and or boron ethanol amine.
Borated fertiliser in suspension	Obtained by suspending boric acid and/or sodium borate and or boron ethanol amine in water.
Sodium chloride	Only mined salt
Stone meal and clays	

You must request a derogation form from us and have it authorised before you may use any products marked above with **Δ**.

9.10.8 Your animal stocking density should be such as not to exceed the limit of 170 kg of nitrogen per year and hectare of agricultural area. Tables to show the number of animals per hectare to comply with this limit are shown in the individual livestock sections of this Standard.

9.10.9 You must keep records showing:

- i. Period of housing;
- ii. Bedding materials used;
- iii. Frequency of changing of bedding;
- iv. Trough and feeder cleaning records.
- v. Any other relevant housing records.

9.11 Handling and transporting livestock

9.11.1 You must take measures to ensure that the duration of livestock transport is minimised.

9.11.2 You must not use

- i. Goads;
- ii. Administer tranquilizers or stimulants during loading, transport, or unloading;
- iii. Electric sticks and such instruments;
- iv. Any type of electrical stimulation to coerce the animals during loading and unloading of animals.
- v. Allopathic tranquillisers, prior to or during transport.

9.11.3 During transhumance animals may graze on non organic land provided they are being moved on foot from one grazing area to another. The uptake of non organic feed, in the form of grass and other vegetation on which the animals graze, during this period shall not exceed 10 % of the total feed ration per year. This figure shall be calculated as a percentage of the dry matter of feedingstuffs from agricultural origin and records must be kept.

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9.12 Livestock movement

- 9.12.1 You must ensure livestock movement records are maintained in the form of a register and kept available to us at all times at your holding. Such records shall provide a full description of the herd or flock management system comprising at least the following information:
- i. Animals arriving at the holding: origin and date of arrival, conversion period, identification mark and veterinary record;
 - ii. Livestock leaving the holding: age, number of heads, weight in case of slaughter, identification mark and destination;
 - iii. Details of any mortalities and reasons thereof;
 - iv. Paperwork accompanying the livestock when sold must be marked organic.

9.12 Identification

- 9.13.1 You must ensure that livestock is permanently identified using techniques adapted to each species, individually in the case of large mammals and individually or by batch in the case of poultry and small mammals.
- 9.13.2 You must keep records of the identification of your livestock to allow traceability.
- 9.13.3 Colours for stamping meat and eggs shells must comply with EU legislation.

9.14 Cleaning and disinfection

- 9.14.1 You must ensure that housing, pens, equipment and utensils are properly cleaned and disinfected to prevent cross infection and the build up of disease carrying organisms. Faeces, urine and uneaten or spilt feed shall be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.
- 9.14.2 Products for cleaning and disinfection of buildings and installations for animal production are listed below:

Potassium and sodium soap
Water and steam
Milk of lime
Lime
Quicklime
Sodium hypochlorite (eg as liquid bleach)
Caustic soda
Caustic potash
Hydrogen peroxide
Natural essences of plants
Citric, peracetic acid, formic, lactic, oxalic and acetic acid

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Alcohol
Nitric acid (dairy equipment)
Phosphoric acid (dairy equipment)
Formaldehyde
Cleaning and disinfection products for teats and milking facilities
Sodium carbonate

- 9.14.3 Products for the cleaning and disinfection of equipment and facilities used in the production of aquaculture animals and seaweed. The animals must be absent during use.

Ozone

Sodium hypochlorite

Calcium hypochlorite

Calcium hydroxide

Calcium oxide

Caustic soda

Alcohol

Potassium permanganate

Tea seed cake made of natural camelia seed (use restricted to shrimp production)

Mixtures of potassium peroxomonosulphate and sodium chloride producing hypochlorous acid

- 9.14.4 You must keep records detailing all cleaning carried out, the date, type of cleaning, materials used, the area or utensils cleaned and the name of the person carrying out the cleaning.
- 9.14.5 You should keep on site all relevant COSHH and MSDS sheets for the products that you use.
- 9.14.6 You must ensure that cleaning instructions and procedures state the frequency and method of cleaning, chemical used and the chemical dilution ratio.
- 9.14.7 You must remove by copious rinsing with potable water any traces of chemical residue that might have been left after cleaning on food contact surfaces.

SECTION 10

POULTRY

10.1 General

- 10.1.1 You must not keep poultry in cages.
- 10.1.2 You must ensure that water fowl have access to a stream, pond, lake or a pool whenever the weather and hygienic conditions permit in order to respect their species specific needs and animal welfare requirements.

10.2 Conversion

- 10.2.1 Your conversion period for the land associated with poultry production will be one year for pasture and open air areas. This period may be further reduced to six months where the land concerned has not during the last year, received treatments with products not authorised for organic production and you can submit evidence and records to us to prove this.
- 10.2.2 When you constitute a flock for the first time, renew or reconstitute and organically reared poultry is not available in sufficient numbers, non organically reared poultry may be brought on to your unit on the condition that the pullets for the production of eggs and poultry for meat production are less than three days old and have been provided feed and veterinary treatment in accordance with this Standard.
- 10.2.3 However until 31 December 2020 you may use non organically reared pullets for egg production of not more than 18 weeks only when organically reared pullets are not available. The pullets must have veterinary treatment and feed in accordance with this Standard and you have an authorised derogation from us.
- 10.2.4 Where you obtain livestock from non organic units, special measures such as screening tests or quarantine periods may be required, depending on local circumstances.

10.3 Laying hens

- 10.3.1 You must on completion of each batch of poultry leave runs empty for not less than two months to allow vegetation to grow back and to break the cycle of parasites and diseases.
- 10.3.2 You must keep documentary evidence of the application of this period.
- 10.3.3 These requirements do not apply where poultry is not reared in batches, is not kept in runs and is free to roam, throughout the day.
- 10.3.4 For breeding purposes you may use non organically raised animals on your holding and these animals and their products may be deemed organic after compliance with the conversion period of six weeks in the case of poultry for egg production.

10.4 Table birds

- 10.4.1 You must after each batch of poultry has been depleted leave runs empty for not less than two months to allow vegetation to grow back. You must also keep records of this. These requirements do not apply where poultry is not reared in batches, is not kept in runs and is free to roam, throughout the day.
- 10.4.2 You must ensure that the total period in any one year that runs are empty must not be less than two months per annum.

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- 10.4.3 For breeding purposes you may use non organically raised animals on your holding and these animals and their products may be deemed organic after compliance with the conversion period of 10 weeks providing they were brought in before they are three days old.
- 10.4.4 When selecting your poultry using slow growing poultry strains as defined below the minimum age of slaughter does not apply.

10.5 Housing

- 10.5.1 In certain cases, where poultry are kept indoors due to restrictions or obligations imposed by Defra, they must permanently have access to sufficient quantities of roughage and suitable material in order to meet their ethological needs.
- 10.5.2 You must empty buildings of livestock between each batch of poultry reared. The buildings and fittings must be cleaned and disinfected during this time.
- 10.5.3 You must ensure that housing buildings for all poultry must meet the following conditions:
- i. At least one third of the floor area must be solid, not of slatted or of grid construction, and covered with a litter material such as straw, wood shavings, sand or turf;
 - ii. For laying hens, a sufficiently large part of the floor area available to the hens must be available for the collection of bird droppings.
 - iii. They must have perches of a size and number proportionate with the number of birds you have;
 - iv. You must have exit and entry pop holes of a size adequate for the birds, and these pop holes must have a combined length of at least 4 m per 100 m² area of the house available to the birds;
 - v. Each house must not contain more than:
 - 4,800 chickens,
 - 3,000 laying hens,
 - 5,200 guinea fowl,
 - 4,000 female Muscovy or Peking ducks,
 - 3,200 male Muscovy or Peking ducks or other ducks,
 - 2,500 capons, geese or turkeys
 - vi. The total usable area of poultry houses for meat production on any single unit must not exceed 1600 m²;
 - vii. Poultry houses must be constructed to allow all birds easy access to open air area;
 - viii. Natural light can only be supplemented by artificial means to a maximum of 16 hours light per day. There must also be a continuous nocturnal rest period without artificial light of at least 8 hours.
- 10.5.4 You must only use products for cleaning and disinfection and pest control as listed in this Standard.
- 10.5.5 You must where a building is subdivided into more than one house to contain more than one flock, ensure that each house has its own dedicated grazing, air space, ventilation, feed and water.

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10.6 Range and pasture

- 10.6.1 You must ensure that poultry have access to an open air area for at least one third of their life.
- 10.6.2 You must ensure that areas of land are mainly covered with vegetation and are provided with protective facilities and allow easy access to adequate numbers of drinking and feeding troughs.
- 10.6.3 Open air areas should provide areas of shade.

10.7 Feed

- 10.7.1 You must ensure that roughage; fresh or dried fodder or silage is added to the daily ration.
- 10.7.2 Feed has to be from organic feed materials unless not available on the market in organic form. Where feed is not available organically it might be possible to get a derogation for the use of non organic feed from us.
- 10.7.3 At least 20 % of the feed shall come from the farm unit itself or in case this is not feasible, be produced in the same region in cooperation with other organic farms or feed business operators.
- 10.7.4 You may use non organic feed where you are unable to obtain organic feed to ensure the requirements of your animals are met. The maximum percentage of non organic feed you may use for 12 months shall be 5 % until 31 December 2020.
- 10.7.5 You may use the non organic feed materials of plant origin listed in our processing Standard under the feed section.
- 10.7.6 You must calculate the figures annually as a percentage of the dry matter of feed from agricultural origin. The maximum percentage authorised of non organic feed in the daily ration shall be 25 % calculated as a percentage of the dry matter.

10.8 Indoor areas

	Indoors area (net area available to animals)			Outdoors area (m ² of area available in rotation/head)
	No animals/m ²	cm perch/animal	nest	
Laying hens	6	18	7 laying hens per nest or in case of common nest 120 cm ² /bird	4, provided that the limit of 170 kg of N/ha/year is not exceeded
Fattening poultry (in fixed housing)	10 with a maximum of 21 kg live weight/m ²	20 (for guinea fowl only)		4 broilers and guinea fowl 4.5 ducks 10 turkey 15 geese In all the species mentioned above the limit of 170 kg of N/ha/year is not exceeded
Fattening poultry in mobile housing	16 in mobile poultry houses with a maximum of 30 kg live weight/m ² Only in the case of mobile houses not exceeding 150 m ² floor space.			2.5, provided that the limit of 170 kg of N/ha/year is not exceeded

10.9 Stocking rate

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Livestock	Age range or average	Body weight kg	Occupancy percent of year	Annual N production kg	Animal number/ ha to comply with maximum N loading of 170kg N/ ha/ yr
Laying hens		2.2	98	0.66	260
Broiler place	42 days	2.2	76	0.495	340
Broiler breeder		3.4	77	0.975	170
Replacement pullets	17 weeks	1.6	38	0.125	1360
Turkeys (male)	140 days	13.5	80	0.139	120
Turkeys (female)	120 days	6.5	80	0.65	260
Ducks	50 days	3.4	85	0.90	190

Assumptions

- Replacement pullets, output per 20 week cycle. If there is more than one cycle per year, then adjust the output proportionately.
- Broilers, output per 6.6 crops/ year, 42 day cycle (76% occupancy).
- Turkeys, assuming 2.1 crops/ year for male birds and 2.4 crops for female birds.

10.10 Slaughter

10.10.1 The minimum age at slaughter shall be:

- i. 81 days for chickens;
- ii. 150 days for capons;
- iii. 49 days for Peking ducks;
- iv. 70 days for female Muscovy ducks;
- v. 84 days for male Muscovy ducks;
- vi. 92 days for Mallard ducks;
- vii. 94 days for guinea fowl;
- viii. 140 days for male turkeys and roasting geese;
- ix. 100 days for female turkeys.

10.10.2 When using slow growing poultry strains the minimum age of slaughter does not apply. **12**

SECTION 11

PIGS

11.1 General

- 11.1.1 Your livestock must have access to areas of open air that may be partially covered
- 11.1.2 You must not keep piglets on flat decks or in piglet cages
- 11.1.3 You must not discourage pigs from rooting by practices such as nose ringing.
- 11.1.4 You must ensure that exercise areas permit dunging and rooting. For the purposes of rooting different substrates can be used.

11.2 Bringing in livestock

- 11.2.1 When you constitute a herd for the first time or for breeding purposes non organic young animals may be used if:
 - i. They have been reared in accordance with this Standard immediately after they are weaned;
 - ii. Piglets must weigh less than 35 kg.
- 11.2.2 To renew a herd you may bring in non organic adult nulliparous female animals under the following restrictions (which will apply until 2012 when this will be reviewed with a view to phasing it out):
 - i. These animals must be treated in accordance with this Standard from the date on which they enter the herd;
 - ii. Up to a maximum of 20 % of adult pigs.
 - iii. If you have with less than 5 pigs any renewal as mentioned above must be limited to a maximum of one animal per year.
- 11.2.3 Non organic male livestock for breeding may be brought in to your unit for a limited period provided the animals reared and fed in accordance with this Standard when they are on your unit.
- 11.2.4 In special cases and with a derogation from us approved by Defra the percentages above may be increased up to 40 %.
 - i. When a major extension to the farm is undertaken;
 - ii. When a breed is changed;
 - iii. When a new livestock specialisation is initiated;
 - iv. When breeds are in danger of being lost to farming and in that case animals of those breeds must not necessarily be nulliparous.
- 11.2.5 Where non organic livestock has been brought on to your holding the livestock products may be considered to be organic after six months.

11.3 Feed

- 11.3.1 You must ensure that young animals are fed on maternal milk in preference to natural milk, for a minimum period of 40 days.
- 11.3.2 You must ensure that roughage; fresh or dried fodder or silage is added to the daily ration.

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- 11.3.3 Feed has to be from organic feed materials unless not available on the market in organic form. Where feed is not available organically it might be possible to get a derogation for the use of non organic feed from us.
- 11.3.4 At least 20 % of the feed shall come from the farm unit itself or in case this is not feasible, be produced in the same region in cooperation with other organic farms or feed business operators.
- 11.3.5 You may use non organic feed where you are unable to obtain organic feed to ensure the requirements of your animals are met. The maximum percentage of non organic feed you may use for 12 months shall be 5 % until 31 December 2020.
- 11.3.6 You may use the non organic feed materials of plant origin listed in our processing Standard under the feed section.
- 11.3.7 You must calculate the figures annually as a percentage of the dry matter of feed from agricultural origin. The maximum percentage authorised of non organic feed in the daily ration shall be 25 % calculated as a percentage of the dry matter.

11.4 Housing

- 11.4.1 You must keep sows in groups except at the last stages of pregnancy and during the suckling period.
- 11.4.2 The minimum surface for indoor and outdoor areas and other characteristics of housing for your pigs are listed below.

	Indoors area (net area available to animals)		Outdoors area (exercise area, excluding pasturage)
	Live weight minimum (kg)	M ² /head	M ² /head
Farrowing sows with piglets up to 40 days		7.5 sow	2.5
Fattening pigs	Up to 50	0.8	0.6
	Up to 85	1.1	0.8
	Up to 110	1.3	1
	Over 110	1.5	1.2
Piglets	Over 40 days and up to 30 kg	0.6	0.4
Brood pigs		2.5 female	1.9
		6 male If pens are used for natural service: 10 m ² /boar	8.0

11.5 Stocking rate

Total nitrogen production as livestock excreta and maximum NVZ stocking rates

Livestock	Age range or average	Body weight kg	Occupancy percent of year	Annual N production kg	Animal number/ ha to comply with maximum N loading of 170kg N/ha/ yr
Maiden gilts		90-130	100	13	13
Boars		130-250	100	16	11
1 sow & litter	Progeny to 7kg	130-225	100	19.5	9
Weaners	3-7.5 weeks	7-18	90	3	57
Growers dry meal	7.5-11 weeks	18-35	90	6.1	28
Light cutter, meal fed	11-20 weeks	35-85	90	9.4	18
Baconer, dry meal fed	11-23 weeks	35-105	90	10.5	16

Sows are based on 2.3 lactations, covering 23% of the year and dry period covering 77% of year. Combined output of 19.5kg N/sow/year

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11.6 Conversion of land

- 11.6.1 Your conversion period for the land associated with pig production will be one year for pasture and open air areas. This period may be further reduced to six months where the land concerned has not during the last year, received treatments with products not authorised for organic production and you can submit evidence and records to us to prove this.

SECTION 14

BEEF AND DAIRY

14.1 General

- 14.1.1 Your livestock must have access to:
- i. Areas of open air that may be partially covered
 - ii. Access to pasturage for grazing whenever conditions allow.
- 14.1.2 If you have bulls over one year old they must have access to pasturage or an open air area.
- 14.1.3 Where your animals have access to pasturage during the grazing period and where the winter housing system gives freedom of movement to the animals, the need to provide open air areas during the winter months may be waived

14.2 Tethering

- 14.2.1 You may tether cattle on a small holding if it is not possible to keep them in groups appropriate to their behaviour requirements. A small holding is interpreted as a holding with not more than 20 female breeding bovines and that the animals concerned are to have daily access to pasture or open air exercise areas where weather conditions preclude access to pasture. If you need to use this provision you must submit your request to us in writing.

14.3 Bringing in livestock

- 14.3.1 When you constitute a herd for the first time or for breeding purposes non organic young mammals may be used if:
- i. They have been reared in accordance with this Standard immediately after they are weaned;
 - ii. Calves and buffalo must be less than six months old.
- 14.3.2 To renew a herd you may bring in non organic adult nulliparous female animals under the following restrictions (which will apply until 2012 when this will be reviewed with a view to phasing it out):
- i. These animals must be treated in accordance with this Standard from the date on which they enter the herd;
 - ii. Up to a maximum of 10 % of adult bovine, including *bubalus* and bison species, livestock.
 - iii. If you have less than 10 bovine animals any renewal as mentioned above must be limited to a maximum of one animal per year.
- 14.3.3 Non organic male livestock for breeding may be brought in to your unit provided the animals are subsequently reared and fed in accordance with this Standard.
- 14.3.4 In special cases and with a derogation from us approved by Defra the percentages above may be increased up to 40 %.
- i. When a major extension to the farm is undertaken;
 - ii. When a breed is changed;
 - iii. When a new livestock specialisation is initiated;
 - iv. When breeds are in danger of being lost to farming and in that case animals of those breeds must not necessarily be nulliparous.

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14.3.4 Where non organic livestock has been brought onto your holding the livestock products may be considered to be organic after:

- i. 12 months for meat production, and at least three quarters of their lifetime;
- ii. Six months in the case of cows for milk production.

14.4 Feed

- 14.4.1 You must ensure that young animals are fed on maternal milk in preference to natural milk, for a minimum period of three months for bovines (including *bubalus* and bison species).
- 14.4.2 You must ensure that rearing systems are based on maximum use of grazing pasturage according to the availability of pastures in the different periods of the year. At least 60 % of the dry matter in daily rations of herbivores must consist of roughage, fresh or dried fodder, or silage.
- 14.4.3 You may reduce this to 50 % for animals in dairy production for a maximum period of three months in early lactation.
- 14.4.4 You should ensure that most of the feed, at least 60 %, is from the farm unit or in case this is not feasible, be produced in cooperation with other organic farms primarily in the same region, except during transhumance.
- 14.4.5 You may use the non organic feed materials of plant origin listed in our processing Standard under the feed section.

14.5 Housing

- 14.5.1 You must not house calves in individual boxes after the age of one week.
- 14.5.2 If you carry out the final fattening phase for cattle indoors you must ensure that this indoors period does not exceed one fifth of the animals' life and lasts no more than three months.
- 14.5.3 The minimum surface for indoor and outdoor areas and other characteristics of housing for your cattle are listed below.

	Indoors area (net area available to animals)		Outdoors area (exercise area, excluding pasturage)
	Live weight minimum (kg)	M ² /head	M ² /head
Breeding and fattening bovine and equidae	Up to 100	1.5	1.1
	Up to 200	2.5	1.9
	Up to 350	4.0	3
	Over 350	5 with a minimum of 1 m ² /100 kg	3.7 with a minimum of 0.75 m ² /100 kg
Dairy cows		6	4.5
Bulls for breeding		10	30

14.6 Stocking rate

SECTION 14

14.6.1 To comply with the nitrogen requirement of 170 kg / ha per year these are the maximum number of animals that you can have on your organic holding per hectare.

Livestock	Age range or average	Body weight kg	Occupancy percent of year	Annual N production kg	Animal number/ ha to comply with maximum N loading of 170kg N/ ha/ yr
Dairy cow		650	100	116	1.5
Dairy cow		550	100	96	1.8
Dairy cow		450	100	76	2.2
Dairy heifer replacement	> 2 years	500	100	58	2.9
Beef suckler cow	> 2years	500	100	58	2.9
Bull beef	6-13.5 months	300	60	23	7.4
Grower fattener	> 2 years	500	100	58	2.9
Grower fattener	12-24 months	400	100	47	3.6
Grower fattener	6-12 months	180	50	12	14
Calf	0-6 months	100	50	7	24
Bull		350+	100	58	2.9

SECTION 15

SHEEP AND GOATS

15.1 General

- 15.1.1 Your livestock must have access to:
- i. Areas of open air that may be partially covered
 - ii. Access to pasturage for grazing whenever conditions allow.
- 15.1.2 Where your animals have access to pasturage during the grazing period and where the winter housing system gives freedom of movement to the animals, the need to provide open air areas during the winter months may be waived

15.2 Bringing in livestock

- 15.2.1 When you constitute a flock for the first time or for breeding purposes non organic young animals may be used if:
- i. They have been reared in accordance with this Standard immediately after they are weaned;
 - ii. Lambs and kids must be less than 60 days old.
- 15.2.2 To renew a flock you may bring in non organic adult nulliparous female animals under the following restrictions (which will apply until 2012 when this will be reviewed with a view to phasing it out):
- i. Up to a maximum of 20 % of the adult sheep and goats;
 - ii. If you have with less than five sheep or goats any renewal as mentioned above shall be limited to a maximum of one animal per year.
- 15.2.3 In special cases and with a derogation from us approved by Defra the percentages above may be increased up to 40 %.
- i. When a major extension to the farm is undertaken;
 - ii. When a breed is changed;
 - iii. When a new livestock specialisation is initiated;
 - iv. When breeds are in danger of being lost to farming and in that case animals of those breeds must not necessarily be nulliparous.
- 15.2.4 Where non organic livestock has been brought onto your holding the livestock products may be considered to be organic after six months.

15.3 Feed

- 15.3.1 You must ensure that young animals are fed on maternal milk in preference to natural milk, for a minimum period of 45 days.
- 15.3.2 You must ensure that rearing systems for herbivores are based on maximum use of grazing pasturage according to the availability of pastures in the different periods of the year. At least 60 % of the dry matter in daily rations of herbivores must consist of roughage, fresh or dried fodder, or silage.
- 15.3.3 You should ensure that most of the feed, at least 60 %, is from the farm unit or in case this is not feasible, be produced in cooperation with other organic farms primarily in the same region, except during transhumance.

SECTION 15

- 15.3.4 You may use the non organic feed materials of plant origin listed in our processing Standard under the feed section.

15.4 Housing

- 15.4.1 With our permission you may carry out the final fattening phase for sheep and goats indoors, you must ensure that this indoors period does not exceed one fifth of the animals' life and lasts no more than three months, this provision can only be allowed until 31 December 2010 and requires a six monthly inspection.
- 15.4.2 The minimum surface for indoor and outdoor areas and other characteristics of housing for your sheep and goats are listed below.

	Indoors area (net area available to animals)	Outdoors area (exercise area, excluding pasturage)
	M ² /head	M ² /head
Sheep and goats	1.5 sheep/goat	2.5
	0.35 lamb/kid	0.5

15.5 Stocking rate

- 15.5.1 To comply with the nitrogen requirement of 170 kg / ha per year these are the maximum number of animals that you can have on your organic holding per hectare.

Livestock	Age range or average	Body weight kg	Occupancy percent of year	Annual N production kg	Animal number/ ha to comply with maximum N loading of 170kg N/ ha/ yr
Sheep					
Adult ewe	> 1 year	50 - 70	100	9	19
Lambs	0-6 months	4 - 40	50	1.2	140
Lambs	6-12 months	30 - 50	50	3.2	53
Ram		60+	100	9	19
Goats					
			100	9	19

SECTION 16

ORGANIC AQUACULTURE

16.1 General standards

- 16.1.1 Aquaculture includes a wide variety of production methods involving many species in fresh, brackish and salt water.
- 16.1.2 You must follow this Standard for organic production for the organisms to be labelled as organically produced.
- 16.1.3 The general requirements of this Standard and for Storage, Warehouse and Transport, Production and Processing apply to aquaculture
- 16.1.4 You must comply with all other sections of this Standard as appropriate.
- 16.1.5 This Standard also require compliance with all relevant regulations that currently are covered by European and UK legislation. In particular, you must be registered with their appropriate Fisheries Department and maintain records and standards that are demanded by these organisations.
- 16.1.6 You must fully comply as a minimum with planning and development regulations, as well as all relevant legislation associated with abstraction of water and its discharge and environmental impact.
- 16.1.7 You must submit to us a full description detailing your aquaculture production system. The full description of the unit must include:
- i. a full description of the installations on land and at sea;
 - ii. the environmental assessment as outlined in paragraph 1.2.11 where applicable;
 - iii. the sustainable management plan as outlined in paragraph 1.2.12 where applicable;
 - iv. in the case of molluscs a summary of the special chapter of the sustainable management plan as required by paragraph 2.2.10.
- 16.1.8 You must keep records and have them available at inspection. These records must be kept up to date and include:
- i. the origin, date of arrival and conversion period of animals arriving at the holding;
 - ii. the number of lots, the age, weight and destination of animals leaving the holding;
 - iii. records of escapes of fish;
 - iv. for fish the type and quantity of feed and in the case of carp and related species a documentary record of the use additional feed;
 - v. veterinary treatments giving details of the purpose, date of application, method of application, type of product and withdrawal period;
 - vi. disease prevention measures giving details of fallowing, cleaning and water treatment.
- 16.1.9 You must not store input products on your production unit other than those listed in this Standard.
- 16.1.10 You must only store veterinary medicinal products and antibiotics on your holding if they have been prescribed by a veterinarian in connection with treatment to avoid suffering to the animal.
- 16.1.11 You must not rear artificially induced polyploid animals.

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- 16.1.12 You must ensure the maintenance of the biodiversity of natural aquatic ecosystems, the continuing health of the aquatic environment and the quality of surrounding aquatic and terrestrial ecosystems in aquaculture production.
- 16.1.13 Organic aquaculture is based on the rearing of young stock originating from organic broodstock and organic holdings; when young stock from organic broodstock or holdings are not available, non-organically produced animals may be brought onto a holding under specific conditions.

16.2 Principles

- 16.2.1 The principles underlying organic farming systems are to maintain a healthy and sustainable aquatic ecosystem that is protective of the welfare of the species that are farmed. The system must be free from inputs prohibited by this standard and must not be affected by or cause pollution to the environment.
- 16.2.2 In addition to established principles for organic production, the following principles and aims also apply to organic aquaculture:
- i. The healthy use and proper care of water, water resources and all life therein
 - ii. The maintenance or enhancement of water quality.
- 16.2.3 The basic characteristics of organic fish farming systems are:
- i. The production of fish of prime quality, free from artificial ingredients and with minimal contamination from the environment.
 - ii. Production methods that use natural ingredients and minimise the use of external resources.
 - iii. Management procedures that ensure minimal effect on the local environment.
 - iv. Promotion of health and welfare of fish by minimising stress, reducing the incidence of disease and nurturing the vitality of fish through meeting their physiological and behavioural needs.
 - v. Management to a high standard to minimise the need for veterinary intervention.
 - vi. The prohibition of pesticides.
 - vii. The application of appropriate standards for the goods and services used by organic fish farms
 - viii. The encouragement of the use of local resources and services.
- 16.2.4 You must where the entire holding is not dedicated to organic production split the holding into clearly separated aquaculture production sites.
- 16.2.5 Where the operator has organic and non organic units the same species may be involved, provided that there is adequate separation between the production sites.
- 16.2.6 You must separate adequately organic and non-organic production units. Methods used for separation include:
- i. natural situation
 - ii. separate water distribution systems
 - iii. distances
 - iv. the tidal flow
 - v. the downstream location of the organic production unit

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- 16.2.7 You must design the husbandry environment of the aquaculture animals in such a way that, in accordance with their species specific needs, the aquaculture animals shall:
- have sufficient space for their wellbeing;
 - be kept in water of good quality with sufficient oxygen levels, and
 - be kept in temperature and light conditions in accordance with the requirements of the species and having regard to the geographic location;
 - in the case of freshwater fish the bottom type shall be as close as possible to natural conditions;
 - in the case of carp the bottom shall be natural earth.
- 16.2.8 Your stocking density and husbandry practices are set out in section 16.16 by species or group of species. In considering the effects of stocking density and husbandry practices on the welfare of farmed fish, the condition of the fish (such as fin damage, other injuries, growth rate, behaviour expressed and overall health) and the water quality must be monitored.
- 16.2.9 You must design and construct aquatic containment systems that provide flow rates and physiochemical parameters that safeguard the animals' health and welfare and provide for their behavioural needs.
- 16.2.10 Your containment systems must be designed, located and operated to minimise the risk of escape incidents.
- 16.2.11 You must in the event of escape of fish or crustaceans take appropriate action to reduce the impact on the local ecosystem, including recapture, where appropriate. You must maintain records of this event.
- 16.2.12 You must provide the Federation, if you are setting up a unit producing more than 20 tonnes of aquaculture products per year, an environmental assessment proportionate to the production. The content of the environmental assessment shall be based on Annex IV to Council Directive 85/337/EEC (1)
- 16.2.13 You must provide us with a sustainable management plan proportionate to the size of your production unit for aquaculture and seaweed harvesting. This plan must
- be updated annually;
 - detail the environmental effects of the operation;
 - detail the environmental monitoring to be undertaken;
 - list measures to be taken to minimise negative impacts on the surrounding aquatic and terrestrial environments, including, where applicable, nutrient discharge into the environment per production cycle or per annum;
 - record the surveillance and repair of technical equipment;
 - include defensive and preventive measures taken against predators.
- 16.2.14 You must have verifiable coordination with the neighbouring operators in drawing up the management plans where applicable.
- 16.2.15 You should use by preference renewable energy sources and recycled materials. This should be included as part of your sustainable management plan. A waste reduction schedule should be put in place when you start operating.
- 16.2.16 You should where possible ensure that the use of residual heat should be limited to energy from renewable sources.
- 16.2.17 You must ensure that, where you produce aquaculture products fishponds, tanks or raceways, your farms are equipped with either:

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- i. natural-filter beds;
 - ii. settlement ponds;
 - iii. biological filters or mechanical filters to collect waste nutrients or use seaweeds and/or animals (bivalves and algae) which contribute to improving the quality of the effluent;
 - iv. effluent monitoring shall be carried out at regular intervals where appropriate.
- 16.2.18 You must when harvesting seaweed produce a once-off biomass estimate at the outset.

16.3 Management and control

- 16.3.1 You must have an effective quality management system which is maintained sufficient to ensure and to demonstrate compliance with the requirements of this Standard. The system must address the specific conditions pertaining to each operation in the areas of fish welfare, health control and environmental impact, detailing the measures (both current and progressive) necessary to ensure sound organic management in accordance with this Standard.
- 16.3.2 You should set out in a quality manual the operational requirements and control systems within the quality management system, which you should complete in consultation with relevant experts and agencies and prior to the first inspection.
- 16.3.3 The quality system should be provided with adequate resources in terms of personnel and equipment to operate effectively. A single individual should be appointed with defined authority and responsibility for the system's operation and maintenance. The quality manual should be made available to all personnel and steps taken to ensure it is understood, implemented, and maintained at all levels within the organisation.
- 16.3.4 The quality system must address the following areas, for which general management procedures and control must be detailed in the quality manual:
- i. The process of conversion
 - ii. Environmental impact and water management
 - iii. Fish welfare
 - iv. Health control
- 16.3.5 In addition, the quality system must include the following components, which should also be detailed in the quality manual:
- i. A written statement setting out the quality policy of the certified organic operation.
 - ii. Procedures for the control of all documentation relating to the effective operation of the system, including compliance with relevant legislation, presence for reference purposes at relevant locations, prompt removal of obsolete documents.
 - iii. Procedures to review contracts with purchasers and suppliers in order to ensure terms, product specifications, verification of compliance, return of non-compliant goods and any subsequent changes to the contract are considered, agreed and understood by both parties.
 - iv. Procedures to ensure that brought in materials and services that are critical to the organic integrity of the operation conform to the specified requirements and where they do not, that they are identified, segregated and returned or otherwise prevented from inadvertent use.
 - v. Procedures to ensure proper storage of brought in materials where appropriate.
 - vi. Procedures for monitoring and controlling all production, packing and processing operations, especially the maintenance of fish welfare and health, water quality and environmental impact.

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- vii. Procedures for checking accuracy of calibration of measuring and testing equipment.
 - viii. Procedures to review product labelling, and promotional and advertising material relating to the organic products and their organic status in order to ensure the labels and claims are accurate, clear and in accordance with this Standard.
 - ix. Procedures for dealing with complaints, including responding to them, taking any resulting action and reporting them to senior management (and the person responsible for the procedure).
 - x. Procedures for enabling product recall where necessary (and the person responsible for the procedure).
 - xi. Procedures for implementing corrective action to investigate and deal with non compliances or other conditions issued by the CB and any weaknesses identified through analysis of records, customer complaints, management reviews and other sources, together with follow up to ensure the corrective action is taken and is effective.
 - xii. Procedures to assess periodically and identify staff training needs and to provide training where needed, including induction training for new entrants.
- 16.3.6 You should review the quality system on at least an annual basis to verify the continuing effectiveness of the system in ensuring the requirements of this Standard is met.

16.4 Conversion

- 16.4.1 You must have your conversion agreed by us. The plan must be drawn up in advance of the first inspection and in particular will include the:
- i. history and existing situation of the unit;
 - ii. the conversion schedule;
 - iii. changes to be made during the conversion process;
 - iv. environment plan;
 - v. health plan.
- 16.4.2 You must when a holding is converted ensure the units (sites) within that holding are converted over a time scale so that all stock on the holding are managed to this Standard by the time the first batch are ready for sale.
- 16.4.3 You must during a progressive conversion of a holding adequately separate the organic, converting and non organic units and clearly identify these units in order to prevent cross-contamination or accidental mixing. There must be sufficient physical and managerial separation between the units to ensure that the organic operation can maintain its integrity and can be inspected. All stock on one and the same unit must be managed to the same Standard.
- 16.4.4 You must not manage a species as organic and non organic on different units of the same holding. Different holdings under the same management or ownership rearing organic and non organic stock of the same species must be physically, operationally and financially separate from each other.
- 16.4.5 You must follow the conversion periods below for aquaculture production units for the following types of aquaculture facilities including the existing aquaculture animals:
- i. for facilities that cannot be drained, cleaned and disinfected, a conversion period of 24 months;
 - ii. for facilities that have been drained, or fallowed, a conversion period of 12 months;

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- iii. for facilities that have been drained, cleaned and disinfected a conversion period of six months;
 - iv. for open water facilities including those farming bivalve molluscs, a three month conversion period.
- 16.4.6 We may decide to recognise retroactively as being part of the conversion period any previously documented period in which the facilities were not treated or exposed to products not authorised for organic production.
- 16.4.7 DEFRA may permit hatcheries and nurseries to rear both organic and non organic juveniles in the same holding provided there is clear physical separation between the units and a separate water distribution system exists.
- 16.4.8 In case of grow out production, DEFRA may permit organic and non organic aquaculture animal production units on the same holding provided section 16.2.4 is complied with and where different production phases and different handling periods of the aquaculture animals are involved.
- 16.4.9 When an operator manages several production units as provided for in this Standard, the units which produce non organic aquaculture animals shall also be subject to the same control system.
- 16.4.10 You must not switch a unit between organic and non organic management once the unit has converted.
- 16.4.11 You may for the renewal or reconstitution of the aquaculture stock with non-organic aquaculture animals following high mortalities caused by catastrophic circumstances listed below when organically reared animals are not available and provided that at least the latter two thirds of the duration of the production cycle are managed under organic management.
- i. natural disasters;
 - ii. adverse climatic events;
 - iii. sudden water quality and quantity changes for which the operator is not responsible;
 - iv. diseases in aquaculture, failure or destruction of production facilities for which the operator is not responsible.

16.5 Breeding and young stock

- 16.5.1 You must use locally grown species and breeding shall aim to give strains which are more adapted to farming conditions, good health and good utilisation of feed resources. Records of their origin and treatment must be kept.
- 16.5.2 You must choose species which can be farmed without causing significant damage to wild stocks.
- 16.5.3 You must ensure breeding methods are aimed at minimum interference with natural behaviour of the breeding animals and minimum application of highly technical / intensive rearing methods.
- 16.5.4 You may bring on to the holding, for breeding purposes or for improving genetic stock and when organic aquaculture animals are not available, wild caught or non organic aquaculture animals. Such animals shall be kept under organic management for at least three months before they may be used for breeding.
- 16.5.5 You may only bring in non organic juvenile's up to the 31 Dec 2016

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- 16.5.6 You must use personnel to supervise the rearing of organically produced fish who are technically competent in the application of fish farming methods and who have an understanding of the principles and aims of organic production when they are applied to aquaculture.
- 16.5.7 You must take particular care for the welfare of the broodstock when stripping and this must be done by trained and competent personnel. Broodstock should be anaesthetised prior to stripping then stunned and slaughtered immediately afterwards. Alternatively they may be stunned and slaughtered prior to stripping.
- 16.5.8 You should inspect eggs soon after fertilisation and frequently thereafter to ensure they are maintained in a good state of health.
- 16.5.9 You must only transport juvenile fish when they are fit and healthy. They must be checked carefully before any transporting operation to verify this and to remove any that are not fit and healthy.
- 16.5.10 You must take care when transporting to avoid unnecessary fear and distress to the fish. The journey time should be kept at a minimum with the number and biomass of the fish in the transport container being such that their welfare is not compromised. Oxygenation should be provided during transit with oxygen levels being constantly monitored throughout the journey. The facility to adjust oxygen levels should be readily available. Carbon dioxide levels should not be allowed to rise to levels that harm the fish. Excessive changes in water temperature and pH must be avoided.
- 16.5.11 You must transport live fish in suitable tanks with clean water which meets their physiological needs in terms of temperature and dissolved oxygen. Records must be kept.
- 16.5.12 You must before transport of organic fish and fish products, thoroughly clean, disinfect and rinse tanks. Records must be kept.
- 16.5.13 You must take precautions to reduce stress during transport, the density shall not reach a level which is detrimental to the species. Records must be kept.
- 16.5.14 You must not use hormones and hormone derivatives as it is prohibited.

16.6 Location and environmental impact

- 16.6.1 You must carefully manage the production unit and its integration with the environment as they are critical to the sustainability of the production system.
- 16.6.2 You must develop an environmental management plan detailed in the quality manual. This should preferably be drawn up in conjunction with environmental experts and appropriate authorities. The plan must establish and define:
- i. Environmental loadings of the pre-converted unit and its impact on the surrounding area;
 - ii. Appropriate controls or reductions of these loadings to achieve the levels set out in the standards for individual species;
 - iii. Any initiatives for positive environmental management / enhancement;
 - iv. Measures to prevent escapes and contingency plans to minimise impact should escapes occur;
 - v. Provision for monitoring the implementation of the plan.
- 16.6.3 You must when siting the production units must take into account the maintenance of the aquatic and terrestrial environment and ecosystem and the impact of the unit on wild stocks of the same or other species in the area.

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- 16.6.4 You must adopt management strategies to maintain and where possible enhance ecological diversity around the unit and maintain or enhance the local wildlife. Ponds, lakes, water channels, marine and other environments must be managed in accordance with the wildlife and conservation value of the area.
- 16.6.5 You should designed and manage the production unit to ensure that its environmental impact is negligible. The use of renewable energy sources and recycled materials should be used where possible.
- 16.6.6 DEFRA may determine whether fallowing is necessary and the appropriate duration which shall be applied and documented after each production cycle in open water containment systems at sea. Fallowing is also recommended for other production methods using tanks, fishponds, and cages.
- 16.6.7 Fallowing is not mandatory for bivalve mollusc cultivation.
- 16.6.8 You must during fallowing period ensure the cage or other structure used for aquaculture animal production is emptied, disinfected and left empty before being used again.
- 16.6.9 You must where appropriate remove promptly, uneaten fish-feed, faeces and dead animals to avoid any risk of significant environmental damage as regards water status quality, minimize disease risks, and to avoid attracting pests.
- 16.6.10 You must keep to a minimum the risk of escaped stocks from confined systems by appropriate strategies and comprehensive measures.
- 16.6.11 You should develop environmental management procedures in agreement with neighbouring fish farmers and landowners.
- 16.6.12 You must not use herbicides or other agro-chemical pesticides around tanks or otherwise on the unit.

16.7 Water and holding facilities

- 16.7.1 You must not use closed recirculation aquaculture animal production facilities, except for hatcheries and nurseries or to produce species used for organic feed organisms.
- 16.7.2 You must ensure rearing units on land meet the following conditions:
- i. for flow through systems it shall be possible to monitor and control the flow rate and water quality of both in flowing and out flowing water;
 - ii. at least five percent of the perimeter ('land water interface') area shall have natural vegetation.
- 16.7.3 You must ensure containment systems at sea are:
- i. located where water flow, depth and water body exchange rates are adequate to minimise the impact on the seabed and the surrounding water body;
 - ii. have suitable cage design, construction and maintenance with regard to their exposure to the operating environment.
- 16.7.4 You may use artificial heating or cooling of water is permitted in hatcheries and nurseries. Natural borehole water may be used to heat or cool water at all stages of production.

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- 16.7.5 A consistently adequate supply of high quality water, appropriate to the needs of the species, is essential to ensure a clean and healthy environment for the stock.
- 16.7.6 You must monitor and record water quality on a regular basis. The following parameters, as appropriate, must be monitored both upstream and downstream of the operation:

Water temperature	Fresh	Marine
Ammonia	Fresh	Marine
Suspended solids	Fresh	
Nitrate / Nitrite / Phosphate levels	Fresh	Marine
Dissolved oxygen	Fresh	Marine
pH	Fresh	Marine
Salinity		Marine
Chlorophyll		Marine

- 16.7.7 You must have holding facilities and / or hydrographical characteristics that permit good water circulation appropriate to the needs of the species.
- 16.7.8 You must design and operate the holding facilities such as to promote good stock health and low stress. This includes measures to provide and maintain an adequate supply of high quality water at all times.
- 16.7.9 You must identify and declare non organic production units / holdings and other potential sources of pollution that may affect the organic production unit. Your organic production units must be sited sufficiently far from such sources of pollution, as determined by an environmental survey and agreed with us, to ensure the risk of contamination is minimal.
- 16.7.10 You must not use materials and compounds in holding structures, production equipment and paints that are detrimental to the environment or to stock.
- 16.7.11 You must have holding facilities that are able to be emptied without the risk of fish escaping or the discharge causing pollution and enable cleaning and disinfection where appropriate.
- 16.7.12 You must properly clean and disinfect holding systems, equipment and utensils using products in this part of the Standard. Records must be kept.
- 16.7.13 You must define cleaning and disinfecting regimes and they must not adversely affect the surrounding environment or the water downstream.
- 16.7.14 You must ensure nets and floating structures are securely moored, properly maintained and regularly checked to ensure they remain secure and undamaged. The construction material of net pens should be smooth enough to prevent risk of injuring fish during stormy conditions.
- 16.7.15 You must only use non polluting methods to ensure the nets are kept clear of weed and other fouling organisms.
- 16.7.16 You must with land based systems have alarm systems and backup facilities that are sufficient to provide against water supply failure or other major problems.

16.8 Diet and nutrition

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- 16.8.1 You must design your feeding regimes with the following priorities:
- a) animal health;
 - b) high product quality, including the nutritional composition which shall ensure high quality of the final edible product;
 - c) low environmental impact.
- 16.8.1 You must tailor diets for aquaculture production to meet the nutritional needs of the species appropriate to the stage in the life cycle.
- 16.8.1 You must only buy feed that holds a certificate of organic compliance.
- 16.8.1 Feed ingredients of agricultural origin must be derived from certified organic origin.
- 16.8.1 You may include mineral and vitamin supplementation and certain feed additives in the diet in accordance with the general legislation for livestock feeds in order to meet the nutritional needs of the stock.

16.9 Feed for carnivorous aquaculture animals

- 16.9.1 You should source feed for carnivorous aquaculture animals with the following priorities:
- i. organic feed products of aquaculture origin;
 - ii. fish meal and fish oil from organic aquaculture trimmings;
 - iii. fish meal and fish oil and ingredients of fish origin derived from trimmings of fish already caught for human consumption in sustainable fisheries;
 - iv. organic feed materials of plant or animal origin;
 - v. feed products derived from whole fish caught in fisheries certified as sustainable under a scheme recognised by DEFRA.
- 16.9.2 You must only use feed rations that comprise a maximum of 60 % organic plant products.
- 16.9.3 You should use astaxanthin derived primarily from organic sources, such as organic crustacean shells in the feed ration for salmon and trout within the limit of their physiological needs. If organic sources are not available natural sources of astaxanthin (such as phaffia yeast) may be used.
- 16.9.4 You may use histidine produced through fermentation in the feed ration for salmonid fish when the feed sources do not provide a sufficient amount of histidine to meet the dietary needs of the fish and prevent the formation of cataracts.

16.10 Feed for fish in inland waters

- 16.10.1 This section covers feed for fish in inland waters (the Carp family (*Cyprinidae*) and other associated species in the context of polyculture, including perch, pike, catfish, coregonids, sturgeon)
- 16.10.2 You must feed fish with feed naturally available in ponds and lakes.
- 16.10.3 You may where natural feed resources are not available in sufficient quantities, organic feed of plant origin, preferably grown on the farm itself or seaweed may be used. You must keep records of additional feed used.

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16.10.4 Where natural feed is supplemented:

- i. the feed ration of siamese catfish (*Pangasius* spp.) may comprise a maximum of 10% fishmeal or fish oil derived from sustainable fisheries;
- ii. the feed ration of penaeid shrimps and freshwater prawns (*Macrobrachium* spp.) referred to in Section 16.16.7 may comprise a maximum of 25 % fishmeal and 10 % fish oil derived from sustainable fisheries. In order to secure the quantitative dietary needs of those shrimps and prawns, organic cholesterol may be used to supplement their diets. Where organic cholesterol is not available, non-organic cholesterol derived from wool, shellfish or other sources may be used. The option to supplement their diet with cholesterol applies both in the grow-out stage and in earlier life stages in nurseries and hatcheries.

Organic juveniles

16.10.5 You may in the larval rearing of organic juveniles, use conventional phytoplankton and zooplankton as feed.

16.11 Fish welfare and stock management

16.11.1 You must minimise the handling of aquaculture animals. It must be undertaken with the greatest care and proper equipment and protocols used to avoid stress and physical damage associated with handling procedures.

16.11.2 You must handle broodstock in a manner to minimise physical damage and stress and under anaesthesia where appropriate.

16.11.3 You must keep grading operations to a minimum and as required to ensure fish welfare.

16.11.4 You must base your management on the 'five freedoms'. Freedom from :

- malnutrition
- thermal and physical discomfort
- injury and disease
- fear and distress
- unnecessary restrictions of behaviour

16.11.5 You must ensure management practices provide a low stress environment and allow the stock as far as possible to act according to their basic behavioural patterns.

16.11.6 You must take measures to minimise stress when handling of stock, eg catching, grading, vaccination, transporting or administering permitted treatments.

16.11.7 You must monitor and record the following welfare parameters as appropriate on a regular basis within the water body of the holding facilities:

- i. Oxygen levels
- ii. Flow rates
- iii. Water temperature
- iv. Stocking densities

16.11.8 You must assess the training needs of personnel engaged in the rearing of fish and training given to individuals as necessary. Training should be given to ensure that personnel are competent for their assigned tasks and that they understand the importance of ensuring that the organic integrity of the fish is not compromised throughout the production cycle and up to the point of delivery of the harvested fish.

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- 16.11.9 You should inspect stock at least on a daily basis (except where weather conditions make this impossible) in order to check on their health and welfare and where appropriate to remove mortalities.
- 16.11.10 You must dispose of in a hygienic way of mortalities to ensure there is no threat of disease spreading to farmed / wild stock or contamination of any water courses. The reason for the mortality must be investigated and recorded.
- 16.11.11 You must not let size distribution for fish compromise welfare or lead to hierarchical behaviour.
- 16.11.12 You must discourage predators from damaging or stressing fish stock by the use of effective means that are non destructive both on target and non target species and must be detailed in the quality manual. Relevant statutory bodies should be consulted in cases where specific predator problems arise.
- 16.11.13 You must only use artificial light for the following reasons:
- i. for prolonging natural day length it shall not exceed a maximum that respects the ethological needs, geographical conditions and general health of farmed animals, this maximum shall not exceed 16 hours per day, except for reproductive purposes;
 - ii. Abrupt changes in light intensity shall be avoided at the changeover time by the use of dimmable lights or background lighting.
- 16.11.14 You may use aeration to ensure animal welfare and health, under the condition that mechanical aerators are preferably powered by renewable energy sources. Records of use must be kept.
- 16.11.15 You must only use oxygen for uses linked to animal health requirements and critical periods of production or transport records must be kept, in the following cases:
- i. exceptional cases of temperature rise or drop in atmospheric pressure or accidental pollution;
 - ii. occasional stock management procedures such as sampling and sorting;
 - iii. in order to assure the survival of the farm stock.
- 16.11.16 You must only crowd fish to allow access to them to facilitate capture.
- 16.11.17 You must make adequate provision for shading, especially for young stock and in shallow holding facilities.
- 16.11.18 You must not move growing fish between holdings (excluding young stock from the rearing facilities).

16.12 Health control

- 16.12.1 You must manage your unit to produce healthy stock by best practice, including good stockmanship, appropriate nutrition, minimising stress, encouraging a high level of resistance to disease and appropriate preventative measures. The wellbeing of the stock is paramount.
- 16.12.2 You must develop a health plan, preferably in conjunction with the farm's veterinary surgeon. The plan must form part of the quality manual and should cover the following areas:
- i. Biosecurity;

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- ii. General health and welfare of the fish on the unit;
 - iii. Identification of the main health issues on the unit and the measures for prevention;
 - iv. Measures to minimise disease outbreaks and encourage fish health generally;
 - v. Identification of specific veterinary treatments, in accordance with this Standard, for use where necessary;
 - vi. At least annual visits from the veterinary surgeon or a qualified aquaculture animal health practitioner and not less than once every two years in the case of bivalve molluscs.
- 16.12.3 You must have management practices that aim to build positive health in order to prevent the need for veterinary medicinal treatment.
- 16.12.4 You should use, if illness does occur, direct treatment complementing the animal's natural powers of recovery and correcting the imbalance that created the disorder, rather than just dealing with the symptoms. Rapid diagnosis must be made and appropriate action taken in consultation with the farm's veterinary surgeon. Where possible the affected stock should be isolated and quarantine procedures brought into operation.
- 16.12.5 You must give treatment even if the stock will lose its organic status. Failure to treat could lead to the farm losing organic certification.
- 16.12.6 You must follow withdrawal periods for stock treated with licensed veterinary medicines, including treatments under compulsory control and eradication schemes. The withdrawal period is twice that defined in the product licence or by the prescribing veterinarian and shall not be less than 14 days. If a withdrawal period is not specified in the product licence the withdrawal period shall be 48 hours.
- 16.12.7 You may use vaccines that have not been genetically engineered may be used where there is a known disease risk to the operation as part of a disease prevention strategy. Any vaccines should be directed at the specific disease risk in question, not administered as a general preventative.
- 16.12.8 With the exception of vaccinations, treatments for parasites and any compulsory eradication schemes in the UK, where an animal or group of animals receive more than two courses of treatments with chemically synthesised allopathic veterinary medicinal products or antibiotics within one year (or more than one course of treatment if their productive lifecycle is less than one year) the livestock, or produce derived from them, may not be sold as organic.
- 16.12.9 You may use parasite treatments though they will be limited to twice per year or once per year where the production cycle is less than 18 months. This does not include compulsory control schemes.
- 16.12.10 You must for biological control of ectoparasites, give preference to the use of cleaner fish and to the use of freshwater, marine water and sodium chloride solutions.
- 16.12.11 You must only use ultraviolet light and ozone in hatcheries and nurseries.
- 16.12.12 You must only use the veterinary treatments in the following order of preference When despite preventive measures to ensure animal health a health problem arises:
- i. substances from plants, animals or minerals in a homoeopathic dilution;
 - ii. plants and their extracts not having anaesthetic effects; and
 - iii. substances such as: trace elements, metals, natural immunostimulants or authorised probiotics.
- 16.12.13 You must inform us whenever veterinary medicinal products are used, before the animals are marketed as organic. Treated stock shall be clearly identifiable and records kept.

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16.13 Harvesting

- 16.13.1 You must use slaughter techniques that render fish immediately unconscious and insensible to pain. Differences in harvesting sizes, species, and production sites must be taken into account when considering optimal slaughtering methods.
- 16.13.2 You must carry out handling of stock during harvesting and slaughtering operations with minimal disturbance and stress using procedures as outlined in the quality manual.
- 16.13.3 You must hold fish in high quality water for the duration of the allowed fasting period prior to slaughter.
- 16.13.4 You must use a method to kill fish that renders them instantly insensible immediately they are taken from the water.
- 16.13.5 You must use only staff for killing fish who are skilled and knowledgeable to perform the task efficiently and humanely as required by the Welfare of Animals (Slaughter or Killing) Regulations.
- 16.13.6 You must observe strict hygiene during slaughtering and evisceration to ensure adequate cleanliness. The disposal of blood water, viscera and disinfectant, should pose no threat to wild / farmed fish or the environment.
- 16.13.7 Your processing, storage and transport operations must comply with our Standard for processing of organic foods, and with all relevant statutory regulations and local authority hygiene regulations.

16.14 Cleaning and disinfection

- 16.14.1 You must only use the products containing the following active substances listed below for cleaning and disinfection of equipment and facilities in the **absence** of aquaculture animals:
 - ozone
 - sodium hypochlorite
 - calcium hypochlorite
 - calcium hydroxide
 - calcium oxide — caustic soda
 - alcohol
 - potassium permanganate
 - tea seed cake made of natural camelia seed (use restricted to shrimp production)
 - mixtures of potassium peroxomonosulphate and sodium chloride producing hypochlorous acid.
- 16.14.2 Products used for cleaning and disinfection of equipment and facilities in the **presence** as well as in the **absence** of aquaculture animals may contain the following active substances:
 - limestone (calcium carbonate) for pH control
 - dolomite for pH correction (use restricted to shrimp production)
 - sodium chloride
 - hydrogen peroxide
 - sodium percarbonate
 - organic acids (acetic acid, lactic acid, citric acid)
 - humic acid

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- peroxyacetic acids
- peracetic and peroctanoic acids
- iodophores (only in the presence of eggs).

16.15 Records

16.15.1 Detailed, legible, accurate and up to date records must be kept of all physical and financial operations and activities, sufficient to demonstrate compliance with this Standard. Records must be kept for a minimum of three years and must be made available to inspectors or other authorised persons.

16.15.2 You must keep the following records:

- i. The name, position and authority of the person with overall responsibility for the organic production operation.
- ii. Details of the responsibility and authority of all other key personnel, including their named deputies, who supervise or verify the organic production operation.
- iii. The name, address and telephone number of the designated veterinary surgeon.
- iv. Staff training records.
- v. Details of calibration for all identified measuring/testing equipment and instruments used for checking conformity with critical requirements, including action taken if any piece of equipment or instrument is found to be out of calibration.
- vi. Details of complaints, responses made and consequential actions taken.
- vii. Details of any corrective actions taken and any changes in procedures made.

16.15.3 You must keep the following general husbandry records:

- i. Stock purchases, including, as appropriate, date, species, age, quantities, origin, status and history.
- ii. Stock movements.
- iii. Purchases, date, quantities and details of use of all materials and inputs.
- iv. Specifications for other purchased materials and services which have a critical bearing on the organic integrity of the fish produced and supplied under an organic designation.
- v. Details of all management activities as defined in the quality manual (fallowing and rotation of enclosures/cropping, grading, etc).
- vi. Measurements of all water and environmental parameters as defined in the quality manual.
- vii. Nature, quantities and details of all stock harvested and sold (quantities sold direct to the consumer must be accounted for on a daily basis).
- viii. Mortalities and the cause for death where this can be established or surmised.

16.15.4 You must keep the following feed records, as appropriate:

- i. Specifications for fish feed.
- ii. Feed purchases, including specification and sources.
- iii. GMO status of the feeds/constituent parts.
- iv. Lot identification and daily quantities of feed fed to each batch of stock.

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16.15.5 You must keep the following veterinary records:

- i. Purchases, dates, quantities, source and nature of all veterinary medicinal products;
- ii. Details of all stock treated, including dates, identity and number of stock, treatment (name and manufacturer), quantities used and name of the person who administered the treatment;
- iii. Details of vaccinations and other treatments.
- iv. Length of withholding period, quarantine measure if appropriate and earliest date for sale of the stock.

16.16 Specific production standards for individual species

16.16.1 Salmonids in fresh water:

<i>Brown trout</i>	<i>Salmo trutta</i>
<i>Rainbow trout</i>	<i>Oncorhynchus mykiss</i>
<i>American brook trout</i>	<i>Salvelinus fontinalis</i>
<i>Salmon</i>	<i>Salmo salar</i>
<i>Charr</i>	<i>Salvelinus alpinus</i>
<i>Grayling</i>	<i>Thymallus thymallus</i>
<i>American lake trout (or grey trout)</i>	<i>Salvelinus namaycush</i>
<i>Huchen</i>	<i>Hucho hucho</i>

Production and stocking requirements:

Production system	Ongrowing farm systems must be fed from open systems. The flow rate must ensure a minimum of 60 % oxygen saturation for stock and must ensure their comfort and the elimination of farming effluent.
Maximum stocking density	Salmonid species not listed below 15 kg/m ³ Salmon 20 kg/m ³ Brown trout and Rainbow trout 25 kg/m ³ Arctic charr 25 kg/m ³

16.16.2 Salmonids in sea water:

Salmon	<i>Salmo salar</i>
Brown trout	<i>Salmo trutta</i>
Rainbow trout	<i>Oncorhynchus mykiss</i>

Production and stocking requirements:

Maximum stocking density	10 kg/m ³ in net pens
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16.16.3 Other fish in open water systems

<i>Cod and other species of family Gadidae</i>	<i>eg Gadus morhua</i>
<i>sea bass</i>	<i>Dicentrarchus labrax</i>
<i>sea bream</i>	<i>Sparus aurata</i>
<i>meagre</i>	<i>Argyrosomus regius</i>
<i>turbot</i>	<i>Psetta maxima [= Scophthalmus maximus]</i>
<i>red porgy</i>	<i>Pagrus pagrus [= Sparus pagrus]</i>
<i>red drum and other Sparidae</i>	<i>Sciaenops ocellatus</i>
<i>spinefeet</i>	<i>Siganus spp</i>

Production and stocking requirements:

Production system	In open water containment systems (net pens/cages) with minimum sea current speed to provide optimum fish welfare or in open systems on land.
Maximum stocking density	For fish other than turbot: 15 kg/m ³ For turbot: 25 kg/m ²

16.16.4 In earth ponds of tidal areas and coastal lagoons

Sea bass, sea bream, meagre, mullets	<i>Liza, Mugil</i>
eel	<i>Anguilla spp</i>

Production and stocking requirements:

Containment system	Traditional salt pans transformed into aquaculture production units and similar earth ponds in tidal areas
Production system	There shall be adequate renewal of water to ensure the welfare of the species, At least 50 % of the dikes must have plant cover Wetland based depuration ponds required
Maximum stocking density	4 kg/m ³

16.16.5 Sturgeon in fresh water

Sturgeon	<i>Acipenser family</i>
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Production and stocking requirements:

Production system	Water flow in each rearing unit shall be sufficient to ensure animal welfare Effluent water to be of equivalent quality to incoming water
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Maximum stocking density	30 kg/m ³
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16.16.6 Production of fish in inland waters

Carp family and other associated species in the context of polyculture, including perch, pike, catfish, coregonids, sturgeon	<i>Cyprinidae</i>
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Production and stocking requirements

Production system	<p>In fishponds which shall periodically be fully drained and in lakes. Lakes must be devoted exclusively to organic production, including the growing of crops on dry areas.</p> <p>The fishery capture area must be equipped with a clean water inlet and of a size to provide optimal comfort for the fish. The fish must be stored in clean water after harvest.</p> <p>Organic and mineral fertilisation of the ponds and lakes shall be carried out in compliance with the approved list of fertilisers, soil conditioners and nutrients with a maximum application of 20 kg Nitrogen/ha.</p> <p>Treatments involving synthetic chemicals for the control of hydrophytes and plant coverage present in production waters are prohibited.</p> <p>Areas of natural vegetation shall be maintained around inland water units as a buffer zone for external land areas not involved in the farming operation in accordance with the rules of organic aquaculture.</p> <p>For grow-out 'polyculture' shall be used on condition that the criteria laid down in the present specifications for the other species of lakes fish are duly adhered to.</p>
Farming yield	The total production of species is limited to 1,500 kg of fish per hectare per year.

16.16.7 Penaeid shrimps and freshwater prawns

Penaeid shrimps and freshwater prawns	<i>Macrobrachium</i> spp.
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Production and stocking requirements

Establishment of production unit/s	Location to be in sterile clay areas to minimise environmental impact of pond construction. Ponds to be built with the natural pre-existing clay. Mangrove destruction is not permitted.
Conversion time	Six months per pond, corresponding to the normal

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	lifespan of a farmed shrimp.
Broodstock origin	A minimum of half the broodstock shall be domesticated after three years operating. The remainder is to be pathogen free wild broodstock originating from sustainable fisheries. A compulsory screening to be implemented on the first and second generation prior to introducing to the farm.
Eyestalk ablation	Is prohibited.
Maximum on farm stocking densities and production limits	Seeding: maximum 22 post larvae/m ² Maximum instantaneous biomass: 240 g/m ²

16.16.8 Crayfish

<i>Crayfish</i>	<i>Astacus astacus</i> , <i>Pacifastacus leniusculus</i>
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Production and stocking requirements

Maximum stocking density	For small-sized crayfish (<20 mm): 100 individuals per m ² . For crayfish of intermediate size (20-50 mm): 30 individuals per m ² . For adult crayfish (> 50 mm): 10 individuals per m ² , provided that adequate hiding places are available.
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16.16.9 Tropical fresh water fish

milkfish	<i>Chanos chanos</i>
tilapia	<i>Oreochromis</i> spp.
siamese catfish	<i>Pangasius</i> spp.

Production and stocking requirements

Production systems	Ponds and net cages
Maximum stocking density	Pangasius: 10 kg/m ³ Oreochromis: 20 kg/m ³

16.17 Seaweed

Sustainable harvesting of wild seaweed

- 16.17.1 Your operations must be situated in locations that are not subject to contamination by products or substances not authorised for organic production, or pollutants that would compromise the organic nature of the products.

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- 16.17.2 You must separate adequately organic and non organic production units. Methods used for separation include:
- i. natural situation
 - ii. separate water distribution systems
 - iii. distances
 - iv. the tidal flow
 - v. the downstream location of the organic production unit
- 16.17.3 DEFRA may designate locations or areas which they consider to be unsuitable for organic aquaculture or seaweed harvesting and may also set up minimum separation distances between organic and non organic production units.
- 16.17.4 If you are setting up a unit producing more than 20 tonnes of aquaculture products per year an environmental assessment proportionate to the production must be sent to us. The content of the environmental assessment shall be based on Annex IV to Council Directive 85/337/EEC (1)
- 16.17.5 You must when a site is first set up provide a full description which includes:
- i. a full description of the installations on land and at sea;
 - ii. the environmental assessment where applicable;
 - iii. the sustainable management plan where applicable;
 - iv. for wild seaweed a full description and a map of shore and sea collection areas and land areas where post collection activities take place shall be drawn up.
- 16.17.6 You must keep seaweed production records and be available to us at all times at your premises. Your records must provide at least the following information:
- i. list of species, date and quantity harvested;
 - ii. date of application, type and amount of fertiliser used.
- 16.17.7 You must for the collection of wild seaweeds ensure the records also contain:
- i. history of harvesting activity for each species in named beds;
 - ii. harvest estimate (volumes) per season;
 - iii. sources of possible pollution for harvest beds;
 - iv. sustainable annual yield for each bed.
- 16.17.8 You must produce a once off biomass estimate for seaweed harvesting at the outset.
- 16.17.9 The conversion period for a seaweed harvesting site shall be six months.
- 16.17.10 The conversion period for a seaweed cultivation unit shall be the longer of six months or one full production cycle.
- 16.17.11 You must keep records in the unit or premises and be able to prove to us that the harvesters have supplied only wild seaweed produced in accordance with the organic regulations.
- 16.17.12 You must carry out harvesting in such a way that the amounts harvested do not cause a significant impact on the state of the aquatic environment. Measures shall be taken to ensure that seaweed can regenerate, such as harvest technique, minimum sizes, ages, reproductive cycles or size of remaining seaweed.

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- 16.17.13 You must If seaweed is harvested from a shared or common harvest area, keep records that the total harvest complies with these standards.
- 16.17.14 You must have records that provide evidence of sustainable management and of no long term impact on the harvesting areas.

Seaweed cultivation

- 16.17.15 Seaweed culture at sea shall only utilise nutrients naturally occurring in the environment, or from organic aquaculture animal production, preferably located nearby as part of a polyculture system.
- 16.17.16 You must ensure that in facilities on land where external nutrient sources are used, the nutrient levels in the effluent water shall be verifiably the same, or lower, than the inflowing water. Only nutrients of plant or mineral origin and as listed this Standard may be used.
- 16.17.17 You should collect juvenile seaweed in the wild on a regular basis to supplement indoor culture stock to ensure that a wide gene pool is maintained.
- 16.17.18 You must not use fertilisers except in indoor facilities and only if they have been authorised for use in organic production by us.
- 16.17.19 You must record culture density or operational intensity and must maintain the integrity of the aquatic environment by ensuring that the maximum quantity of seaweed which can be supported without negative effects on the environment is not exceeded.
- 16.17.20 You must re use or recycled where possible ropes and other equipment used for growing seaweed.

Antifouling measures and cleaning of production equipment and facilities

- 16.17.21 You must only remove biofouling organisms physical means or by hand and where appropriate returned to the sea at a distance from the farm.
- 16.17.22 You must clean equipment and facilities out by physical or mechanical measures. Where this is not satisfactory only substances as listed in Section 16.14 may be used.

Processing

- 16.17.23 You must if the final product is fresh seaweed, flushing of freshly harvested seaweed must use seawater.
- 16.17.24 You must if the final product is dehydrated seaweed, potable water may also be used for flushing. Salt may be used for removal of moisture.
- 16.17.25 You must not use direct flames which come in direct contact with the seaweed for drying. If ropes or other equipment are used in the drying process they must be free of antifouling treatments and cleaning or disinfection substances except where a product is listed in Section 16.14 for this use.

16.18 Molluscs

- 16.18.1 You must inform us prior to bivalve mollusc production so we can audit before and during maximum biomass production.

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Growing area

- 16.18.2 You may carry out bivalve mollusc farming in the same area of water as organic finfish and seaweed farming in a polyculture system to be documented in the sustainable management plan. Bivalve molluscs may also be grown together with gastropod molluscs, such as periwinkles, in polyculture.
- 16.18.3 You must ensure organic bivalve mollusc production takes place within areas delineated by posts, floats or other clear markers and shall, as appropriate, be restrained by net bags, cages or other man made means.
- 16.18.4 You must on shellfish farms minimise risks to species of conservation interest. If predator nets are used their design shall not permit diving birds to be harmed.

Sourcing of seed

- 16.18.5 You must use seed from a certified organic source.
- 16.18.6 You must for the cupped oyster, *Crassostrea gigas*, give preference to stock which is selectively bred to reduce spawning in the wild.

Management

- 16.18.7 You must not exceed production stocking density in excess of that used for non organic shellfish in the locality. Sorting, thinning and stocking density adjustments shall be made according to the biomass and to ensure animal welfare and high product quality.
- 16.18.8 You must remove bio fouling organisms by physical means or by hand and where appropriate returned to the sea away from shellfish farms. Shellfish may be treated once during the production cycle with a lime solution to control competing fouling organisms.
- 16.18.9 Mussel ropes and the following may be eligible for mussel cultivation: long lines, rafts, bottom culture, net bags, cages, trays, lantern nets, bouchot poles and other containment systems.
- 16.18.10 You must not allow, for mussel cultivation on rafts, the number of drop ropes exceed one per square meter of surface area. The maximum drop rope length shall not exceed 20 metres. Thinning out of drop ropes shall not take place during the production cycle, however subdivision of drop ropes shall be permitted without increasing stocking density at the outset.
- 16.18.11 You must only use bottom cultivation of molluscs where no significant environmental impact is caused at the collection and growing sites. The evidence of minimal environmental impact shall be supported by a survey and report on the exploited area to be provided by the operator to the control body or control authority. The report shall be added as a separate chapter to the sustainable management plan.
- 16.18.12 **Specific production requirements for molluscs and echinoderms**

Production systems	<p>Long lines, rafts, bottom culture, net bags, cages, trays, lantern nets, bouchot poles and other containment systems.</p> <p>For mussel cultivation on rafts the number of drop ropes shall not exceed one per square meter of surface area. The maximum drop rope length shall not exceed 20 metres. Thinning out of drop ropes shall not take place during the production cycle, however subdivision of drop ropes shall be permitted without increasing stocking density at the outset.</p>
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Specific cultivation rules for oysters

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

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DEER

17.1 Origin of animals

- 17.1.1 Livestock products that are sold, labelled or represented as organic must be from livestock under continuous organic management from the last third of gestation.
- 17.1.2 You must use either:
- i. Red deer;
 - ii. Fallow deer.
 - iii. Other deer (park) might be used providing you can meet this Standards.
- 17.1.3 Stock should be domesticated. This means deer are farm bred and reared for at least four generations.
- 17.1.4 You must not use other types of deer such as wild.

17.2 Conversion of animals

- 17.2.1 You must ensure for offspring of your deer to be organic that:
- i. The deer are mated on organic land;
 - ii. If they are to be mated on conventional land you must obtain prior permission from us;
 - iii. Deer are managed to this Standard from mating;
 - iv. Offspring are managed to this Standard throughout their lives;
 - v. You must not have used embryo transfer techniques or hormonal reproductive treatments.
- 17.2.2 You must manage replacement deer you bring onto your holding to this Standard from the moment they arrive
- 17.2.3 Livestock used as breeder stock may be brought from a non organic operation onto your holding at any time: provided that, if such livestock are gestating and the offspring are to be raised as organic livestock, the breeder stock must be brought onto the facility no later than the last third of gestation.
- 17.2.4 Non organic breeding stock replacements cannot be sold as organic.

17.3 Health and welfare

- 17.3.1 You must have a documented current herd health plan and all your staff have access to it.
- 17.3.2 You must ensure that your farm management guarantees the safety and welfare of stock, stockmen and the general public, particularly during the rut and calving seasons.

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- 17.3.3 You must provide facilities on your farm for the humane slaughter of both emergency and casualty animals. You must use a named, trained and competent member of staff, a licensed slaughterer or a veterinary surgeon.
- 17.3.4 You must inform us if it becomes necessary to remove the antlers for reasons of safety or welfare.
- 17.3.5 You must not remove antlers while in velvet. (While new antlers are growing.)
- 17.3.6 You must not use artificial insemination or embryo transfer.
- 17.3.7 You must not castrate stock.
- 17.3.8 You must not disbud stock (removal of the horn bud).
- 17.3.9 You must not use immobilon (a very potent neuroleptanalgesic) on deer intended for human consumption.

17.4 Grazing

- 17.4.1 You must have an extensive grazing area.
- 17.4.2 You must not use fields less than two hectares for grazing, except during collection or convalescence, unless we have agreed this as part of your livestock management plan.
- 17.4.3 You must provide all year round grazing without compromising herd welfare and sward condition.
- 17.4.4 You may use non electrified double fencing to separate stags where you cannot avoid putting them in adjacent fields.
- 17.4.5 You must manage you deer as a heard
- 17.4.6 You must ensure that stocking density is kept:
 - i. Appropriate for herd behaviour;
 - ii. To allow effective parasite control;
 - iii. Lower than five hinds, plus followers, per hectare.
- 17.4.7 You must have tracks and gateways at least 3.5 m wide to allow stock to move freely through them.
- 17.4.8 You must have perimeter fencing of at least 1.8 meters high to prevent escape.
- 17.4.9 You must have fencing that is visible to the stock to prevent injury.
- 17.4.10 You must provide shelter from harsh weather conditions.
- 17.4.11 You must manage manure in a manner that does not contribute to contamination of crops, soil or water by plant nutrients, heavy metals, or pathogenic organisms and optimises recycling of nutrients.
- 17.4.12 You must provide animals with sufficient shade.

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17.4.13 You must provide rubbing posts, tree cover and wallows.

17.4.14 You must not:

- i. Have jump in points;
- ii. Keep stags in adjacent fields during the rut.

17.5 Feeding

17.5.1 You must provide your deer with:

- i. Access to clean fresh water at all times;
- ii. Good quality feed which meets their nutritional and seasonal needs to ensure good body condition;
- iii. Feeding facilities which include adequate trough space for all deer to feed at the same time.

17.5.2 For each deer, this means at least the following trough space:

- i. Hinds/yearlings 55 cm 28 cm;
- ii. Weaned calves 33 cm 17 cm;
- iii. Stags 75 cm 38 cm.

17.5.3 You must provide your deer with adequate feed and detail the ingredients and quantities you feed to each group of deer in your livestock management plan.

17.5.4 You should ensure that most of the feed, at least 60 %, is from the farm unit or in case this is not feasible, be produced in cooperation with other organic farms primarily in the same region.

17.5.5 You may use the figures below to make sure you feed an adequate daily dry matter intake and to calculate the various feed allowances. This is only a guide. Some animals may eat more or less during different stages of their lives, especially pre and post calving.

Average daily Red deer DMI (kg)

- Mature stag 3.50
- Mature hind 2.15
- Yearling 2.35
- Weaned calf 1.65

Average daily Fallow deer DMI (kg)

- Mature buck 1.75
- Mature doe 1.08
- Yearling 1.18
- Weaned fawn 0.83

17.5.6 You should ensure that dams rear their own calves. The calves will then build a natural vigour and resistance to infection.

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- 17.5.7 You should allow calves to wean naturally.
- 17.5.8 You should only wean calves when natural weaning is not possible and when they are taking enough solid food to satisfy their full nutritional needs.
- 17.5.9 Your calves' diet should consist of:
- i. Colostrum, preferably suckled within six hours of birth;
 - ii. Organic whole milk, suckled from the dam until weaning;
 - iii. Suckled milk once or twice a day, beyond 12 weeks.
- 17.5.10 Your animals must be fed a 100% organic diet.
- 17.5.11 The milk you feed to your calves must be:
- i. At least 51% fresh, whole, organic milk, preferably maternal milk, for:
 - ii. At least three months;
 - iii. No more than 49% dried milk, skimmed milk powder or milk replacer which must be free from substances listed in this Standard.
- 17.5.11 You may, in an emergency, feed to calves non organic milk replacer over the amounts we normally allow until they are 72 hours old. However, if you feed them like this for any longer they will lose their organic status.
- 17.5.12 You must not feed your calves dried milk, skimmed milk powder or milk replacer containing additives such as antibiotics, growth promoters or ingredients of animal origin (except milk derivatives).
- 17.5.13 You must not wean calves before they are 12 weeks of age.
- 17.5.14 If your calves reach 35 kg before 12 weeks and you wish to wean them early, you must ask us for permission.

17.6 Housing

- 17.6.1 You should provide housing with outside runs.
- 17.6.2 If you house deer they should be able to see farm activates or other deer.
- 17.6.3 You should inspect deer daily when they have been housed.
- 17.6.4 You may house deer:
- i. In severe weather conditions;
 - ii. If sick or injured;
 - iii. Conditions under which the health, safety, or well being of the animal could be jeopardized;
 - iv. If enforced by regulatory authority for reasons of protection;
 - v. When calving during the winter period;

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- vi. At the final finishing phase for a maximum of two weeks prior to slaughter.
 - vii. Where there is risk to soil or water quality.
- 17.6.5 You may house adult deer through the winter if it is a benefit to their health and welfare and we have approved it as part of your livestock management plan.
- 17.6.6 You must ensure that your deer housing provides:
- i. Housing for groups of similar ages;
 - ii. At least five square metres lying area for each 100 kg live weight;
 - iii. A safe environment to prevent injury to the deer;
 - iv. Adequate light, ventilation and no draughts;
 - v. Facilities for rearing orphan calves and refuge for bullied deer, using barriers or partitions with a minimum height of 2 m.
- 17.6.7 Bullied deer must be removed to a different pen and if possible identify and remove the aggressor.
- 17.6.8 You must obtain permission from us before you house mature stags or housing finishing deer during the winter period.

17.7 Handling and transport

- 17.7.1 You must clearly identify your animals when there is a risk of being mixed with non organic animals i.e. transportation or parallel production
- 17.7.2 You should use subdued low level lighting to reduce stress when handling deer.
- 17.7.3 You may use short term holding pens providing there is at least 0.6m² for each 100 kg of live weight.
- 17.7.4 You may use dart guns providing that
- i. The provisions of all statutory regulations are followed and in only essential circumstances;
 - ii. The user is fully trained;
 - iii. Animals are observed during recovery from sedation;
 - iv. They cannot injure or lose themselves eg near water or woodland.
- 17.7.5 You must when handling your animals:
- i. Make sure that they are always in sight of the handlers and other deer;
 - ii. Familiarise them with your handling facilities;
 - iii. Keep separation of individuals to a minimum;

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- iv. Make sure your handlers are experienced and have received suitable training.
- 17.7.6 You must ensure that your handling facilities are good enough to enable your stock to remain safe and well.
- 17.7.7 You must provide barriers of at least 2 meters high. The last 20 meters of the handling race must be solid boarding or close mesh (less than 6 cm) and should be covered in hessian or a similar material.
- 17.7.8 You should not transport deer for more than eight hours, including the loading and unloading time. If the trip takes longer, the livestock must be fed and watered according to their needs.
- 17.7.9 You must keep any transportation of your deer to an absolute minimum.
- 17.7.10 You must use trained and competent people when transporting your deer.
- 17.7.11 You (or the responsible person) must when transporting deer:
 - i. Allow the deer access to food at least four hours before the journey;
 - ii. Provide the deer with fresh, clean water directly before and after the journey;
 - iii. Ensure the mode of transportation must be clean and free of protrusions that could cause bruising and / or injury;
 - iv. Allow any stressed deer to rest for up to one hour before loading or unloading them;
 - v. Provide emergency facilities to cool down heat stressed deer.
- 17.7.12 You must provide a suitable vehicle for transportation of deer. You must ensure that the vehicle has:
 - i. Ramps with a slope of no more than 20°;
 - ii. Appropriate and adequate ventilation;
 - iii. Sufficient bedding to prevent your deer slipping;
 - iv. Comfortable head space so the animal is able to stand in a natural position;
 - v. Pen divisions that are solid and at least 2 m high, with no sharp edges or projecting parts that could cause injury.
- 17.7.13 When transporting deer you must:
 - i. Individually pen any irritable or hard antlered stags;
 - ii. Separate groups of deer based on their previous groups, size and sex;
 - iii. Regularly inspect the deer;
 - iv. Ensure a stocking density of at least 0.6m² for each 100 kg liveweight;
 - v. Report any injuries or deaths to the driver, abattoir manager and farmer, and record them in the farm records.

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17.7.14 You must make sure where you keep your deer in lairage during transit that:

- i. There is enough space for the number of deer held;
- ii. There is enough shelter and bedded lying area for the number of deer held;
- iii. They have easy access to food and water;
- iv. The facilities are kept clean;
- v. There are suitable handling, loading and unloading facilities.

17.7.15 Whilst the deer are in lairage you must:

- i. Keep them in their social groups;
- ii. Ensure they are inspected regularly, at least every eight hours, by a competent deer handler.

17.7.16 You must not transport the deer in the same vehicle as other species.

17.7.17 You must not transport any of the following to an abattoir:

- i. Deer under five months old;
- ii. Stags in hard antler, unless you individually pen them;
- iii. Hinds more than five months in calf;
- iv. Sick, injured or diseased deer;
- v. Males over 24 months old during the rut;
- vi. Hinds, with calves under three months old at foot.

17.8 Slaughtering

17.8.1 General points that you must follow:

- i. Ensure compliance to the terms of any welfare and regulatory legislation;
- ii. Design and manage your slaughter system to make sure you do not cause your animals unnecessary distress or discomfort;
- iii. Keep the pre slaughter handling to a minimum
- iv. Use only trained and competent people whose training is recorded.
- v. If the carcass is to be taken to an approved game handling establishment, then the stalker must have trained hunter status and a written declaration will have to be completed for each carcass.

17.8.2 You should where possible shoot the deer in the field, in the brain, at close range using a trained and experienced marksman.

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- 17.8.3 When shooting deer you should:
- i. Choose an appropriate sized field, avoiding very small paddocks;
 - ii. Use an elevated position;
 - iii. Bleed out straight after shooting;
 - iv. Care must be taken in shooting one deer not to injure others;
 - v. Use a suitable high velocity rifle and ammunition which meets the legal requirements;
 - vi. Provide a safe backstop for the bullet;
 - vii. Take sensible precautions to ensure public safety,;
 - viii. If the kill is not clean, kill the wounded deer straight away, and only continue the cull when the remaining deer are calm.
- 17.8.4 Deer must only be shot at a range that will ensure a humane kill. For park deer this must be no more than 80 meters and for farmed deer must be no more than 40 meters, unless there are exceptional circumstances and by a proven marksman.
- 17.8.5 You may use captive bolt stunning if you have a licensed facility, provided that:
- i. Your animals are restrained in a drop floor crush, hydraulic crush or suitable pen;
 - ii. The stun to stick interval is no more than 60 seconds;
 - iii. After incision of the blood vessels, you perform no further dressing procedures on the deer for at least 20 seconds and until all brain stem reflexes have ceased.
- 17.8.6 A specialised licensed abattoir with staff who are trained and experienced with deer may be used providing:
- i. Your deer are slaughtered as soon as possible on arrival, or are rested in a lairage designed for, and only being used by, deer;
 - ii. Your deer are not brought close to any other species in the lairage or abattoir before stunning;
 - iii. Walls, doors, passages and pens are smooth, without projections that could injure your deer, and are high enough to discourage them from escaping;
 - iv. Your deer are restrained in a drop floor crush, hydraulic crush or suitable pen;
 - v. The time that the last deer in a batch is left is kept to an absolute minimum;
 - vi. The stun to stick interval is no more than 60 seconds;
 - vii. After incision of the blood vessels, no further dressing procedures are performed on the deer for at least 20 seconds and until all brain stem reflexes have ceased.

SECTION 18

Bee Keeping

18.1 Bee keeping

- 18.8.1 Beekeeping plays an important role in the countryside through pollination. In the UK about 70 crops are dependent on, or benefit from, visits from bees. In addition, bees pollinate the flowers of many plants which become part of the feed of farm animals. The economic value of honey bees and bumble bees as pollinators of commercially grown insect pollinated crops in the UK has been estimated at over £200 million per year.

18.2 Origin of bees

- 18.2.1 Preference shall be given to the use of *Apis mellifera* and their local ecotypes.
- 18.2.2 In case of high mortality of bees caused by health or catastrophic circumstances, the reconstitution of the apiaries with non-organic bees, when organic apiaries are not available.

18.3 Conversion

- 18.3.1 To convert your hives you must follow this Standard for 12 months.
- 18.3.2 During the conversion period the wax shall be replaced with wax coming from organic beekeeping

18.4 Use of non organic beeswax

- 18.4.1 In the case of new installations or during the conversion period, non-organic beeswax may be used only:
- i. where beeswax from organic beekeeping is not available on the market;
 - ii. where it is proven free of contamination by substances not authorised for organic production;
 - iii. if it comes from the cap.

18.5 Replacement of bees

- 18.5.1 If you renovate apiaries, 10 % per year of the queen bees and swarms may be replaced by non-organic queen bees and swarms provided that the queen bees and swarms are placed in hives with combs or comb foundations coming from organic production units

18.6 Feed

- 18.6.1 At the end of the production season you must ensure that hives shall be left with sufficient reserves of honey and pollen for the bees to survive the winter.
- 18.6.2 You must only feed bee colonies where the survival of the hives is endangered due to climatic conditions.
- 18.6.3 You must only feed with organic honey, organic sugar syrup, or organic sugar.
- 18.6.4 You must enter in the apiary register records of the use of feed as follows:
- i. type of product,

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- ii. dates,
- iii. quantities
- iv. hives where it is used.

18.7 Health

18.7.1 For cases of *Varroa destructor*:

- i. The practice of destroying the male brood is permitted only to isolate the infestation.
- ii. You may use formic acid, lactic acid, acetic acid and oxalic acid as well as menthol, thymol, eucalyptol or camphor. The use of these products will not affect your organic status.
- iii. If a treatment is applied with chemically synthesized allopathic products, during such a period, the colonies treated shall be placed in isolation apiaries and all the wax shall be replaced with wax coming from organic beekeeping. Subsequently, organic status will be lost and a further conversion period of one year will apply to those colonies.

18.7.2 For the purpose of cleaning and disinfection of frames, hives and combs, sodium hydroxide may be used.

For the purposes of protecting frames, hives and combs, in particular from pests, only rodenticides (to be used only in traps), and appropriate products listed in 5.10 of this Standard, are permitted.

18.7.3 You may use physical treatments for disinfection of apiaries such as steam or direct flame.

18.7.4 If despite all preventive measures, your colonies become sick or infested, you must treat them immediately and, if necessary, the colonies should be placed in isolation apiaries.

18.7.5 You must ensure that veterinary medicinal products comply with UK law.

18.7.6 You must inform us if you use any veterinary medicinal products. You should keep the following records for disease prevention and veterinary treatment:

- i. date of treatment,
- ii. details of the diagnosis,
- iii. the method of administration
- iv. the dosage;
- v. the duration of the treatment
- vi. type of treatment product,
- vii. the indication of the active pharmacological substances involved method of treatment and veterinary prescription for veterinary care with reasons
- viii. withdrawal periods

18.7.7 Bees treated must be clearly identified by hive

18.7.8 When veterinary medicinal products are used, withdrawal period must have been completed before the products from the hive can be sold as organic again.

18.8 Siting of apiaries

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- 18.8.1 Defra may designate regions or areas where beekeeping complying with organic production rules is not practicable.
- 18.8.2 The siting of the apiaries shall be such that, within a radius of 3 km from the apiary site the area has nectar and pollen sources consisting essentially of organically produced crops or, as appropriate, of spontaneous vegetation or non-organically managed forests or crops that are only treated with low environmental impact methods. Apiaries shall be kept at sufficient distance from sources that may lead to the contamination of beekeeping products or to the poor health of the bees;
- 18.8.3 Nectar and pollen sources should consist essentially of organically produced crops, spontaneous vegetation and/or crops treated with low environmental impact methods such as agri-environmental schemes. This does not apply where flowering is not taking place, or the hives are dormant.
- 18.8.4 The zone where the apiary is situated must be registered with us together with the identification of the hives. You must inform us when moving the apiaries by a deadline agreed on with us.
- 18.8.5 You must provide us with a map on an appropriate scale listing the location of hives. Where no areas are identified by Defra you must provide us with appropriate documentation and evidence, including suitable analyses if necessary, that the areas accessible to your colonies meet the conditions required in this Standard.

18.9 Managing your apiaries

- 18.9.1 Mutilation such as clipping the wings of queen bees is prohibited.
- 18.9.2 You must not use brood combs for honey extraction.
- 18.9.3 Artificial insemination of bees is prohibited.
- 18.9.4 The bees wax for new foundations must come from organic production units.
- 18.9.5 You must only use natural products such as propolis, wax and plant oils in the hives.

18.10 Harvesting

- 18.10.1 You must not destroy bees in the combs as a method associated with the harvesting of beekeeping products;
- 18.10.2 You must not use chemical synthetic repellents during honey extractions operations.
- 18.10.3 You must keep records of the supers and the honey extraction operations.
- 18.10.4 Particular care shall be taken to ensure adequate extraction, processing and storage of beekeeping products. All the measures to comply with this requirement shall be recorded.

18.11 Housing

- 18.11.1 Hives and materials used in beekeeping shall be mainly made of natural resources presenting no risk of contamination to the environment or the apiculture products.

18.12 Pollination

SECTION 18

- 18.12.1 For the purpose of pollination you may have organic and non-organic units on the same holding, provided that all the requirements of this Standard are fulfilled, with the exception of the provisions for the siting of the apiaries. Products cannot be sold as organic if this occurs and you must keep documentary evidence of the use of this section.

GLOSSARY OF TERMS

A, B, C

Agri environmental scheme	A government scheme that links agricultural production to minimum levels of environmental management and responsibility.
Alien species	<ul style="list-style-type: none"> ➤ a species or subspecies of an aquatic organism occurring outside its known natural range and the area of its natural dispersal potential; ➤ polyploid organisms, and fertile artificially hybridised species irrespective of their natural range or dispersal potential
Applicant	An organisation or person who has applied for, but has not yet been given operator status.
Approved body	A body approved by the Defra for the purpose of operating a certification scheme for organic food production
Approved producer	A registered operator holding a valid Certificate of Conformity for the production of organically produced products.
Aquaculture	The rearing or cultivation of aquatic organisms using techniques designed to increase the production of the organisms in question beyond the natural capacity of the environment; the organisms remain the property of a natural or legal person throughout the rearing or culture stage, up to and including harvesting
Aquatic organisms	Any species living in water belonging to the animalia, plantae and protista kingdoms, including any part, gametes, seeds, eggs or propagules of their individuals that might survive and subsequently reproduce
Bovine	Ruminant such as cow, ox, or buffalo.
Bubalus	Water buffaloes
Caprine	Animal with the characteristic of a goat.
Certificate of conformity	A certificate showing organic products, fields, etc issued to an operator recognising their conformity to our Standards.
Certification scheme	The Scheme operated by the Organic Food Federation and audited by the Defra designed to certify conformity with the Standards as defined.
Closed recirculation aquaculture facility	A facility where aquaculture takes place within an enclosed environment on land or on a vessel involving the recirculation of water, and depending on permanent external energy input to stabilize the environment for the aquaculture animals
Closed aquaculture facility	A facility where aquaculture is conducted in an aquatic medium, which involves recirculation of water and which is separated from the wild aquatic medium by barriers preventing the escape of reared specimens or biological material that might survive and subsequently reproduce
Competent Authority	The Competent Authority is Defra (Department for Environment, Food and Rural Affairs).
Control Authority	The Control Authority is Defra (Department for Environment, Food and Rural Affairs).
Control Body	Organic Food Federation or an equivalent body.
Conventional feedstuffs/feed	Materials not produced in accordance with the rules of production specified in this Standard.
COSHH	Control of substances hazardous to health.

D, E, F

Defra	Department for Environment Food and Rural Affairs
Defra surveillance visits	A random inspection of some operators to check our inspection procedures.
Derogation	Permission granted by us or Defra to carry out a specific task.

GLOSSARY OF TERMS

Energy from renewable sources	Renewable non-fossil energy sources: wind, solar, geothermal, wave, tidal, hydropower, landfill gas, sewage treatment plant gas and biogases
Equine	Horses, asses and zebras.
Ethological	The scientific study of animal behaviour, especially as it occurs in a natural environment.
Feed additives	Additives that may be included in feed that are listed in this Standard.
Feedingstuff	Feed
Feed materials	Feed materials produced in accordance with this Standard.
First consignee	The person to whom the imported consignment is delivered and who will receive it for further preparation and/or marketing.

G, H, I

Genetically modified organisms (GMO)	Products produced from or by GMOs are incompatible with the concept of organic production and consumers' perception of organic products. They should therefore not be used in organic farming or in the processing of organic products.
GMO derivative	Any substance which is either produced from or produced by GMOs, but does not contain them.
Hatchery	A place of breeding, hatching and rearing through the early life stages of aquaculture animals, finfish and shellfish in particular
Hazard Analysis Critical Control Point (HACCP)	A system for identifying and controlling hazards.
Holding	All the production units operated under a single management for the purpose of producing agricultural products.
Homeopathic products	Veterinary medicinal product prepared from products, substances or compositions called homeopathic stocks in accordance with a homeopathic manufacturing procedure.
Hydroponic production	The method of growing plants with their roots in a mineral nutrient solution only or in an inert medium, such as perlite, gravel or mineral wool to which a nutrient solution is added.
Importer	An operator who imports goods either in person or through a representative for release for free circulation into the Community.
In conversion	The transition from non organic to organic farming within a given time period, during which our Standards have been applied.
In conversion feedingstuffs / feed materials	Feedingstuffs produced during the conversion period to organic production, with the exclusion of those harvested in the 12 months following the beginning of the conversion.
Ingredients	Processed agricultural crop and livestock products intended for human consumption, prepared essentially from one or more ingredients of plant or animal origin.
Ionising radiation	Radiation that has enough energy to remove electrons from substances it passes through, forming ions.
Inspector	A qualified person appointed to conduct and carry out audits.
Inspection service	An independent inspection service appointed, or operated directly, by Defra or us to carry out inspections on its behalf.
Introduction	The process by which an alien species is intentionally moved to an environment outside its natural range for use in aquaculture

J, K, L

Labelling	Any words, particulars, trademarks, brand names, pictorial matter or symbols appearing on any packaging, document, notice, label, board or collar accompanying or referring to a product.
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GLOSSARY OF TERMS

Licensee	An operator who has been granted a Certificate of Conformity.
List of ingredients	The list of ingredients referred to on the labelling.
Livestock production	The production of domestic or domesticated terrestrial animals and aquatic species farmed in fresh, salt or brackish water.
Locally absent species	A species or subspecies of an aquatic organism which is locally absent from a zone within its natural range of distribution for biogeographical reasons
Locally grown species	In the framework of aquaculture and seaweed production, means those which are neither alien nor locally absent species under Council Regulation (EC) No 708/2007 (3) (see this glossary). Those species listed in Annex IV of Regulation (EC) No 708/2007 (Rainbow trout, <i>Oncorhynchus mykiss</i> Brook trout, <i>Salvelinus fontinalis</i> Common carp, <i>Cyprinus carpio</i> Grass carp, <i>Ctenopharyngodon idella</i> Silver carp, <i>Hypophthalmichthys molitrix</i> Big head carp, <i>Aristichthys nobilis</i> Pacific cupped oyster, <i>Crassostrea gigas</i> Japanese or Manila clam, <i>Ruditapes philippinarum</i> Large-mouth bass, <i>Micropterus salmoides</i> Arctic char, <i>Salvelinus alpinus</i>) may be considered as locally grown species.
Logo	The symbol or mark of conformity issued to operators by the Federation for use on products produced in accordance with this Standard.

M, N, O

Marketing	Marketing means holding or displaying for sale, offering for sale, selling, delivering or placing on the market in any other form.
Mass catering operations	The preparation of organic products in restaurants, hospitals, canteens and other similar food business at the point of sale or delivery to the final consumer.
Movement	Introduction and/or translocation
MSDS	Material Safety Data Sheet
Mycology	Study of fungi.
National Organic Program (NOP)	A certification programme for operators supplying product to the United States, either directly or via processors exporting products to the US, and which require products produced to the United States Department of Agriculture NOP Standards.
Non compliance	A failure to meet this Standard.
Non organic	Not coming from or not related to a production in accordance with this Standard.
Non routine movement	Any movement of aquatic organisms which does not fulfil the criteria for routine movement
Non target species	Any species or subspecies of an aquatic organism likely to be detrimental to the aquatic environment that is moved accidentally together with an aquatic organism that is being introduced or translocated not including disease-causing organisms which are covered by Directive 2006/88/EC
Nursery	A place where an intermediate farming system, between the hatchery and grow-out stages is applied. The nursery stage is completed within the first third of the production cycle with the exception of species undergoing a smoltification process
Open aquaculture facility	A facility where aquaculture is conducted in an aquatic medium not separated from the wild aquatic medium by barriers preventing the escape of reared specimens or biological material that might survive and subsequently reproduce

GLOSSARY OF TERMS

Operator	Anyone who produces, prepares, stores or imports from a third country, with a view to the subsequent marketing thereof, products referred to as organic.
Organically produced feedstuffs/materials	Materials produced in accordance with the rules of production laid down in this Standard.
Ovine	Characteristic of sheep.

P, Q, R

Permanent pasture	Pasture which has been in existence for at least five years.
Phytotherapeutic	The use of plant-derived substances to treat a medical condition.
Pilot release	The introduction of alien species or translocation of locally absent species on a limited scale to assess ecological interaction with native species and habitats in order to test the risk assessment assumptions
Pollution	In the framework of aquaculture and seaweed production means the direct or indirect introduction into the aquatic environment of substances or energy as defined in Directive 2008/56/EC of the European Parliament and of the Council (1) and in Directive 2000/60/EC of the European Parliament and of the Council (2), in the waters where they respectively apply
Polyculture	In the framework of aquaculture and seaweed production, means the rearing of two or more species usually from different trophic levels in the same culture unit
Polyploid organisms	Artificially induced tetraploid organisms (4N). These are aquatic organisms in which the number of chromosomes in the cells has been doubled through cell manipulation techniques
Posology	Study of the dosages of medicines and drugs.
Potable water	Water that is safe to drink, free from pollution, harmful organisms and impurities.
Production cycle	In the framework of aquaculture and seaweed production, means the lifespan of an aquaculture animal or seaweed from the earliest life stage to harvesting
Propolis	Resinous mixture that honey bees collect from tree buds, sap flow or other botanical sources.
Pre packaged foodstuff	A wrapped or packaged food product before sale.
Preparation/ Processing	The operations of preserving and / or processing of agricultural products (including slaughter and cutting for livestock products), and also packaging and / or alterations made to the labelling concerning the presentation of the organic production method of the fresh, preserved and / or processed products.
Processing aid	Any substance not consumed as a food ingredient by itself but performs a technological purpose during processing.
Processing complex	Where raw materials are processed in such a way that the nature, weight or volume is transformed.
Processing simple on farm	Simple Processing must always be on a dedicated organic site. Normally defined as where raw materials are processed in such a way that traceability and reconciliations are not difficult to follow for a producer inspector. For example: cleaning; peeling, chopping and slicing; packing (including bought in certified products) eg box schemes; blending (including bought in

GLOSSARY OF TERMS

certified products) where the nature of the product is not changed e.g. muesli; processing of a single organic ingredient where nature is not changed e.g. flour milling; simple butchery.

Production unit	All assets to be used for a production sector such as production premises, land parcels, pasturages, open air areas, livestock buildings, fish ponds, containment systems for seaweed or aquaculture animals, shore or seabed concessions, the premises for the storage of crops, crop products, seaweed products, animal products, raw materials and any other input relevant for this specific production sector.
Pyrethrin	Extracts of a species of chrysanthemum used as insecticides.
Quarantine	A process by which aquatic organisms and any of their associated organisms can be maintained in complete isolation from the surrounding environment
Quarantine facility	A facility in which aquatic organisms and any of their associated organisms can be maintained in complete isolation from the surrounding environment
Receiving Member State	The Member State into the territory of which the alien species is introduced or the locally absent species is translocated
Routine movement	The movement of aquatic organisms from a source which has a low risk of transferring non-target species and which, on account of the characteristics of the aquatic organisms and/or the method of aquaculture to be used, for example closed systems as defined in 3, does not give rise to adverse ecological effects

S, T, U

Simultaneous conversion	Conversion of land and animals simultaneously from the beginning of conversion period. Both become organic at the same time.
Sending Member State	The Member State from the territory of which the alien species is introduced or the locally absent species is translocated
Stocking density	In the framework of aquaculture, means the live weight of animals per cubic metre of water at any time during the grow-out phase and in the case of flatfish and shrimp the weight per square metre of surface.
Third country	A country that is not a member of the European Union and importers from these countries are required to obtain authorisation from Defra with the exception of Argentina, Australia, Costa Rica, Israel, New Zealand, Switzerland and India.
Torrefaction	Drying or roasting
Transhumance	When animals are moved on foot from high ground to low ground, or vice versa.
Translocation	The process by which a locally absent species is intentionally moved within its natural range for its use in aquaculture to an area where it previously did not exist because of bio-geographical reasons
UKAS	United Kingdom Accreditation Service - The UK body responsible for accrediting certification bodies to EN45011/ISO65 and contracted by Defra in the UK to assess certification Bodies.

V, W, X

GLOSSARY OF TERMS

Varroa destructor	An external parasitic mite that attacks honey bees
Veterinary medicinal products	Products used as a curative or preventative treatment against a specific disease.
Veterinary treatment	All courses of a curative or preventive treatment against one occurrence of a specific disease.
Zoonoses	Diseases that are transferable from animals to humans
Zootechnical	Relating to the science and technology of animal husbandry.