# Organic Crop Improvement Association International, Inc.

# International Certification Standards

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#### **OCIA INTERNATIONAL**

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## **Procedures**

#### AMENDMENT PROCEDURES FOR THE CERTIFICATION STANDARDS

Standard proposals and amendments are subject to review at the General Membership Meeting, which is held in the first quarter of each year. Proposed changes in standards must be submitted by any member including chapters, producers at large or processor/handlers to the OCIA Standards Committee at least 90 days prior to the Annual General Membership Meeting. The Standards Committee shall mail a copy of proposed deletions or additions to the standards to the last recorded address of each OCIA associate at least 45 days before the General Membership meets to consider their changes.

The International Standards Committee has developed a procedure for the submission of standards and amendments to the standards. Members wishing to make submission to the Standards Committee should use this guideline to submit standards, or amendment to the current standards. Interested members should contact the OCIA International Office and request a copy of the <u>Standards Submission Guidelines</u>. Submissions not made in this format will not be accepted by the International Standards Committee for presentation to the General Membership at the annual meeting.

#### STANDARDS REVIEW PROCEDURES AND IMPLEMENTATION POLICY

All standards voted on at the OCIA Annual General Membership Meeting shall then be reviewed and updated by the OCIA International Standards Committee, in English and Spanish, no later than 60 business days after the close of the annual meeting. Implementation of the amended standards shall be enforceable 60 days after publication by OCIA International. Certification is to be performed according to standards in place at date of application for certification.

In the case where immediate implementation of an amended standard is not practical, the standards committee will publish an implementation protocol. In cases where applicants believe they are unable to implement new standards according to the International Standards Committee policy, a written waiver may be obtained from the Membership/Chapter Licensing Committee or International Certification Committee as the case may warrant.

# **Section One**

#### 1.0 PREAMBLE

- 1.1. The following constitute OCIA minimum standards and allowed materials for organic certification to the OCIA International program. All applicants must meet or exceed these requirements to use the OCIA International seal/mark. OCIA may also offer certification to the regionally based standards on request. These programs may be offered both separately and in combination to best suit the needs of the applicant.
- 1.2. OCIA certification arises from the following basic principles:
  - 1.2.1. Organic certification is a system of institutionalized trust, allowing consumers to identify and reward conscientious stewards of our natural heritage.
  - 1.2.2. Organic certification is a privilege to be earned rather than a right to be withdrawn.
  - 1.2.3. No one knows the farm system better than a farmer.
  - 1.2.4. Organic production focuses on natural processes and their management: materials and products are an adjunct to, not a replacement for, effective management.
  - 1.2.5. Diversity, interaction, adaptability and competition are characteristic, natural elements to be respected in the organic system.
  - 1.2.6. The organic farming system should be structured and managed to ensure that soil loss through erosion and other degradation does not exceed natural replacement rates.
  - 1.2.7. Organic operations must take measures to maintain and/or improve landscape and enhance biodiversity.
  - 1.2.8. The producers, handlers, and consumers depend on processors of organic products to preserve or enhance the original nutritive value for the type of product, while continuing producer efforts to minimize contamination of the product and the environment.
  - 1.2.9. The audit trail is an integral part of organic certification.
  - 1.2.10. The use of products made from organisms that have been modified by genetic engineering techniques (as defined in the Materials List) is prohibited and is in direct violation of the philosophy and organic intent of OCIA.
  - 1.2.11. Nanotechology applied as an extension to the process of genetic modification referred to in 1.2.10 is prohibited within the organic system.
  - 1.2.12. The use of manufactured nanoparticles or nanostructures is prohibited.

    \*Notwithstanding the above, the use of naturally occurring nanoparticles, as in traditional biodynamic practice, is allowed
  - 1.2.13. The use of artificial nanoscale processes is prohibited within the organic system.
- 1.3 OCIA shall decertify a farm, handling operation, or processing facility if its management is convicted of violating local, state, provincial, or federal labor laws or international conventions such as the UN Convention of Human Rights. Organic production may not be based on social injustice or a violation of human rights.

- 1.3.1 All OCIA certified operators must document a policy on social justice, which ensures that
  - a. Forced or involuntary labor is not used;
  - b. Employees and contractors of organic operations have freedom to associate, and the right to organize and bargain collectively;
  - c. Equal opportunity and treatment is given to all employees or contractors, and employers do not act in a discriminatory way;
  - d. All employed people under the age of 18 will not be denied educational opportunities and shall not be given tasks which are hazardous to them because of age or physical size.
- 1.3.2 Operators who hire fewer than ten (10) persons for labor and those who operate under a state or other governmental system that enforces social laws are exempt from having to document the policy as required by 1.3.1.
- 1.3.3 OCIA encourages children to participate in family and/or community farming operations and projects, and to participate in regional cultural practices that involve participation with the rest of their family in traditional harvest. When children work in this way it is required that:
  - a. The work is not hazardous to their health and safety;
  - b. It does not jeopardize the children's educational, moral, social and physical development;
  - c. Children are supervised by adults and have authorization from a legal guardian.

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# **Section Two**

#### 2.0 FARM CERTIFICATION STANDARDS

#### 2.1. ADMISSIBILITY

- 2.1.1. Certification may be on a whole farm or on a field-by-field basis. If the latter, all fields of the farm unit must be committed to an ongoing program of organic crop improvement. This program of organic crop improvement must be submitted in writing to the certification committee by the third year of certification and be designed to bring 100% of the farm acres into organic management or transition within at least 5 years following the first certification of any portion of that farm. Exceptions may be granted for portions of the farm which are rented or not under the complete control of the grower or for unexpected and extreme circumstances. In all cases of split production, the organic and conventional parts of the operation must be clearly and continuously separate until the entire operation is converted to organic production. This separation will be verified by inspection (in regards to equipment, please see 2.6.2). Fields may not be rotated in and out of organic production and remain certified.
- 2.1.2 To be certified, a farm or field must be managed in accordance with these STANDARDS:

#### 2.2. PARALLEL PRODUCTION and SPLIT PRODUCTION

- 2.2.1 A crop cannot be sold as OCIA-certified if any variety of that crop is also produced elsewhere on the farm operation employing a genetically engineered (GE) technology.
- 2.2.2 To be admissible for OCIA certification, a farm or field must not be under the care and control of a farmer who uses genetic engineering technology or grows genetically modified (GMO) crop or livestock anywhere in that farm operation.
- 2.2.3 To be admissible for OCIA certification, a farm or field must not be under the care and control of a farmer that sells genetically modified (GMO) seed, crop, or livestock anywhere in that farmer's operation. An exemption may be granted to allow a farmer to sell as conventional a GMO contaminated crop that was originally intended to be certified organic.
- 2.2.4 The same crop variety or product cannot be sold as OCIA-certified if the same crop variety or product is also produced elsewhere on the farm using materials or methods that do not conform to these standards. OCIA encourages growers to convert their entire acreage to organic production, but allows for parallel production and split production when:
  - a) It is within the conversion period, or
  - b) Growers own or operate multiple farms and the parallel production, or split production, occurs on farms which do not share equipment or transportation systems, or
  - c) The OCIA-certified crop varieties or products can be sold as OCIA-certified organic if: verified through inspection to be properly handled and segregated in all aspects of production. Prohibited materials shall be stored in separate locations from where organic products are processed, stored or handled.

In all cases of parallel production, or split production, the producer and organic product must meet the following criteria:

- Notification to the Chapter Review Committee, Chapter Administrator and/or OCIA
   International prior to scheduling the inspection of the type(s) of crops involved in the
   parallel and split production systems so that OCIA and inspectors can ensure the integrity
   of the OCIA-certified product. The inspection must include the non-organic fields and/or
   non-organic on-farm processing.
- 2. A plan for production, harvest and storage of crops that ensures that there will be segregation of the OCIA-certified crop from the conventional crop. For growers this separation is accomplished by choosing crops or crop varieties that are visually distinguishable from each other, or by verifying the effectiveness of the separation plan at the annual inspection.
- In cases where the crops in parallel production are not visually distinguishable, at least two (2) inspections must occur and must be conducted by OCIA approved inspectors/chapter committee members. An OCIA approved inspector must conduct the annual inspection and qualified individuals may conduct additional inspections with pre-approval from the chapter committee or OCIA International. At least one inspection must occur during a harvest and/or during on-farm processing.
  - 3. Complete and comprehensive record keeping systems for organic and conventional product must be maintained. OCIA will perform a complete audit of production and sales records of both the organic and non-organic product at the annual inspection of any grower with parallel or split production, even when the products are visually distinguishable.

#### 2.3. CONVERSION PERIOD

- 2.3.1 A field, pasture, orchard, vineyard, etc. may be certified organic if there has been no use of unacceptable materials (as defined by these standards) for 36 months prior to the first certifiable harvest and this is documented and can be verified.
- 2.3.2 The conversion period may be extended by the certification committee, taking into account the past use of the land, and/or the applicant's level of understanding of organic production and its certification requirements.
- 2.3.3 No product may carry the OCIA seal, which has not undergone this full conversion period. (This is to mean that there is no OCIA in-conversion labeling).
- 2.3.4 An OCIA-certified organic farmer, who wishes to incorporate another, previously un-certified piece of land may do so by providing necessary documentation of compliance with OCIA Standards 2.1.2, 2.3.1, and 2.5.5. The land only needs to be included in the application for the current crop year certification and the land would not have had to undergo an inspection during the previous year.

#### 2.4 BUFFERS/ADJOINING LAND USE

- 2.4.1 In cases where there is reason to suspect contamination (an adjoining farm is growing sprayed crops, or there is other possibility of contamination), there must exist adequate physical barriers or a 25 foot (8 meter) minimum distance between organic pastures and crops and sprayed pastures and crops to maintain the integrity of certified fields. Where a field has been contaminated by a prohibited material, a 36-month transition period is required. Although testing is permitted, the amount of contamination or residue is not the issue. Even when subsequent testing may imply there are no residues of a prohibited material, the land is still not eligible to be brought back into certification without undergoing a 36-month transition period.
- 2.4.2 In cases where a farm field has been contaminated by GMO seed due to the actions of neighboring farms or custom operators, or the invasion of pollen from GMO crops, the time of conversion for that field back in to certified organic production, for that special crop or any crop that could be crossed with the GMO contaminated crop, may be tied to the length of time the specific seed is known and documented to be viable, plus one year.

- a. This period must be documented and the farmer must follow a procedure prescribed by the certification committee, with the minimum requirement that:
  - 1. The crop grown on the field during the conversion time shall be a different crop, which is easily distinguishable from the crop which contained the GMO seed.
  - 2. The farmer must document the collection and destruction and removal from the farm of all volunteer plants from GMO seed.
- b. In cases where a farm field has been contaminated by GMO seed, and only seed, as per 2.4.2.a above, that farmer may grow a certified organic crop of a different kind on that field, during the time of reconversion, if and only if, the procedure in 2.4.2.a is followed and documented, as long as the certification requirements are met, and the process of conversion is fully documented.
- c. The above exception to the normal conversion period shall apply to the instance of contamination of a field, if and only if the prohibited substance that contaminated the field was GMO seed, and only seed.

#### 2.5. REQUIRED PRACTICES

- 2.5.1 Organic production focuses on natural processes and their management: materials and products are an adjunct to, not a replacement for, effective management practices. If inputs are used, materials of microbial, plant, or animal origin must form the basis of the fertility program. Nutrients and fertility products must be applied in a manner that protects soil, water, and the biodiversity. Restrictions may be applied by the OCIA International Office, for International Members, or by the Chapter Review Committee, for Chapter Members, based on the amounts, location, timing, treatments, methods, and/or choice of inputs used.
- 2.5.2 Development and implementation of a conscientious soil-building program designed to enhance organic matter and encourage optimum soil health.
- 2.5.3 OCIA International certifies across a vast range of bioregions and agricultural styles. A single set of rotational requirements for non-perennial crops is not appropriate or applicable to all of these variations. Therefore rotational requirements are developed by OCIA certified organic producers within the various regions in accordance with accepted regional organic practices. A record of these regional requirements may be kept by Chapter Committees and submitted to the OCIA International office for use by the CDT in evaluating chapter files. Rotations must be as varied as possible and aim to maintain or improve soil fertility, reduce nitrate leaching, and reduce weed, pest and disease problems. Certification committees shall require documented crop rotation plans designed to bring the entire certifiable/certified portions of the farm into compliance within three years following the first year of certification. Non-chapter members are required to comply with this standard by including with their application the verification that their rotational practices are appropriate for the region.
- 2.5.4 Once established, orchard and plantation management must maintain or improve floor cover and/or refuge plantings native to the area farmed. All applicable required practices outlined in these standards must be followed in orchards/plantations.
- 2.5.5 Use of careful management, resistant varieties, inter-cropping, and maintenance of soil health as the first line of defense against weeds, pests, and diseases.
- 2.5.6 Complete information describing at least three (preferably five) most recent years' production methods and materials, as well as information about current production practices, must be provided. The applicant for certification must also furnish an organic system plan of farm management strategies directed at achieving strict compliance with these standards.
- 2.5.7 If restricted or prohibited materials are used in any part of the organic producer's operation (including pest control, cleaning, etc.), the applicant must supply a documented management plan which specifies

- how the use of these restricted and prohibited inputs will be reduced or eliminated. This management plan must also include proposed timelines for this reduction or elimination.
- 2.5.8 Generation of an audit trail which will permit tracing the sources and amounts of all off-farm inputs, date and place of harvest, and all steps between harvest and sale to the wholesaler, retailer, or final consumer. Certification agents shall recommend denial of certification for inadequate audit trail.

#### 2.6. MACHINERY AND HANDLING EQUIPMENT

- 2.6.1 Maintenance of machinery and equipment in good enough condition to avoid contamination of soil or crops with hydraulic fluid, fuel, oil, etc.
- 2.6.2 All equipment, owned, hired, borrowed, or leased, including, but not limited to, planting, tillage, baling, harvesting and handling equipment used in the production, harvesting, and/or handling of OCIA-certified organic crops, including, but not limited to, grains, beans, vegetables, fruits, herbs, and forages, shall be cleaned sufficiently and documented by the use of a clean down log and/or checklist to prevent any contamination by conventional farming residues or by non-certified organic and/or GMO containing crops or products.
  - a. When organic grains are cleaned on farm by a mobile seed cleaner, this process shall be part of the producer's Organic System Plan (OSP). Monitoring of the process by the producer, as well as purge and cleanout of the mobile processing equipment shall be documented.
  - b. When post harvest cleaning of seed/grain is done off-farm at a stationary cleaning facility, and the seed/grain remains under the ownership of the producer, then one of the following options must be followed:
    - 1. The facility is OCIA certified or an OCIA approved facility or certified by another accredited certification body.
    - 2. The facility is OCIA certified as a contract processor under the application of the producer.
- 2.6.3 Pre- and post-harvest handling procedures and packaging materials that ensure maximum product quality (appearance, hygiene, freshness, and nutrition) using techniques and materials that are consistent with these standards. Irradiation of certified foods is prohibited.

#### 2.7. SOIL TESTING

2.7.1 Beginning March 1991, soil testing will not be mandatory for inspection and/or certification purposes. However, OCIA maintains that all members manage their soils responsibly, with the intent to improve soil fertility and tilth through proper management practices. If any problems arise that are associated with nutritionally imbalanced soils, such as poor plant growth or excessive pest pressure (including insects and/or weeds), then it is the responsibility of the grower to test the field(s) in question for macro- and micronutrients, cation exchange capacity, base saturation, and organic matter. These results should be used in part to determine reasonable management options to correct soil imbalances and improve field and crop performance. Further, it is the inspector's responsibility to document field problems associated with nutritionally imbalanced soils, and to verify whether soil tests have been taken and/or soil test results received and appropriate action has been taken. In this case, appropriate action may include developing a more appropriate rotation, applying an OCIA approved material, modifying composting and/or manure management practices, or responding in some other manner to the acknowledged problem. Failure to respond in any manner to a known soil deficiency(s) that result in inferior quality crops and/or poor soil quality will be looked upon as negligence in management and may be used as grounds for de-certification.

#### 2.8 SOILS AND PLANTS

Authorized methods and materials

#### 2.8.1 MANURE/ORGANIC MATTER

- a. All manure sources and management techniques must be clearly documented as a part of the certification process.
- b. Certification committees shall set limits on the total amount of organic materials brought into the farm unit, taking into account local conditions and the specific nature of the crops.
- c. The total amount of manure added, averaged over the rotation, must not exceed the quantity which could be produced on the farm unit if it were a self-sufficient livestock holding. Exceptions can be made by certification committees for isolated intensive crops, for farms in a period of focused soil building, or farms where other extra need for nutrients and soil organic matter can be proven.
- d. Composted and uncomposted manure preferably produced on the farm, or which is free of contaminants if acquired elsewhere.
  - Fresh, aerated, anaerobic, or "sheet composted" manures on perennials or crops not for human
    consumption or applied at least four months before harvesting a crop for human consumption.
    At application the soil must be sufficiently warm (about 10° C) and moist to ensure active
    microbial digestion. Exceptions can be made at the discretion of the certification committee
    for animal-powered/ground-driven operations.
  - 2. Fresh, aerated, anaerobic or "sheet-composted" manures when applied at least four months before planting crops for human consumption which are known nitrate accumulators such as leafy greens, radishes and the beet family. At application the soil must be sufficiently warm and moist to ensure active microbial digestion. Exceptions per 2.8.1.d.1 are permitted.
- e. Manures containing human excrement (feces and urine) shall not be used on vegetation for human consumption, except where all sanitation requirements are met. Procedures shall be in place, which:
  - prevent transmission of pests, parasites, and infectious agents.
  - ensure that the manures are not mixed with other household or industrial wastes, which contain prohibited substances.
  - Sewage sludge and septic waste are prohibited.
- f. Green manures and crop residues, peat moss, straw, seaweed, and other similar materials.
- g. Composted food and forestry by-products, which are free of contaminants.

#### 2.8.2 MINERALS

- a. A program addressing long-term fertility needs together with other techniques including but not limited to: additions of organic matter, green manures, crop rotations, and nitrogen fixation by plants must be in place prior to the application of mineral fertilizers. The following mineral fertilizers are allowed:
  - Agricultural limestone, natural phosphates, and other slowly soluble rock powders. Fluorine
    content of the natural phosphates should be balanced with application rates so that total
    fluorine applied does not exceed an average of 5kg/ha/year in the field, or 10 kg/ha/year in the
    greenhouse.
  - 2. Wood ash, langbeinite (sulpomag), non-fortified marine by-products, bone meal, fishmeal, and other similar natural products only if free of prohibited materials.
  - 3. Cottonseed meal and blended products containing this substance is allowed only if free of prohibited materials.
  - 4. Potassium sulfate, borax (solubor), sodium molybdate, and sulphate trace mineral salts where agronomically justified. Application rates and distribution should be controlled by applying these products in solution with a well-calibrated sprayer.

- b. Ammonia and urea products are prohibited.
- c. Nutrient sources, natural or synthetic, containing highly soluble nitrate, phosphate, or chloride are prohibited from use on soil or foliage.
- d. Mineral fertilizers must be applied in the form in which they are naturally composed and extracted. Minerals cannot be rendered more soluble by chemical treatment, other than the addition of water and mixing with other allowed, naturally occurring materials. The Chapter Review Committee or the OCIA International Office may grant exceptions on a case-by-case basis. Exceptions cannot be granted for mineral fertilizers containing nitrogen.

#### 2.8.3 SEEDS, SEEDLINGS, GRAFTING AND ROOT STOCK

- a. When certified organic seeds are commercially available, they shall be used. All seeds planted after January 1, 2010 must be organic seed. Exemptions may be granted by the Chapter Review Committee, Chapter Administrator, or CDT (with input from the local chapter about the availability of the seed, when appropriate) for quantity, quality, variety or availability.
- An exemption may be granted by the Chapter Review Committee, Chapter Administrator or the CDT for treated foundation seed stock, specifically for the production of organic seed when no other suitable alternatives are available. (*Note: this does not conform with NOP Standards*).
  - b. Horticultural crops and non-perennial field crops must be produced from seed that has not been treated with any unauthorized product.
    - (1) Seeds, annual seedlings, and planting stock treated with prohibited substances may be used to produce an organic crop when the application of the materials is a requirement of applicable government phyto-sanitary regulations.
  - c. Vegetatively propagated plants such as garlic and other bulbous plants are to be considered as seeds and are subject to paragraphs a. and b. of this article.
  - d. Transplants shall be propagated under organic management one generation, in the case of annuals, and, for perennials, two growing periods, or 12 months, whichever is longer, before being considered organic.
  - e. Intentional use of seed, seedlings, grafting, and rootstocks that have been modified by genetic engineering techniques (as defined in the Materials List) including transgene plants and/or genetically engineered pollen are prohibited. Producer must ensure that purchased seed, seedlings, grafting and rootstock materials are free from such contamination.

#### 2.8.4 **FOLIAR**

- a. Liquid or powdered seaweed extract or other non-fortified marine by-products. (Explanatory note: In some circumstances, such as the use of phosphoric acid to hydrolyze fish emulsion, a normal aspect of the industrial process coincidentally furnishes plant nutrients. This is not to be considered "fortification" for the purposes of these standards. The operative criterion is whether a product is added to the process in order to boost the analysis, as is the case with potassium nitrate added to fish emulsion.)
- b. Plant or animal based growth regulators and other plant or animal products.
- c. Adjuvants, wetting agents, and the like.
- d. Mineral suspensions such as silica.

#### 2.8.5 SOIL AND WATER CONSERVATION

1. Clearing of land through the means of burning organic matter, (e.g. slash-and-burn, cane burning, straw burning) shall be restricted to the minimum level which allows sustainable regeneration of soil organic matter. Burning of crop residue shall be restricted to pest or disease control or sanitation purposes. All practices must be documented and in compliance with local regulations.

- 2. The clearing of primary ecosystems is prohibited.
- 3. Relevant measures shall be taken to prevent erosion.
- 4. Excessive exploitation and depletion of water resources are not allowed. In operations where water is scarce, water extraction should be monitored on a regular basis. All organic operations are encouraged to recycle rainwater, where feasible.
- 5. Relevant measures shall be taken to prevent salination of soil and water.

#### **2.9. OTHER**

- 2.9.1 Assorted plant and/or animal preparations, biodynamic preparations, microbial activators, bacterial inoculates, and mycorhizae, etc. maybe used but must be naturally occurring and not products of genetic engineering technology.
- 2.9.2 The use of manufactured nanoparticles or structures, or products that have been produced using artificial nanoscale processes is prohibited.
  - \*Notwithstanding the above, the use of naturally occurring nanoparticles, as in traditional biodynamic practice, is allowed.

#### 2.10. PEST, DISEASE AND WEED CONTROL

- a. Authorized methods and materials for management of significant pests, weeds, and diseases under normal circumstance include but are not limited to:
  - 1. Use of resistant varieties.
  - 2. Sexual, visual, and physical traps.
  - 3. A combination of cultural practices that limit weed development and pest and disease cycles (rotation, green manure, fallow, etc.).
  - 4. Mechanical, electrical, and thermal weeding
- b. If the organic system is not sufficient to control pests, diseases, and/or weeds, management products that are prepared at the farm from local plants, animals and microorganisms are allowed.
- c. If the ecosystem or the quality of the organic products can be shown to be in jeopardy, materials approved for pest, disease, or weed control in Section 9.3 of the OCIA Materials List may be used as appropriate.
- d. All pest, disease, and weed management products containing or derived from products made from organisms that have been modified by genetic engineering techniques (as defined in the Materials List) are prohibited.
- e. Thermal sterilization is restricted. All forms of soil sterilization require pre-approval from the Chapter Review Committee or OCIA International and must be shown to not have a harmful or lasting negative impact on the environment.

#### Authorized Methods and Materials

#### 2.10.1 **DISEASE**

- a. Use of resistant varieties.
- b. Lime-sulfur, Bordeaux, elemental sulfur. Other sulfur or copper products may be approved by the certification committee with the approval of OCIA.
- c. Fungicidal and cryptocidal soaps, plant preparations, vinegar and other natural substances.
- d. All disease control materials containing or derived from products made from organisms that have been modified by genetic engineering techniques (as defined in the Materials List) are prohibited.

e. Products used for disease control prepared at the farm from local plants, animals, and microorganisms are allowed except if specifically prohibited elsewhere in these standards.

#### 2.10.2 INSECTS AND SIMILAR PESTS

- a. Use of resistant varieties and the provision of conditions favoring natural equilibrium.
- b. Insecticidal soaps and botanical insecticides such as ryania, sabadilla and teas/ extracts / decoctions / poultices of locally grown botanicals.
- c. Rotenone, pyrethrum, dormant oil (preferably vegetable-based), and diatomaceous earth may be used with great caution due to their high ecological profile.
- d. Sexual, visual, and physical traps.
- e. All pesticides containing aromatic petroleum fractions or synergists (such as piperonyl butoxide) are prohibited.
- f. Microbial insecticides as found in the OCIA material list are acceptable.
- g. All insect and similar pest control materials containing products made from organisms that have been modified by genetic engineering techniques (as defined in the Materials List) are prohibited.
- h. Products used for pest control prepared at the farm from local plants, animals, and microorganisms are allowed except if specifically prohibited elsewhere in these standards.

#### 2.10.3 **WEEDS**

- a. Weeds are to be controlled through a combination of cultural practices that limit weed development (rotation, green manure, fallow, etc.).
- b. Mechanical, electrical, and thermal weeding.
- Microbial weed killers.
- d. Chemical or petroleum herbicides are prohibited. Amino acid herbicides have not yet been registered for use.
- e. For protected structure coverings, plastic mulches, fleeces, insect netting and silage wrapping, only products based on polyethylene and polypropylene or other polycarbonates are allowed. These shall be removed from the soil after use and shall not be burned on the farmland. The use of polychloride-based products is prohibited.
- f. All weed control materials containing products made from organisms that have been modified by genetic engineering techniques (as defined in the Materials List) are prohibited.
- g. Products used for weed management prepared at the farm from local plants, animals, and microorganisms are allowed except if specifically prohibited elsewhere in these standards.

## **Section Three**

#### 3.0 ANIMAL CERTIFICATION STANDARDS

Authorized Methods and Materials

#### 3.1. CONVERSION

3.1.1. Livestock shall be registered with OCIA for at least 6 months before it may be eligible to seek certification. Poultry shall be registered with OCIA for at least 30 days before it may be eligible to seek certification.

#### 3.2. PARALLEL PRODUCTION

- 3.2.1. Parallel production may be approved subject to inspection provided:
  - a. The stocks are not kept together or OCIA-certified or OCIA-recognized organic stock can be easily distinguished from non- certified stock, i.e. distinguishable breeds. An audit of the production and sales records of both the organic and non-organic livestock will be conducted during the inspection in all instances of parallel production, even when the organic and non-organic livestock can be easily distinguished.
  - b. Areas for storing feed are separated and clearly marked.
  - Accurate documentation is maintained of stock, feed handling, medications, etc. and non-certified stocks.
  - d. OCIA-certified or OCIA-recognized organic livestock shall be securely excluded from storage, feeding, mixing and handling areas of non-organic feed and prohibited materials.
- 3.2.2 Livestock may not be rotated in and out of organic production and remain certified.

#### 3.3 LIVING CONDITIONS

- 3.3.1 Management of the environment of the animals must take into account the behavioral needs of the animal and provide for:
  - a. Sufficient free movement;
  - b. Sufficient fresh air and natural daylight according to the needs of the animals;
  - Protection against excessive sunlight, temperatures, rain and wind according to the needs of the animal:
  - d. Enough lying or resting area;
  - e. Ample access to fresh water and feed according to the needs of the animals;
  - f. Adequate facilities for expressing behavior in accordance with the biological and behavioral needs of the species. Rabbits and pigs must not be kept in cages.

- g. Access to open air and/or grazing appropriate to the type of animal and season taking into account their age and condition. Exceptions may be allowed in cases where:
  - There is inclement weather.
  - There are absences of pasture due to temporary or seasonal conditions. In such instances, the animals must have access to an outdoor run.
  - Feeding of animals with carried fresh fodder is a more sustainable way to use land resources than grazing providing animal welfare is not compromised.

Restrictions shall always include a time limit, which shall be set for each exception.

- Housing conditions must ensure that
  - 1. Adequate *natural materials for* bedding are provided when housed (If the bedding is typically consumed by the animal species, it must comply with the feed requirements of Section 3.5);
  - 2. No construction materials or production equipment are used which might detrimentally affect human or animal health;
  - 3. Housing construction shall ensure that air circulation, dust levels, temperature, relative air humidity, and gas concentrations are within levels that are not harmful to the livestock, and shall include providing insulation, heating, cooling, and ventilation of the building as need and/or conditions indicate; and
  - 4. Animals are protected from predation by wild and feral animals.
- 3.3.2. Landless animal husbandry systems and/or confinement based production systems shall be prohibited.
- 3.3.3. When artificial lighting prolongs the natural day length, this must not lead to a total day length that is longer than 16 hours. Exemptions may be granted by the CDT with advice from the chapter review committee to protect the well being of the animal (i.e. heating lamps for newborn/newly hatched animals).
- 3.3.4. Herd/flock animals shall not be kept individually with the exception of male animals, sick animals, small holdings and those about to give birth.
- 3.3.5. Routine confinement of animals in crates or boxes where they cannot move freely is prohibited.
  - a. White veal production is prohibited.
  - b. Temporary exemptions for penning of animals may be allowed based on the animal's stage of growth, weather conditions, animal health, and safety. Temporary exemptions may also be allowed based on the need to protect plant, soil, and water quality.
- 3.3.6. Livestock housing with 100% slatted and/or grid flooring above manure pits is prohibited.

#### 3.4. MANURE MANAGEMENT

- 3.4.1 Manure management practices used to maintain any area in which livestock are penned, housed, or pastured must be implemented in a manner that:
  - a. minimizes soil and water degradation;
  - b. does not contribute to contamination of water by nitrates and pathogenic bacteria;
  - c. optimizes recycling of nutrients;
  - d. does not include burning or any practice inconsistent with organic practices.

- 3.4.2 All manure storage and handling facilities, including composting facilities must be designed, constructed and operated to prevent contamination of ground and/or surface water.
- 3.4.3 Manure application rates must be at levels that do not contribute to ground and/or surface water contamination. The timing and application methods and rates must be in compliance with Section 2.3.1, Organic Matter, of these standards and must not increase the potential for run-off into ponds, rivers and streams.

#### 3.5. **FEED**

- 3.5.1 Slaughter animals must be fed 100% OCIA-recognized-certified organically grown feed including pasture. Buffer zone requirements may be waived by the Chapter review committee if an affidavit of non-use of prohibited materials can be obtained from neighboring landowners.
  - a. OCIA-recognized certified organically grown feed is defined as:
    - 1. Feed that has been certified by OCIA; or
    - 2. Feed that has been certified by an accredited certifying agency; or
    - 3. In the case of a new applicant, after the first inspection, there may be on-farm feed that qualifies. The land on which the feed and hay has been grown must be documented and confirmed to be free of prohibited materials for 36 months or more. This feed can be fed to the livestock, which are destined to be OCIA Certified and still maintain the organic integrity of the animals. However, the feed may only be used on-farm for the producer's own livestock and cannot be sold as OCIA Certified.
  - b. Pasture management must ensure that stocking rates do not exceed the maximum carrying capacity of the land in the region, taking into account the forage production capacity, stock health, and environmental impact.
  - c. Overgrazing leading to the degradation of the land may result in non-certification.
  - d. The use of products made with artificial nanoscale processes is prohibited. The use of products containing manufactured nanoparticles or structures is prohibited
- 3.5.2 Certified animals that are grazed off the certified property must be grazed on other OCIA-certified or OCIA-recognized-certified organic pastures to maintain their certification.
- 3.5.3 At least 55% of the feed shall either come from the farm unit itself or be produced in cooperation with other organic farms in the region. The Chapter review committee may allow exemptions with regard to local conditions annually.
- 3.5.4 All ruminants shall have daily access to OCIA-recognized-certified organic roughage.
- 3.5.5 Feed must be processed by an OCIA-recognized-certified organic facility.
- 3.5.6 Plastic roughage, urea, and other synthetic nitrogen compounds, intentional manure refeeding, and similar practices are prohibited.
- 3.5.7 In certain critical years where OCIA forage crops are unavailable or in short supply due to extreme weather conditions, or other emergencies, the Chapter review committee can allow a farmer to utilize non-certified organic feed and forage for a limited time in an emergency situation. These inputs must be sufficiently documented to be free of prohibited materials. Notification must be made to the Chapter Review Committee and/or OCIA International as soon as reasonably possible. Documentation of that must be included in the farmer's certification application file. On the recommendation of the Chapter Review Committee and/or OCIA International, a maximum time limit for this feeding shall be established.

- 3.5.8 Silage preservatives such as these may be used:
  - a. bacteria and fungi;
  - b. course rock salt and sea salt;
  - c. sugar or sugar products such as molasses (organic when available).
- 3.5.9 In all circumstances, the grower will ensure that all feed materials made available to livestock are not grown, produced, or manufactured from products made from organisms that have been modified by genetic engineering techniques (as defined in the Materials List).
- 3.5.10 Water for livestock must be free of contamination from hazardous substances.
- 3.5.11 Animals must have access to drinkable water in all paddocks during periods when fluid intake from forage is insufficient.

#### 3.6. WEANING

- 3.6.1 Calves, lambs, piglets and kids shall suckle for at least the full colostrum period.
- 3.6.2 Early weaning (less than 4 weeks for piglets, 3 months for beef, and 18 kg or 2 months for sheep and goats) or feeding of milk replacer are prohibited.
- 3.6.3 Prior to weaning, in emergencies, whey, skim milk, and other by-products from OCIA-certified or other OCIA-recognized-certified organic milk processing is permitted.

#### 3.7. SUPPLEMENTS

- 3.7.1. The following products are permitted:
  - a. Any source of feed salt is acceptable.
  - b. Selenium of whatever form (ingested or injected at recommended doses).
  - c. Feed supplements as found in nature or that have undergone only mechanical/physical processes (i.e. precipitation, extraction only with water no chemical solvents, refining without chemical treatment), biological/enzymatic process and microbial processes (i.e. fermentation).
  - d. Natural minerals and trace elements such as magnesium oxide and greensand.
  - e. Calcium phosphate materials such as marl or calcium carbonate materials such as limestone, dolomite, etc.
  - f. Molasses, organic when available.
  - g. Kelp
  - h. Fish oils and other fish by-products.
  - i. Oyster shells, cuttlefish bones.
- 3.7.2. Vitamins should be provided from sprouted grains, fish liver oils, brewer's yeast or other natural sources when available in appropriate quantity and quality. Synthetic or manufactured vitamins, minerals and other nutritional supplements may be permitted in cases of long winters, mountainous zones, poor forage due to bad weather or for nutritional needs of the animal that cannot be met otherwise. This will be determined by Chapter review committees on a case-by-case basis.

At no time should these:

- contain medications nor be formulated as protein supplements, requiring them to be fed at large rates (100-300 pounds/ton grain ration).
- be derived from or manufactured from products made from organisms that have been modified by genetic engineering techniques (as defined in the Materials List).
- 3.7.3. The following products shall be prohibited:
  - a. Synthetic growth promoters, growth suppressants, or stimulants (including antibiotics, hormones, and trace elements used to stimulate growth) implanted, injected, or ingested.
  - b. Synthetic appetizers.
  - c. Preservatives, except when used as a processing aid.
  - d. Artificial coloring agents.
  - e. Urea and other synthetic nitrogen compounds.
  - f. Animal by-products to ruminants.
  - g. Droppings, dung, or other manure even if technologically processed.
  - Feed (e.g. soy and rapeseed meal) subjected to solvent (e.g. hexane) extraction or the addition of other chemical agents.
  - i. Pure amino acids.
  - j. Genetically engineered organisms or products thereof.
  - k. The use of products made with artificial nanoscale processes is prohibited. The use of products containing manufactured nanoparticles or structures is prohibited

#### 3.8. PURCHASED, SLAUGHTER, AND DAIRY CULL ANIMALS

- 3.8.1. Slaughter stock from existing OCIA-certified herds must be offspring of OCIA-certified or OCIA recognized certified organic breeding stock and raised on the farm in accordance with OCIA standards from birth or purchased from OCIA-certified organic or OCIA recognized certified organic livestock producers.
- 3.8.2. Slaughter stock may be certified prior to birth if the animal is in-utero and the mother is OCIA-certified or OCIA recognized certified organic. In the case of short gestation periods (less than 9 months) or purchasing of slaughter poultry, animals that are not born or in-utero can be certified. When animals are prior to birth at the time of inspection, that animal type must have been raised and certified on that farm the previous year. In the case of start-up animal operations or of farms diversifying into new animal enterprises, the type of livestock for which initial certification is requested must be on-site at the time of inspection.
- 3.8.3. Breeding stock may be bought from whatever source, provided the animal is not in the last third of gestation. Breeding stock will not be eligible for certification until 12 months of management according to OCIA Standards has elapsed. Breeding stock may be sold as certified organic for breeding purposes only (not for slaughter) if raised in compliance with OCIA standards for one year following purchase.
  - Slaughter offspring from purchased stock or newly certifiable herds must be raised and managed organically from last trimester to slaughter.
- 3.8.4 Any breeding or dairy cull stock can be sold as organic slaughter stock if they are raised organically from the last third of gestation and continuously thereafter.

- 3.8.5 Breeding stock brought into the operation from conventional sources must not exceed 10% of the OCIA-certified adult animal population (of that type) on an annual basis. Chapter committees may allow exceptions, with specific time limits in the following cases:
  - a. Unforeseen severe natural or man-made events,
  - b. Considerable enlargement of the farm,
  - c. Establishing a new type of animal production on the farm,
  - d. For small farms with less than 10 animals of each species..
- 3.8.6 All purchased animal stock must be free from contamination by products made from organisms that have been modified by genetic engineering techniques (as defined in the Materials List). This includes breeding material, medication, metabolical and biological regulators, all feed, and any supplements. It is the members' obligation to ensure that all purchased animal stocks are free of such contaminants.
- 3.8.7 Day old poultry may be bought from whatever source.
- 3.8.8 Male breeding stock may be from any source.

#### 3.9. HERD HEALTH

- 3.9.1. Good management is the key to keeping healthy livestock. Organic production systems shall be designed and maintained to provide compatible housing, proper nutrition, adequate clean water and proper ventilation, including techniques which are organically acceptable.
- 3.9.2. Cleaning agents and disinfectants should be chosen from among soaps, biodegradable detergents, iodine 5%, 1% potassium permanganate solutions, lye, alkali carbonates, caustic potash, lime, hydrogen peroxide, and bleach.
- 3.9.3. Areas to be disinfected should be empty of livestock, and manure should be physically removed as much as possible.
- 3.9.4. Biotherapies such as plant concoctions and homeopathic remedies.
- 3.9.5. Vaccinations (including vaccination to stimulate production of maternal antibodies), probiotics, and similar preventive techniques are permitted when diseases are known to exist in the surrounding district or region of the farm and cannot be controlled by other techniques. If a disease or condition, as verified by a veterinarian, has been known to exist previously on the farm or the general area of the farm, the producer can have the animals vaccinated. Legally required vaccinations are allowed.
- 3.9.6. Hormonal treatment may only be used for therapeutic reasons and under veterinary supervision.
- 3.9.7. Organic solutions are required whenever possible to ensure animal health; however, livestock producers must not withhold medication that can relieve the suffering of the animal even when so doing results in the loss of organic status for that animal. Intentional failure to treat animals requiring medical intervention will result in the loss of certification.
- 3.9.8. When recourse to prohibited materials is deemed necessary slaughter animals may not be sold as certified organic.
- 3.9.9. Materials used in herd health maintenance may not contain, be derived from, or manufactured using products made from organisms that have been modified by genetic engineering techniques (as defined in the Materials List).
- 3.9.10. The use of products made with artificial nanoscale processes is prohibited. The use of products containing manufactured nanoparticles or structures is prohibited.

#### 3.10. BREEDING

- 3.10.1. Natural service is the ideal.
- 3.10.2. Since breeding methods have minimal effect on the quality of meat produced, various other methods are tolerated, provided they do not unduly restrict the gene pool.
- 3.10.3. Embryo transfer techniques and the use of hormonal reproductive treatments are not allowed. Clones and cloning as a method of reproduction are prohibited. Offspring of clones are also prohibited.
- 3.10.4. Breeding systems must be based upon breeds that can reproduce successfully under natural conditions without human involvement.
  - Artificial Insemination is permitted

#### 3.11. TRANSPORTATION

- 3.11.1. Throughout the different steps of the process there shall be a person responsible for the well being of the animal.
- 3.11.2. Animals presented for transportation must be in a condition that enables them to endure the stress of travel.
- 3.11.3. Animals/flocks must be clearly identifiable.
- 3.11.4. Animals must be treated humanely during loading, unloading, shipping, holding and slaughter. The use of electric prods and such instruments is prohibited.
- 3.11.5. Mode of transportation must:
  - a. be clean and free of protrusions that could cause bruising and/or injury.
  - b. provide adequate ventilation and comfortable head space so that the animal is able to stand in a natural position.
  - c. During transportation and slaughter, the animals must be provided with conditions that reduce the adverse affects of:
    - stress;
    - loading and unloading;
    - the mixing of different groups of animals and/or animals of different sex;
    - the quality and suitability of the transportation and handling equipment;
    - the temperature and relative humidity;
    - hunger and thirst; and
    - the specific needs of each animal.
- 3.11.6. When transport is by axle, the journey time to the slaughterhouse shall not exceed eight (8) hours. Exemptions for journeys in excess of that time may be granted on a case-by-case basis by Chapter Review Committees or the Certification Decision Team. When exceptional conditions prevail, i.e. the trip takes longer than expected, livestock must be fed and watered according to their needs.
- 3.11.7. Administering tranquilizers or stimulants during loading, transport, or unloading is prohibited.

#### 3.12. SLAUGHTER

3.12.1. Slaughter facilities must be inspected and OCIA-certified or OCIA-recognized-certified organic.

- 3.12.2. The number of animals per holding pen shall be limited allowing plenty of space for each animal to move about.
- 3.12.3. Holding pens may have slatted floors only if there is a bedded surface with space for all stock to lie down.
- 3.12.4. Slaughter must be effected under sanitary conditions, which shall usually mean government approved slaughterhouses.
- 3.12.5. Slaughter shall normally take place the same day that the animal(s) arrive.
- 3.12.6. The following three methods of slaughtering and handling are permitted:
  - a. In the case of cattle, sheep, swine and other hoofed livestock, all animals must be rendered insensible to pain by a single blow or gunshot or by an electrical means that is rapid and effective.
  - b. By slaughtering in accordance with the ritual requirements of the Jewish faith or any other religious faith that stipulates a method of slaughter that the animal suffers loss of consciousness by anemia of the brain induced by the simultaneous and instantaneous severance of the carotid arteries with a sharp instrument and handling in connection with this type of rendering.
  - c. Killing of slaughter stock on pasture will be subject to all applicable laws.
- 3.12.7 Shackling, hoisting, or slaughtering prior to having rendered the animal unconscious is prohibited. Small poultry and other small animals are exempt from this requirement.
- 3.12.8 Before and after slaughter, OCIA-certified animals, carcasses, and meat products must be clearly identified in such a manner as to preclude confusion with non-certified meat. OCIA-certified livestock must be slaughtered as a separate lot and OCIA-certified meat hung apart from non-certified meat.
- 3.12.9 Carcass marking agents must be approved for use by the local governmental regulatory agency and meet the requirements of these standards.
- 3.12.10 Meat products must be clearly identifiable back to the primary producer and through to point of sale.

  Care must be exercised to keep certified products isolated from all possible contamination and prohibited materials during transit and point of sale.

#### 3.13. PHYSICAL ALTERATIONS

- 3.13.1. Practices that may be considered physical alterations are not allowed by OCIA unless the practice is to the animals' ultimate benefit. These practices shall not cause suffering or be used where other less invasive practices are available, nor be used to circumvent a deficiency in animal husbandry. The following exceptions shall apply:
  - Castration Physical castration is allowed in order to maintain the quality of products and traditional production practices (meat-type pigs, bullocks, capons, etc.) but only under conditions set out above.
  - b. Dehorning.
  - c. Dulling needle teeth of piglets within 24 hours of their birth (to prevent udder injury).
  - d. Tail docking of lambs to prevent myiasis.
  - e. Clipping wing feathers of birds.
- 3.13.2. Suffering shall be minimized and anesthetics used when appropriate.

- 3.13.3. The following practices are not allowed:
  - b. Tail cutting with the exception of lambs
  - c. Debeaking
  - d. Wing burning.
  - d. All other physical alteration practices not specifically allowed.

#### 3.14. AUDIT TRAIL

- 3.14.1. An audit trail must be maintained which will permit tracing the sources and amounts of all feeds, supplements, all treatments and medications administered for any reason (including quarantine periods), breeding and/or origins of livestock, stock movements within the unit, transportation, slaughter and/or sales.
- 3.14.2. With the exception of poultry, if animals are not individually identified by numbered tags, each animal that is treated with an active material must be clearly identified with a tag specifying the material and date of treatment.
- 3.14.3. Each animal/flock must be traced from birth to slaughter.

#### 3.15. STANDARDS FOR DAIRY PRODUCTION

The standards are the same as for meat production, with the exception of the following additions and clarifications. Dairy animals cannot be certified for slaughter unless they have also been managed in compliance with OCIA slaughter stock standards.

- 3.15.1. Certified organic milk shall be from dairy animals that have been fed 100% OCIA-recognized-certified feed for at least 1 year during and prior to certification.
- 3.15.2. In the case of new and certifiable herds, dairy animals shall be fed a minimum of 80% of daily ration on an as-is basis of OCIA-recognized-certifiable organically grown feed for 9 months followed by being fed 100% OCIA-recognized-certified feed 3 months prior to certifiable status.
  - Once an entire, distinct herd has been converted to organic production, all dairy animals shall be under organic management from the last third of gestation.
- 3.15.3. All ruminants shall have daily access to OCIA-recognized-certified organic roughage.

#### 3.15.4. PURCHASED PRODUCTION STOCK INTO OCIA-CERTIFIED HERDS

- a. Should be from OCIA-recognized-certified organic sources.
- b. Can be from sources that qualify under the new herd provision 3.15.2.
- c. As a last resort, can be from conventional sources given that the number of these adult animals (milking and one year prior to milking) on the farm does not exceed a maximum of 10% of the adult herd on an annual basis. Milk can only be sold as certified organic after full compliance with the standards for 1 year and continuously thereafter.
- 3.15.5. Dairy replacements on an organic dairy must be fed feed which is non-medicated, including milk replacer (whole milk is preferable), up to the required 1 year prior to certification.
- 3.15.6. The use of antibiotics, prohibited parasiticides (internal and external) and all hormones is prohibited in organic dairy. If recourse to antibiotics, prohibited parasiticides (internal and external) or hormones is deemed necessary, that animal's production cannot be sold as organic. For new herds and replacements, no antibiotic, prohibited parasiticide (internal and external) or hormone use will be allowed 1 year prior to certifiable status.

#### 3.15.7. CLEANSERS AND SANITIZERS (ON-FARM)

- a. All cleansers and sanitizers for dairy farms and dairy processing facilities must conform to Section
   5.2 Product Protection. If possible, sanitary standards should be met using OCIA-approved materials.
- Government regulations require the cleaning and sanitizing of all milk handling equipment by government-approved substances.
- c. Rinsing after sanitizing is in violation of government regulations.
- 3.15.8. All regulatory sanitation requirements and quality standards for bacteria and somatic cell count (SCC) must be observed. In addition, the annual average SCC should not exceed 400,000 for bovine (800,000 for ovine or caprine) or local regulations, whichever is lower; maximum bacteria count should not exceed 100,000 or local regulations, whichever is lower. Individual animals are recommended to be on monthly SCC testing. Failure to comply with these quality levels will require a farm plan response to be implemented to come into compliance and be approved by the Chapter review committee.
  - a. A new herd should have under a 400,000 (800,000) average SCC for the three months prior to certifiable status.

#### 3.15.9. WATER QUALITY

a. Dairy animals must drink water with nitrate levels below 10 mg nitrate, nitrogen/liter (45 mg NO<sub>3</sub>/liter) and satisfy all state requirements concerning bacteria and other microlife. If a farmer is unable to meet these requirements, a farm plan response shall be implemented to come into compliance.

#### 3.16. STANDARDS FOR EGG PRODUCTION

The standards are the same as for meat production, with the exception of the following additions and clarifications.

- a. Day old poultry may be bought from whatever source.
- b. When pullets are purchased, the must be treated in accordance with these standards for at least four months before their eggs are certified.
- c. Pullets must be fed 100% OCIA-recognized-certified organic feed for at least four months before eggs are certifiable.
- d. Poultry must not be housed in cages or so densely as to restrict free movement.
- e. Hens must have at least two square feet per bird of floor space in the hen house.
- f. Hens must have outdoor access when seasonally appropriate.
- g. If access to pasture is not feasible, flocks must be fed a balanced diet to ensure that all of their nutritional requirements are met on a daily basis.
- h. Use of petroleum-based oil as a shell coating after washing is prohibited.
- i. Feather clipping is allowed only on an individual basis (to prevent escape.)

#### 3.17. COMPANION ANIMAL FOOD

#### 3.17.1. INGREDIENTS

a. All primary ingredients must be certified by OCIA or an OCIA approved organization and in combination with added minerals and vitamins represent not less than 95% of the finished product by weight. b. Added minerals and vitamins may be provided by natural sources or may be synthetic but cannot contain prohibited additives or preservatives. Any materials permitted in section 3.3. Supplements may be used.

#### 3.17.2. NUTRITIONAL ADEQUACY

The food must be nutritionally adequate for the animals and purposes for which it is intended as proven either:

- a. by ingredients in quantities sufficient to meet the nutritional requirements established by regulatory or other recognized authorities, or
- b. by feeding it to normal animals as the only source of nourishment except water, in accordance with testing procedures established by the regulatory recognized authorities, to meet the criteria of testing procedures for the purpose or life stage or stages for which intended.

#### **3.17.3. LABELING**

The product container must be labeled in a manner that:

- Clearly indicates the animals and purpose for which it is intended and if a food is proven nutritionally adequate.
- b. Is in accordance with that required by the appropriate regulatory agency for that animal, purpose or food, or if there is none as suggested by another recognized authority for that animal, purpose or food.
- c. Is not misleading.

#### 3.17.4. COMPANION ANIMAL NUTRITIONAL SUPPLEMENTS

Nutritional supplements for animals must meet all the requirements of a companion animal food except sections 3.17.2. relating to nutritional adequacy.

#### 13.8 FINISHING OPERATIONS

#### 3.18.1. PRODUCTION REQUIREMENTS

- a. To be admissible for certification, finishing operations must be in compliance with OCIA International Farm Certification Standards in Section 2, the Animal Certification Standards in Section 3, with the OCIA International Materials Lists in Section 9 in addition to the following standards:
  - 1. Organic cattle must be finished on an organic farm or ranch.
  - 2. Cattle must have access to pasture during the months of the year when pasture can provide edible forage. Exemption may be allowed for:
    - Dairy stock under the age of 3 months.
    - Beef animals during the final stage of finishing.\*
    - During the weaning phase.
  - \*At a minimum, all cattle must have access to pasture for 50% of their total life span, except beef cattle destined for human consumption which must have access to pasture for 30% of their life span.
  - 3. Concrete finishing lots are prohibited unless sufficient bedding is used. Concrete floors or alleyways along feed bunks are acceptable.
  - 4. Adequate bunk space/feeding space must be provided according to the needs of the animal.

#### 3.18.2. SUPPLEMENTARY LIVING CONDITION REQUIREMENTS

a. An organic facility shall provide no less than 250 square feet (23 square meters) per head.

b. Shelter must be provided to protect against excessive sunlight, temperatures, rain and wind. Adequate clean and dry bedding must be provided.

#### 3.18.3. MANURE REQUIREMENTS

- a. Manure storage and handling facilities must be able to accommodate the quantity of manure generated from the cattle in finishing lots.
- b. Manure must be removed from the pens, at a minimum, prior to receiving new cattle and handled in compliance with OCIA Standards 3.4 and 2.8.1.

#### 3.18.4. SUPPLEMENTARY HERD HEALTH REQUIREMENTS

Any animal treated with a prohibited material must be permanently identified.

#### 3.18.5. SUPPLEMENTARY AUDIT TRAIL REQUIREMENTS

- a. All cattle must be inventoried and accounted for. Finishing facilities must maintain TCs for incoming organic cattle, in addition to the audit trail requirements in section 3.14. Lack of an adequate audit trial may result in the denial of certification.
- b. All lots shall be numbered and lot maintenance recorded.

# **Section Four**

#### 4.0 SPECIALTY CROP CERTIFICATION STANDARDS

#### 4.1 GREENHOUSE

- 4.1.1. Existing standards apply as expressed elsewhere in this document.
- 4.1.2. Nitrate testing is to be conducted on growing plants on a case-by-case basis.
- 4.1.3. Air and water quality must meet government standards.
- 4.1.4. Greenhouse operators should strive to include a variety of crops in their management plans.

#### 4.2 HONEY

#### 4.2.1 CONVERSION

- a. Bee colonies may be converted to organic production; if new bees are introduced into the colony, they must be from organic apiaries, when commercially available.
- b. Full application of the OCIA International Certification Standards must be in place for one year prior to the harvest/collection of bee products. An inspection must occur at least 12 months prior to the first harvest/collection of organic bee products (by an OCIA approved inspector) which verifies that the certification applicant is in full compliance with the certification standards.
- c. Wax shall be replaced by organically produced wax during the conversion period; this is not necessary in instances where no prohibited substances have been previously applied to the hives.
- d. The conversion period may be extended by the Certification Decision Team in instances where the 12 month conversion period is not sufficient to replace conventional wax.

#### 4.2.2. FEEDING OF BEES

- a. Honey from a known certified origin is permitted.
- b. Bee pollen from a known certified source is permitted.
- c. Organic sugar or organic sugar syrup if starvation is imminent is permitted. Exemptions with specified time limits may be made if organic sugar is not available.
- d. Use honey as the major feed source.
- e. To feed sugar or sugar syrup during any honey flow is prohibited.
- f. To extract honey from brood chambers where sugar syrup has been used is prohibited.
- g. Feeding shall only take place after the last harvest before the season when no foraging feed is available

#### 4.2.3. CONTROL/PREVENTION OF DISEASE

- a. Keep strongest hives and destroy weak hives.
- b. Select good locations.
- c. Check hives regularly (i.e., once every 2-3 weeks).
- d. Keep obviously diseased hives in hospital yards.

- e. For pest and disease control and for hive disinfection the following products may be allowed:
  - Caustic soda
  - Lactic, oxalic, acetic acid
  - Formic acid
  - Sulfur
  - Plant derived essential oils
  - Bacillus Thuringiensis
  - Menthol to control tracheal mite parasite
- f. Use of antibiotics in honey production is prohibited except when the health of the colony is threatened. After such treatment the hive must be removed immediately and taken out of organic production. The pull immediately following the use of antibiotics may not be OCIA-certified.
- g. Sulfa products and other chemical products are prohibited.
- h. Veterinary medicine shall not be used in bee keeping.

#### 4.2.4. FORAGING AREAS

- a. Apiaries must be located on OCIA-Certified land or on areas of spontaneous vegetation which have been verified to be free of OCIA prohibited materials for 36 months.
- b. Beekeeper must provide clean water (Authorized Methods and Materials: Dairy and Eggs, Section 10: Water Quality) and sufficient OCIA forage to feed the bees throughout the season.
- c. Apiaries may not be located within 2 miles of garbage dumps or sanitary landfills.
- d. It is prohibited to locate apiaries within 2 miles/3 km of flowering agricultural crops which have been sprayed with non-OCIA-accepted pesticides or are treated with or contain materials listed as prohibited (including genetically modified crops) on the OCIA Materials List if the bees could be using these crops for forage.
- e. Apiaries may not be located within 2 miles of golf courses.
- f. Apiaries may not be located within 2 miles/3 km of major town sites or cities.
- g. Apiaries may not be located within 2 miles of major traffic polluting areas.

#### **4.2.5. BEESWAX**

- a. Use pure beeswax in hives--preferably your own.
- b. Wax of dubious origin is prohibited.

#### 4.2.6. HONEY TREATMENT

- a. Bee blower or smoker to remove bees from hives may be used if needed. Smoke shall be used in a minimal manner. All smoking materials must be natural or approved for use as per the OCIA Materials List.
- b. Heat to not more than 47°C/116°F and keep this process as short as possible.
- c. Mechanical uncapping of combs preferred to uncapping with heat.
- d. Allow debris in honey to settle out by gravity. Mesh filter holes must be 1/132 inch, or .2mm, or 200 Microns or larger.
- e. All surfaces honey contacts should be stainless steel or coated with beeswax.
- f. Painted surfaces must be painted with a food and beverage approved paint and coated with beeswax. Honey may not contact galvanized metal or metal with surfaces that oxidize.

- g. Honey extraction facility should be bee tight to prevent robbing and the spread of disease.
- h. Extracting facility should be very clean and inspected annually by appropriate food inspectors.
- Extracting facility should be well lit with facilities to wash down daily with copious amounts of fresh, clean, hot water.
- j. Accumulated numbers of bees in extracting area should be allowed to gather and then washed down with water and disposed of or put in a nearby hive.
- k. Honey barrels must be of a known origin, washed, and stored inside. If not new, they should have previously been used in food service. Preferably they should be coated with beeswax. Oxidized barrels are prohibited.
- 1. Chemical bee repellents are prohibited.
- m. Floors and walls must be sealed from insects and rodents. Presence of insect pests such as flies in extracting facility will not be permitted.
- n. Use of chemical agents such as calcium cyanide as a fumigant is prohibited.
- o. The destruction of bees in the combs as a method of harvesting of bee products is prohibited.

#### 4.2.7. HONEY, FRAME, WAX, AND HIVE STORAGE

- a. Honey may be stored a maximum of 2 years before sale as organic.
- b. Naphthalene (moth balls/crystals) is prohibited for the control of wax moths in stored honey and honey product materials.

#### 4.2.8. QUEEN REARING

- a. Cross breeding of bee families is encouraged.
- b. To prevent spreading of disease, rear your own queens.
- c. Making of artificial swarms is permitted.
- d. Purchase of packaged bees is permitted.
- e. Artificial insemination is not allowed.
- f. Killing of colonies of bees in the fall is prohibited.
- f. Wing clipping is not allowed.

#### 4.2.9 HIVE CONSTRUCTION

- a. Each beehive shall primarily consist of natural materials.
- b. Treated lumber is prohibited.
- c. Other toxic and persistent materials (as per the materials list) cannot be used.

#### 4.3. MAPLE SYRUP PRODUCTION

#### 4.3.1 CONDITIONS

a. All standards applying to material use in OCIA's general crop standards must be adhered to in maple syrup production.

#### 4.3.2 TAPPING AND SAP COLLECTION

a. Diameter of tree:

Diameter at 1.4 m (4ft. 6in.) Chest Height	Number of taps	Tap depth (bark excluded)
0 to 20 cm (8 in.)	0	4 cm of wood $(1^{9}/_{16} in.)$
20 to 40 cm (8 to 15 ¾ in.)	1	4 cm of wood
40 to 60 cm (15 ¼ to 23 ½ in.)	2	4 cm of wood
60 to 80 cm (23 ½ to 31 ½ in.)	3	4 cm of wood
80 to 1.0 m (31 ½ to 39 ¾in.)	4	4 cm of wood
1.0 to 1.2 m (39 ¼ to 47 ¼ in.)	5	4 cm of wood
1.2 to 1.4 m (47 ¼ to 55 in.)	6	4 cm of wood
1.4 to 1.6 m (55 to 63 in.)	7	4 cm of wood
1.6 m and more (63 in. +)	8	4 cm of wood

- b. Use of paraformaldehyde is prohibited.
- c. Double tapping (freshening of tap holes) is prohibited.
- d. Vacuum pumps shall not exceed 20 pounds pressure at the pump and shall not exceed 20 pounds pressure at the taps. Poor condition of tubing shall not be considered a reason to increase pressure.
- e. Tap, buckets, tubing and other equipment shall be in good condition and properly used.

#### 4.3.3 PRODUCTION

- a. Acceptable defoaming agents are: milk and milk products (cream, butter), vegetable oil, and vegetable glycerin.
- b. Silica powder, clay and diatomaceous earth are acceptable in the filtering of syrup. Asbestos is prohibited.
- c. Management, handling and storage of syrup and syrup products (taffy, butter, sugar, etc.) must be clean and free of contaminants.
- d. Cleaning of equipment must be done with authorized products (cider vinegar, peroxide, bleach, fermented sap) and in such a way as to avoid all possible contamination of sap or syrup.
- e. Caustic soda (NaOH) may be used in the cleaning solution for the reverse osmosis membrane, as follows:
  - 1. 200 ml of NaOH per 100 liters of permeate;
  - 2. Permeate is to be at a pH of 10.0 11.0;
  - 3. The washing solution is to be three times the volume of the machine when in a closed circuit;
  - 4. The washing solution is to be maintained at 40 degrees Celsius;
  - 5. The post-wash rinse must be done with a high quality permeate, using at least 20 times the volume of the machine when in a closed circuit.
  - 6. A maintenance and cleaning log must be maintained for the reverse osmosis machine.
  - 7. The technical data pertaining to the machine must be provided with the certification application.

- 8. Membranes are to be chosen and used in such a way, which does not remove mineral components from the sap. Sugar concentrations in the concentrate PRIOR to boiling shall not exceed 8%.
- Syrup may be stored in galvanized barrels for not more than 60 days for brix less than or equal to 65 nor more than 120 days for brix greater than 65. Producers should seek alternatives to galvanized barrels.

#### 4.4. SHIITAKE AND OYSTER MUSHROOMS

#### 4.4.1 **TREES**

Only trees not treated with synthetic pesticides can be used in the cultivation of specialty mushrooms. Trees treated with Bacillus Thuriengensis (BT) are acceptable, as are trees or limbs of trees treated with any of the pesticide alternatives acceptable by OCIA. Supplements: All supplements as synthetic fertilizers or pesticides are prohibited. Log and spawn site coatings used to prevent moisture loss must be food grade paraffin, cheese wax, mineral oil or beeswax. Recycled wax can be used as long as its origin can be ascertained. Petroleum based tree coatings, latex and oil based paints are prohibited.

#### 4.4.2 **SPAWN**

Choices of spawn and suppliers may be left to the discretion of the grower. Certified organic spawn should be used if available.

Note: Purity of spawn is related to the success of the spawn producer and their customers. Cryogenic storage is essential in maintaining the genetic integrity of parent cultures. It is the same system that is used for semen storage in livestock breeding programs.

#### INSECTS AND WEED FUNGI 4.4.3

The use of any synthetic pesticides is prohibited. The use of preventative management, sanitation, proper air flow and removal of affected blocks is required. Dilute chlorine bleach used as a disinfectant is acceptable. Use of mechanical controls (traps and physical barriers without addition of synthetic pesticides with the exception of pheromones or attractants), biological controls (natural predators and parasites), physical controls (sprays and dusts such as diatomaceous earth, insecticidal soaps and natural pesticides as approved by OCIA) are acceptable pest controls.

#### 4.4.4 WOODLOT MANAGEMENT

Woodlot Management for specialty mushrooms produced outdoors on natural logs: Woodlots directly adjoining agricultural fields should have a 100 foot buffer strip separating the mushrooms growing area from the field to avoid agricultural drift. The use of herbicides for understory control is prohibited.

#### 4.4.5 WATER

Well, stream and pond water used for soaking logs and blocks must be tested to determine if concentrations of nitrates and coliforms are acceptably low. Use of chlorinated water in urban areas is acceptable. Use of water known to be contaminated with toxic substances, byproducts of urban, industrial or waste treatment processes is prohibited.

#### 4.4.6 **HANDLING**

Harvesting, storage and shipping procedures that ensure maximum freshness and nutritional quality are encouraged. Harvesting at proper maturity levels, chilling immediately through refrigeration, clean work areas for packing and clean bulk containers used for storage during chilling are highly encouraged.

#### 4.5. **SPROUTS**

- 4.5.1. This annex is intended to complement the admissibility criteria, authorized materials and methods, and certification procedures, as detailed elsewhere in the standards. It refers both to water grown sprouts and soil grown sprouts.
  - a. Seeds must be either OCIA-certified or OCIA recognized certified organic.
  - b. Water used for watering and rinsing must be consistent with OCIA processing water standards. It must meet government regulations, e.g. potable water.
  - c. Growing media must be free of contaminants. Producer is responsible to verify the origin of materials and see that they meet OCIA standards.
  - d. Fertilizers and soil amendments must meet OCIA standards. No soluble fertilizers may be added to the irrigating water.
  - e. Pest (phytosanitary) management must stress preventive measures, such as impeccable cleaning of containers and chambers.
  - f. Light source can be natural or artificial.

#### 4.6. WILD PLANTS

- 4.6.1. The collection area must be free of any contamination by prohibited materials for 36 months prior to collection and at an appropriate distance from conventional farming, pollution and contamination.
- 4.6.2. Produce can only be certified organic if collected from a self-sustaining growing environment. Harvesting or gathering the product must not exceed the sustainable yield of the ecosystem. The individuals who harvest, gather, or wildcraft must not take any products at a rate that threatens the existence of plant, fungal or animal species, including species that are not directly removed
- 4.6.3. Produce can only be certified organic if collected from a clearly defined collection area that is subject to a normal annual inspection procedure. The operator who manages the harvesting or gathering of common resource products must be familiar with the defined collection areas.
- 4.6.4. When there is a history of chemical use in the collection area, residue testing may be required by the Certification Decision Team in consultation with the Chapter Review Committee.
- 4.6.5. A specific management plan must be submitted by the member.
- 4.6.6. Products that only consist of certified wild ingredients must be clearly labeled as "wild" or "natural".

#### 4.7. WILD SEA VEGETABLES

Wild sea vegetables may be certified organic as long as they comply with all applicable portions of these Standards. Guidelines for the collection of wild sea vegetables are available from the International Office.

#### 4.8 LAKE GROWN WILD RICE STANDARDS

All applicable OCIA Standards not specifically addressed in this section must be followed.

#### 4.8.1. HABITAT AND WATERSHED QUALITY AND MONITORING PROTOCOL

- a. The lake/river water and sediments used for lake grown wild rice production must be free of significant contamination from residential, municipal, commercial, or industrial waste, emissions, tailings or affluent. Harvesting areas must not be located within:
  - 1. twenty miles (34 kilometers) of any nuclear facility.
  - 2. three miles (5 kilometers) of any industrial discharge area.
  - 3. three miles (5 kilometers) of any city or town sewage discharge.

It is the producer's responsibility to report to OCIA and the inspector any other possible source of contamination. These will be examined on a case-by-case basis by the International Office to assess the possible risk of contamination and to determine whether the crop is certifiable. As the lake grown wild rice is a water-based crop, the water must be in compliance with government regulations for water quality. An annual water test is not required, however the International Office can require a water test to be conducted if a contamination problem is perceived. A plan for monitoring and testing the lake grown wild rice, water, and sediment must be submitted yearly and approved by the International Office prior to certification. This plan must be specific to the area in which the rice harvest is being conducted.

- b. The water and sediments shall be free of high concentrations of indigenous, naturally occurring compounds which may be harmful to human health.
- c. Management of sediment quality via fertilizing, liming or the addition of soil/sediment amendments of any kind is prohibited. The use of pesticides, growth stimulants, desiccants, and all other types of agrochemicals are prohibited.
- d. The lake grown wild rice harvest must attempt to allow the area to be self-sustaining. This must be verified through harvesting practices and harvesting records from previous years. If re-seeding is necessary, the seed must be organic. Uncertified, non-GMO seed can be used if organic seed is documented to be unavailable from at least three (3) sources.

#### 4.8.2. LAKE GROWN WILD RICE PROCESSING

The processing of lake grown wild rice must be handled in compliance with Section 5 (Organic Processing) of the current OCIA International Standards. In addition, the following Standards must be addressed:

- a. A lake grown wild rice processing enterprise seeking organic certification shall, prior to initial certification, submit a lake grown wild rice Processing Organic System Plan which includes the following elements:
  - 1. A general description of the handling, drying, curing, processing and storage procedures.
  - 2. A detailed plant site and plant diagram. This includes the structural pest management plan and pest control plan as outlined in Section 5 of the OCIA Standards.
  - 3. A schematic flow chart identifying all the equipment, processing and holding facilities in the plant.

This plan will need to be updated yearly and supplied to the International Office with the certification file for review.

- b. An Internal Quality Assurance System must be in place and documented. This must address all potential areas of contamination to the OCIA Certified product including:
  - 1. Commingling of OCIA Certified lake grown wild rice with non-OCIA Certified wild rice.
  - 2. Containers and packaging.
  - 3. Sanitizers, boiler chemicals, processing aids, prohibited substances used in and around the facility.
  - 4. Transportation and storage. This includes storage records and clean-truck affidavits.
  - 5. Pest control methods and substances.
  - 6. Enzymes and food spoilage microorganisms.
  - Prohibited handling and processing procedures, including, but not limited to, the use of irradiation.

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### 4.9 COFFEE PRODUCTION STANDARDS DEFINITIONS

**Coffee cherry** – a ripe coffee berry, usually red or yellow in color.

**Exotic species** – non-indigenous or vegetation introduced from a foreign region.

**Live barrier** – introduction of plant material to provide means of soil conservation and protection from erosion or material that is used in addition to the buffer zone to safeguard the organic integrity from the plantations that are under conventional production systems.

**Parchment** (coffee) – a coffee bean with its hull or husk intact.

**Production zone** – area dedicated to the cultivation and management of the crop.

**Restoration zone** – area in which renewal of both coffee and tree vegetation occurs through selective use of coffee varieties and reforestation.

**Secondary vegetation** – vegetation which results after the occurrence of natural events (e.g., floods, tornadoes, volcanic eruptions, avalanches, etc.) or the intervention of humans.

#### 4.9.1. ORGANIC PRODUCTION AND MANAGEMENT PLAN

An organic production and management plan for the coffee plantation must be developed. It must address, but is not limited to, plans for soil building and conservation, shade management, reforestation and/or restoration, crop protection (weed, insect, and disease management), vegetation management (including shade, if any), and means for compliance with OCIA International Standards.

#### 4.9.2. SEEDS, SEEDLINGS, GRAFTING, AND ROOT STOCK

- a. Coffee germplasm must include those varieties that are well adapted to regional or local conditions. Varieties are preferred with tolerance or resistance to pests and diseases. Tolerance or resistant traits must not come from the use of genetically engineered technology.
- b. As part of the organic management, reforestation and/or restoration plans must be developed to maintain sustainability of the coffee ecosystem.
- c. Any source of germplasm must be handled according to Section 2.8.3. These sources include, but are not limited to, seeds, transplants, and plantings from nurseries.

#### 4.9.3. BUFFER ZONES

- a. Buffer zones must be established in those areas where it is necessary to reduce the impact or contamination potential from adjacent areas.
- b. Live barriers of trees and/or shrubs shall be maintained along roadways and sources of contamination.
- c. Buffer zones shall be established in accordance with Section 2.4.
- d. The harvest of the plantings in the buffer zones and the disposition of the buffer crop must be performed and documented separately from the certified organic crop.

#### 4.9.4. SOIL BUILDING AND CONSERVATION

- a. A soil building and conservation plan must be developed to maintain at least minimum conditions for crop growth in a sustainable environment.
- b. Soil conservation and management must be focused on developing strategies to promote soil building, prevent erosion and conserve hydrographic basins.
- c. Strategies allowed include, but are not limited to:
- 1. Contour planting.
- 2. Windbreaks, individual terraces, and live barriers.
- 3. Cover vegetation and cover crops.
- 4. Selective weeding in the coffee plantation.
- 5. Other means adapted to regional or local conditions.
- d. Soil building strategies must be designed to maintain or improve organic matter content and nutrient availability to the coffee plant.
- e. The following management techniques are allowed:
- 1. Use of on-farm resources such as composted material from coffee pulp, animal manure, untreated wood ashes and vegetation residues.
- 2. Application of composted materials, as described in Section 9.3.
- 3. Use of natural fermented compounds, such as homemade bocashi.
- 4. Use of microbial products, as provided in Section 9.3.
- 5. Use of leguminous vegetation as green manure or as part of the coffee vegetation ecosystem.
- 6. Use of Guano, purines, fermented and commercial organic fertilizers, as defined in Section 9.3 and the OMRI/OCIA List.
- 7. Other soil building practices, as defined in Sections 2.8.1, 2.8.2, 2.8.4, 2.9.1, and 9.3.

#### 4.9.5. HARVEST AND POST-HARVEST

- a. After the harvest of the ripe cherries, any green or black cherries must be removed as much as possible from the field to prevent coffee borer encroachment.
- b. De-pulping must be performed, with a manual, mechanical, or industrial de-pulper, the same day of harvest. Clean water must be used.
- c. Water testing shall be performed according to Section 5.1.4, only if justifiable reasoning exists that contamination from organic pesticides, inorganic fertilizers, and other contaminants is present.
- d. Fermentation performed during wet milling must be natural and use vats appropriate to this purpose.
- e. Fermentation is prohibited in plastic bags or wood-treated baskets.

- f. Chemical or synthetic products are prohibited for inducing fermentation.
- g. Drying areas must be maintained clean of any potential source of contamination, such as humans, birds, dogs, cats, etc.
- h. Storage of parchment and green coffee must be performed in a dedicated facility that preserves organic integrity, as defined in Section 6. No off-farm inputs may be stored with the organic crop.
- i. Packaging and bagging must be performed using food-grade materials and be dedicated only for organic coffee. Use of plastic material is restricted to polyethylene, polypropylene and other described in Section 5.5.
- j. As part of the audit control system and farm plan, coffee farm operations must maintain complete records from the cherry coffee harvest phase through the parchment phase and green coffee phase. These records must document segregation and disposition of the crop, use a lot numbering system, and be traceable and verifiable to the fields of origin.
- k. Water and Wet Milling
- 1. Wet mills, machinery, and other devices used must be maintained with appropriate sanitary and hygienic conditions.
- 2. Parchment coffee must not be washed in streamlets or any other source of water that does not protect the product from contamination.
- 3. Harvest and wet milling drainage water and wastes must be treated before they are channeled to creeks, rivers, or farm streams. Oxidation and/or drainage tanks must be used to filter wastewater to remove residues.
- 4. In an effort to preserve the hydrologic sources in the coffee culture, alteration of the course of streams and other surface waters is prohibited in the wet milling process.
- 5. By-products such as coffee pulp and parchment must be recycled and transformed into usable matter.
- 6. As part of the waste management, means must be provided to compost and otherwise handle residues from wet and dry milling.
- 7. Any mill that jeopardizes any water source, forest resources or any other element of biological or environmental importance shall not be certified.
- 8. The quantity of water used in the wet milling process shall be reduced to the minimum possible so that wet milling is not a focus of contamination in the surrounding media.

### 4.9.6. CROP PROTECTION (WEED, INSECT, AND DISEASE MANAGEMENT)

- a. A plan to handle the presence of weeds, insects, and diseases must be developed as part of the production and organic management plan.
- b. Acceptable crop protection strategies designed to provide adequate weed, insect, and disease management include, but are not limited to:
- 1. Selective pruning, but only as part of coffee restoration.
- 2. Shade management as described in Section 4.9.7.
- 3. Use of mulch.

- 4. Use of variety selection.
- 5. Use of entomopathogens.
- 6. Use of parasitic wasps and other natural predators.
- 7. Use of any other cultural practice adopted locally or regionally that does not include the use of prohibited synthetic materials or genetically modified organisms.
- 8. Other strategies as described in Sections 2.10 and 9.3.
- c. As part of the biological diversity in coffee plantations, epiphytic plants such as Bromeliads, vines and parasitic plants are allowed to grow only on canopy trees that are above 10 meters in height.
- d. Only hand tools are allowed to provide removal and control of any epiphytic or parasitic growth found on coffee trees.

### 4.9.7. BIODIVERSITY

- a. A shade management plan that takes into account ecological conditions, the production system, and sustainability must be developed to maintain optimum ecological conditions and enhance biodiversity.
- b. A diversity of tree species is encouraged when the soil and climatic conditions allow it.
- c. The management system must attempt to establish and maintain conditions for both organic crop production and habitat for indigenous animals.
- d. Hunting and fishing shall be prohibited within the coffee culture.
- e. The coffee culture system must support populations of migratory and domestic birds that are common to the natural, non-agricultural parcels of forested land of the region or country.

### 4.10 SHADE-GROWN COFFEE PRODUCTION STANDARDS

### 4.10.1. COFFEE PRODUCTION

All Coffee Production Standards in Section 4.9 must be met.

### 4.10.2. SHADE-GROWN COFFEE CRITERIA

- a. Plantations must have an inspection for compliance to and adoption of these shade-grown coffee criteria before being eligible for certification.
- 1. If necessary, a transitional plan for the introduction of shade and shade management in accordance with these standards must be developed.
- 2. Continuous progress must be demonstrated toward achievement of the shade management plan in Section 4.10.2.a.1.
- 3. The shade management plan in Section 4.10.2.a.1 must be revised and reviewed annually in order to achieve sustainability of the operation.
- 4. Plantations in transition must have an inspection of the conditions and adoption of the shade-grown coffee criteria before becoming eligible for certification.

- b. Shade management
- 1. Rustic or traditional polyculture shade is encouraged on the coffee plantation.
- 2. A minimum of 40 percent of canopy cover is required over the crop.
- 3. Shade management must not drastically reduce canopy coverage.
- 4. Species other than *Inga spp, Erythrina spp, Gliricidia sepium*, and *Gravillea robusta*, which include fruit species, can be planted to improve biodiversity, but non-native species shall not represent more than 20 percent of the shade trees.
- 5. The *Inga* species shall not represent more than 50 percent of the canopy.
- 6. Shade introduction shall have a minimum of ten botanical species other than *Inga spp.*, *Erythrina spp.*, *Gliricidia sepium* and *Gravillea robusta* per production area. A single *Inga spp.*, shall not comprise more than 50% of the trees in the production area.
- 7. Pruning of trees must be provided during the rainy season to provide and preserve the natural habitat for plants and animals.
- 8. Removal of old trees and restoration must be documented and in accordance with the reforestation plan required in Section 4.10.2.c.1.
- 9. Only controlled cutting of firewood for use by workers or drying of coffee is allowed. In the event that there is excess firewood from the pruning of trees, this wood may be sold.
- c. Vegetation management
- 1. A reforestation plan must be developed before any deforestation can occur.
- 2. The reforestation plan must emphasize the use of indigenous species adapted to the region.
- 3. Reforestation with exotic species is restricted to a maximum of 10% and to environmental justification.
- 4. Clearing of land is restricted to weeds, shrubs, and other types of secondary vegetation.
- 5. No trees important for the establishment of the forest that are above three meters in height may be removed unless, diseased or damaged by natural elements.
- 6. To prevent erosion, plant coverage of the soil must be encouraged.
- 7. Weed control on sloped terrain shall not cause erosion.
- 8. Live barriers of secondary vegetation and reforestation shall be maintained along watersheds, near rivers, and near stream banks within the production zones.

### 4.10.3 REQUIREMENTS FOR ORGANIC SHADE GROWN COFFEE LABELING

- a. Use of the Organic Shade-Grown Coffee label in parchment and green coffee crop must meet the following criteria:
- 1. Farm operations must be inspected and certified for the Organic Shade-Grown Coffee standards category, including production, as per Sections 4.10 and 4.10.2(a)(b)(c)

- 2. Farm operations must maintain sufficient records to show compliance with the requirements of sections 4.10.2 and 4.10.3
- 3. Farm operations conducting own or having subcontracted mills must be inspected to verify handling and processing of organic shade grown coffee.
  - 4.Processors and Handlers must have records that validate the shade grown denomination of coffee. This may include valid copies of certificates, transaction certificates, or other types of records available.
  - 5.Traceability: all operations (farms, processors, and handlers) labeling coffee as Organic Shade Grown must have sufficient records that show traceability, separation, and identification of coffee during the different stages of production, processing, and/or post harvest handling.
- b. OCIA Shade Grown Coffee Logo:
- 1.The OCIA Shade Grown Coffee logo must be used only by those operations that maintain sufficient evidence of traceability and origin of the certified coffee.
- 2. The OCIA Shade Grown Coffee logo cannot be displayed more prominently than any organic regulated logo used in the package.
- 3. It is prohibited to use a distorted form and not legible logo.
- 4. Operators are entitled to choose the color that best fits their packaging needs.
  - c. Labeling green and parchment bags of Organic Shade Grown Coffee must:
- 1. Include the specific OCIA logo for shade grown coffee in figure 1.
  - 2. Include a lot number.
- 3.Include the OCIA associate number
- 4.Include the country of origin.
- 5.Only bags containing 100% shade grown coffee will bear the OCIA shade grown coffee logo.
- d.A retailed processed product with the OCIA shade grown coffee logo must:
- 1. Contain 100% shade grown organic coffee.
- 2.Display the OCIA shade grown coffee logo (figure 1) in the front panel of the package or container. A minimum size of 10mm can be used.
- 3.Include a lot number
- 4.Use the term "Certified Organic by OCIA." This term must be below the information identifying the handler or distributor of the product.



OCIA Shade Grown

Figure 1

### **Section Five**

### 5.0 PROCESSING CERTIFICATION STANDARDS

Each industrial process is different, and has specific areas in which "organic" methods and materials differ from conventional production. It is the responsibility of industry to develop standards specific to each process (flour milling, tofu, breakfast cereals, etc.) and have those standards approved by the OCIA International Certification Committee. Such standards must be reviewed by the Standards Committee and approved by the General Membership.

No ingredient, secondary ingredient, additive, processing aid, or fermentation material used in the processing of OCIA-certified product may be from a product made from organisms that have been modified by genetic engineering techniques (as defined in the Materials List)

No ingredient, secondary ingredient, additive, processing aid, or fermentation material used in the processing of OCIA Certified products may be made from a product produced using nanotechnology. Processors are prohibited from using artificial nanoprocesses.

### 5.1. RAW MATERIALS

- 5.1.1. All primary ingredients must be certified by OCIA or an OCIA approved organization and represent not less than ninety-five percent (95%) of the finished product by either weight and/or volume, whichever is most applicable as per government regulations, in order to be labeled as per Section 5.6 "Product Labeling Standards".
- 5.1.2. Permitted secondary ingredients, processing aids, and additives in products labeled as per Section 5.6 "Product Labeling Standards" includes:
  - a. Fermentation organisms.
  - b. Microorganisms must be grown on substrates that consist entirely of organic ingredients or permitted ingredients under the OCIA Handling and Processing Materials List (Standard 9.4.3).
  - c. Herbs, spices, thickeners, colors and flavors wholly derived from botanical or animal sources.
  - d. Minerals (including trace elements) and vitamins where legally required or where dietary or nutritional deficiency can be demonstrated.
  - e. Agricultural food products.
  - f. Processing aids listed as allowed or restricted in the Processing and Handling Materials Lists for Processing Aids and Non-Organic Ingredients.
  - g. A non-organic secondary ingredient will be replaced with an ingredient certified by OCIA or certified by another certification organization and approved by OCIA, when the organic ingredient becomes available.
- 5.1.3. Salt and water are considered inert, non-certifiable ingredients and must conform with OCIA's quality standards for them. (Note: in the calculations of percentages of organic ingredients, added water and salt shall not be included.).
- 5.1.4. The Certification Committee can request water tests to be submitted with the application. Water shall be sampled at the most common point of use in accordance with proper water sampling procedures.

- a. A typical potable water test, (as required by EPA or other appropriate governmental agencies for municipal water assurance and in conformance with language in this section), shall be required prior to initial certification and on an annual basis if
  - 1. Water is used as an ingredient in the preparation of organically produced food in any certified facility.
  - 2. Water is present in any form in the final product.

This water test must at minimum include tests for Nitrates, Coliforms, Mercury, Lead, and Iron. If justifiable reasoning exists that contamination from organic pesticides or volatiles is present, a test may be requested.

- b. If commercial water purification or filtration devices are installed on the incoming supply system, then these tests only need to be updated every three years.
- c. If the water is used only to perform cleaning or maintenance on any equipment or utensils used to prepare organically produced food, or if water is used for the sole purposes of washing\* as processing aids or comes in contact with the organically produced food but does not occur in the final form of the product, a full water test (conducted within the last year) is required at the time of the initial application for certification. and must follow the guidelines addressed in 5.1.4.a. Additional tests are required on a tri-annual basis but only need to address Nitrates and Coliforms. If justifiable reasoning exists that contamination has occurred or if the source of water has changed, a water test may be requested.

\*Initial water test for water used in cleaning utensils or washing vegetables in preparation for market need not include mercury, unless a potable water test for the area in question includes mercury with its regular potable water test, or, unless there is a documented reason to suspect mercury contamination in the area

- d. These tests are to be made available to the inspector during the annual certification inspection.
- 5.1.5. All non-certified ingredients (the term "ingredient" shall be interpreted in accordance to relevant federal government regulations) must be identified and shall be processed in a manner that is consistent with acceptable processing methodologies defined by OCIA standards for food processing. The following practices are prohibited in all ingredient manufacturing:
  - a. Irradiation
  - b. The processor shall show good faith in identifying non-fumigated ingredients, and shall receive documentation from supplier that no OCIA prohibited fumigants are used on the products. If no sources can be identified, the processor shall be able to utilize fumigated products until such time as non-fumigated products are available.
  - c. Extraction\* or concentration process with petroleum distillates.
    - \*Acceptable extraction methods include those with water, ethanol, plant and animal oils, vinegar, carbon dioxide, or nitrogen. These shall be of food grade quality and appropriate for their purpose.
  - d. Filtration techniques that chemically react with or modify organic food on a molecular basis are restricted. Filtration equipment must not contain asbestos, or utilize techniques or substances that may negatively affect the product.
- 5.1.6. As a condition for certification all members submitting products containing non-organic ingredients must submit a plan for conveying these ingredients to 100% organic. Further it shall be the responsibility of the applicant seeking certification to provide a written and signed declaration from the supplier of the ingredient stating that the ingredient(s) meet OCIA processing guidelines as defined above.

### 5.2. PRODUCT PROTECTION

### 5.2.1 SANITATION

The processor or handler must take all necessary measures to prevent contamination of the organic products by pollutants and contaminants, such as substances prohibited in organic production and foreign substances, including the cleaning, decontamination, and/or disinfection of the facilities and equipment as necessary. A formalized sanitation program must be in place and conform to local municipal, state/provincial, and federal health codes. Programs must be in place that provide proper sanitation for:

- a. The facilities exterior (dumpsters and waste collection areas, old equipment storage, landscape and parking areas.
- b. The facilities interior (including processing, packaging and warehouse areas),
- c. Processing and packaging equipment (programs to prevent unwanted yeasts, molds, and bacteria).
- d. Employee hygiene, including sanitation in lunchrooms, break areas, and restrooms.

### 5.2.2 CLEANING MATERIALS

Cleaning materials must be labeled for the intended use and appropriate for the intended application. Cleaning materials should be considered processing aids, which means they must not have any residue in certified products. Rinsing after use of all cleaning materials must be adequate to ensure residues are removed from equipment, primary and secondary food preparation surfaces.

### 5.2.3 SEED TREATMENT

The storage, use or application of any synthetic or otherwise prohibited seed treatment materials or the storage and/or handling of any seed treated with such materials within a certified facility is prohibited. If seed treatment, handling and storage of treated seed are performed in a separate building the rest of the facility may be considered for certification subject to the stipulation in Section 5.3.8.

### 5.2.4 CULINARY STEAM USAGE GUIDELINES

If culinary steam is used during any part of food processing, then steam condensate traps shall be placed to collect condensate for testing of known used boiler chemicals. At least one trap should be placed as close to the first entry of steam into the food system as possible.

- a. Steam filters should be required for food contact steam.
- b. Testing for the presence of prohibited substances used in boiler water conditioning shall be mandatory if culinary steam is used during any part of an organic food process and comes in contact with the food and no filters are employed to remove said substances prior to the steam contacting the food.
- c. Steam condensate testing shall be for the specific material used in that particular boiler system and should be conducted by any state of federally accredited testing facility.
- d. Limits on tested substances shall be non-detectable to the limit of the equipment used.

### Recommendations:

- All boiler systems should be on a monthly service schedule by a professional water conditioning company that tests treatment limits and operating conditions peculiar to that boiler.
- 2. Typical boiler operating parameters should be no more than 80% of capacity.
- 3. Condensate traps need to be installed at appropriate junctions to provide sampling of steam quality and purity.

5.2.5 Processing and handling of OCIA-certified products must be done separately in time or place from the processing and handling of non-OCIA-certified products. Exceptions may be granted by the certification committee with proper documentation.

### 5.3. STRUCTURAL PEST MANAGEMENT

- 5.3.1. Pest management in processing facilities should be accomplished by a detailed plan incorporating the following measures in order of priority.
  - a. Preventive methods such as exclusion of pests, good sanitation, restriction of habitats, and monitoring.
  - b. Mechanical, physical, and biological methods.
  - c. Pesticidal substances contained in Section 9.4.4 of these Standards.
- 5.3.2. Ongoing monitoring and inspection should be performed in the facility to determine the presence and degree of activity of any insect or rodent pests. Monitoring / inspection should also assess the efficacy of any remedial actions in the pest management program.
- 5.3.3. An understanding of specific pest ecology should be demonstrable for all pests that potentially pose a threat of adulteration to OCIA-certified commodities in the facility.
- 5.3.4. A plan must be developed by the management to diminish the use of restricted or prohibited materials that are used in the non-organic portion of production.

### 5.3.5 ALLOWED

- Mechanical, electrical, pheromone/scent and adhesive traps, physical barriers, diatomaceous earth, sound and light devices as repellents.
- b. Carbon dioxide and nitrogen as fumigants and as flushing agents in packaging.
- c. Freezing, heating and vacuum treatments.
- d. Storage methods that may further protect commodities from pest adulteration.
- e. Botanical pesticides such as pyrethrum, derris and ryania, and boric acid for insect control within the following parameters:
  - 1. The material may not contain petroleum distillate carriers.
  - 2. The material may not contain synergists such as piperonyl butoxide or MGK-264.
  - 3. The material used in a certified facility must be labeled for the specific use and used in accordance with the labeled directions.
- 5.3.6. Rodenticides with vitamin D-based active ingredients may be used. This material may not be used in an on-going fashion in an OCIA-certified processing or food handling facility. Use is restricted to knockdown of residual rodent populations after the source(s) of the rodent problem is identified. Mechanical/physical methods of rodent removal are preferred.
- 5.3.7. Mechanical/physical methods of rodent removal are allowed.
- 5.3.8. When management techniques have failed and allowed materials are unavailable, any product registered and labeled for food processing use may be used. The use of these materials is limited to dire circumstances where product is in imminent danger of adulteration by pests. No OCIA-certified commodities are allowed in the area during application of materials that are not on the allowed materials list. If the use of a non-approved substance is undertaken, the processor/warehouser/retailer must observe the following:

- a. In the case of fogging, broad surface treatment, and spot treatment, no product may be brought into the treatment area for three days (72hrs.) after application.
- b. In the case of fumigants, no product may be brought into the area of treatment, either for storage or processing for a minimum of 5 days. These actions must be documented and available for inspector review for the annual review. In the case of known applications of prohibited materials, failure to provide these reports may be cause for immediate revocation of certification.
- 5.3.9. Any application of materials that do not appear on the allowed materials list may only be applied by a certified, trained pesticide applicator(s), to reduce risk of misapplication.
- 5.3.10. Application of materials not on the allowed materials list must be reviewed by the certification committee as a part of the certification. All applications of these materials must be documented. These documents must be available to the certification inspector.
- 5.3.11. Applications of materials that do not appear on the allowed materials list may not be made on a regular basis. The processor must strive for the development of non-toxic management approaches that not only reduce but eliminate this use. Documented regular use of prohibited materials, even under allowed conditions, shall be evidence that little or no credence is given to the need to develop structural management changes required to be in compliance with certification standards. As such, this failure shall be cause to consider denial of certification.
- 5.3.12. Residue testing shall be required if contamination is suspected to have occurred. These residue tests shall test for the suspected prohibited material and the results made available to the committee and inspector (if applicable) immediately. In the case of verified contamination, all applicable federal and state laws shall take effect concerning disposition of the product.

### 5.3.13 PROHIBITED

- a. Fumigation of OCIA-certified product with methyl bromide, phosphine, chlorpicrin, and all other fumigants not specifically mentioned on the allowed materials list.
- b. Use of any vaporizing pesticide in a facility where OCIA-certified product could be contaminated.
- c. The use of any organophosphate, chlorinated hydrocarbon, or carbamate insecticide in a facility where OCIA-certified product could be contaminated.
- d. The use of any rodenticides not mentioned on the allowed materials list, including tracking powders and dust formulations, which may contaminate product and non-target areas.
- e. Materials used in structural pest management may not contain, be derived from, or manufactured from products made from organisms that have been modified by genetic engineering techniques (as defined in the Materials List).
- f. Persistent or carcinogenic pesticides and disinfectants.
- g. The use of ionizing radiation for pest control is prohibited.

### 5.4. PROCESSING AND HANDLING PEST CONTROL LIST – see section 9.4.4

### 5.5. PACKAGING MATERIALS

- 5.5.1. All packaging must be free of fungicides, preservatives, fumigants, insecticides, or other intentionally added contaminants.
- 5.5.2. Aluminum and lead-bearing solder where the lead is over 5% are prohibited. Lead contents within the aforementioned parameters are acceptable only when the pH is between 6.7 and 7.3. Ninety-five percent tin solder and plate and cadmium-free food grade solder is permitted.

- 5.5.3. Processors should research and share information on the relative benefits and drawbacks of the various plastics and papers used for food packaging.
- 5.5.4. All materials used for packaging must be food grade and of suitable design to protect the organic integrity of the product. Edible packaging material must not be derived from or manufactured from products made from organisms that have been modified by genetic engineering techniques (as defined in the Materials List). The use of recycled food grade packaging materials or containers is encouraged. However, organic products shall not be packaged in reused bags or containers that may have been in contact with any substance likely to compromise the organic integrity of the product or ingredient placed in those containers.
- 5.5.5. Non-essential packaging should be avoided where possible and considerations should be given to how the end product packaging may be recycled or returned.
- 5.5.6. Any printing or labeling on the product or outer packaging should use non-toxic inks and adhesives and must not come in contact with the product.

### 5.6. PRODUCT LABELING STANDARDS

- 5.6.1. OCIA's mark, including seal and name(s), are registered trademarks and are to be used only by OCIA-certified members to designate certified products approved for mark use by OCIA. In order to carry the seal and/or names a processed food product must be made from at least 70% OCIA-certified ingredients, and be processed and packaged by OCIA-certified facilities. This 70% may include organic ingredients certified by other certification organizations, if the product or processor is certified organic by an IFOAM accredited certifier and a request is made to the certification committee and approved by the certification committee (determination of equivalence of standards will allow similar product from the certifier to be used thereafter), or if the product and its certification undergo the OCIA document review process, included in Section 10 of the Standards.
- 5.6.2. The same ingredient shall not be derived both from organic and non-organic origin.
- 5.6.3. All OCIA-certified processed organic foods must be in compliance with the following labeling regulations:
  - a. At least 95% organic ingredients: If a product is made from at least 95% OCIA-certified ingredients, and the processing facility is OCIA-certified,
    - 1. The terms "OCIA-certified Organic," or "OCIA-certified Organically Grown" or their equivalent may be used without size restriction (except as denoted in this section).
    - 2. The terms in 5.6.3.a.1 may appear on any panel of the package.
    - 3. The display of the seal must be no larger in diameter than 1/8th of the height or width (whichever is greater) of the panel upon which it is displayed.
  - b. At least 70% but less than 95% organic ingredients: If a multi-ingredient processed food in which any single ingredient or combination of ingredients is/are certified by OCIA, and comprise(s) at least 70% but less than 95% OCIA-certified ingredients, and the processing facility is certified,
    - 1. The terms "OCIA-certified Organic," or "OCIA-certified Organically Grown" or their equivalent may be used to identify those ingredients that are OCIA-certified.
    - 2. These terms may appear on any panel, however, they must clearly communicate that certification applies only to certain ingredients.
    - 3. These terms along with the name of the ingredient and the statement "made with" are restricted in type size to no larger than  $\frac{3}{4}$  the size of the type size of the product identity.
    - 4. Use of the OCIA seal is prohibited.

- c. Foods containing less than 70% organic ingredients may not use the word "certified organic" on the principal display panel. "Certified organic" may be used on the ingredient panel to identify the certified organic ingredient(s).
- 5.6.4. All product labeling must be in compliance with the laws of relevant legislative jurisdictions governing the labeling, manufacture and/or sale of organic processed products.
- 5.6.5. The person or company legally responsible for the production or processing of the product shall be identifiable.
- All ingredients in multi-ingredient products must be listed on the label in order of their percentage of the final product by weight. The organic and non-organic ingredients must be clearly identified as such (using the term "organic" in parentheses, indicating organic ingredients by an asterisk (\*), etc.). All additives must be listed with their full name. If herbs and/or spices constitute less than 2% of the total weight of the finished product, they may be listed using the terms "herbs" or "spices" without stating their percentage.
- 5.6.7 OCIA shall be indicated as the certification body responsible for product certification.
- 5.6.8 Organic labeling may not reference to "GMO Free" or other phrases which indicate the product contains no GMOs. Labels may reference the fact that production and processing methods have not used GMOs.
- 5.6.9 Any product that is labeled as "produce of organic agriculture" or equivalent terms must comply with all applicable OCIA Standards.

### 5.7. AUDIT TRAIL

- 5.7.1. Audit trail and inventory control procedures must be detailed enough to trace all raw materials from the supplier, through the entire plant process, and on through the distribution system to the retailer, using lot numbers, serial numbers, or the like.
- 5.7.2. Company records (including purchase orders, bills, invoices, and inventory records) shall be made available on demand to a bonded OCIA certification agent or through the International Office.
- 5.7.3. If restricted or prohibited materials are used in any part of the organic operation (including pest control, cleaning, etc.), the applicant must supply a documented management plan which specifies how the use of these restricted and prohibited inputs will be reduced or eliminated. This management plan must also include proposed timelines for this reduction or elimination.
- 5.7.4. The applicant must provide a notarized or sworn affidavit attesting to the truth of information furnished and adherence to these Standards.

## **Section Six**

### 6.0. HANDLING, STORAGE AND TRANSPORT STANDARDS

- **6.1.** All handling and storage facilities must be inspected and certified by OCIA unless the following exemption applies:
  - 6.1.1 When the product is in the final consumer package, inspection of secondary storage facilities (that are separate from the certified processing facility) is not required if either of the following conditions are met:
    - a. The packaging materials protecting the OCIA-certified products are documented by the applicant to be impermeable to any OCIA prohibited material typically used in conventional pest control. Acceptable packaging materials used for this purpose may include, by example, but not by limitation, those materials which maintain the OCIA-certified product in an atmosphere separate from the atmosphere of the storage area.

OR

- b. The storage facility provides a written and notarized affidavit from the management of the storage facility that no OCIA prohibited materials are used in that facility.
- **6.2.** OCIA-certified products may not be transported in a fashion that may compromise the organic integrity. Unless otherwise agreed upon, the OCIA-certified party owning the product at the point of transport is responsible for maintaining the organic integrity of the product in the transportation process, unless the transportation operation is certified to the OCIA International program or by an OCIA-recognized organic certification agency.
- **6.3.** OCIA-certified organic products may not be stored or transported with non-certified products unless packaged, labeled or otherwise segregated in a fashion that will insure the organic integrity.
- **6.4.** OCIA-certified products must be handled, stored, and transported in a manner to minimize contamination by pollution and prohibited substances and must be handled, stored, and transported in a fashion that will preserve the organic integrity of the commodity.

### 6.5 HANDLING AND STORAGE

- 6.5.1 OCIA-certified organic product may be handled and stored in the following environments:
  - a. ambient temperature
  - b. drying and aeration
  - c. refrigeration and freezing
  - d. humidity regulation
  - e. on ice with potable water

- f. controlled atmosphere (airtight silo, carbon dioxide, nitrogen)
- g. hot water dips
- 6.5.2 The use of synthetic sprouting inhibitors, ripeners, or growth regulators is prohibited unless specified in the materials list.
- **6.6.** Pest management and control measures must be in compliance with the Structural Pest Management Standards in Section 5 of these standards.

### 6.7 AUDIT TRAIL

- 6.7.1 Complete audit trail documentation must be provided at each annual inspection and also be available to OCIA upon request.
  - a. Clean down logs or checklists must be maintained for all handling equipment, storage facilities, and transportation containers that provide the following: cleaning date, cleaning method, location or bin/container number, and brand name and source of any material used.
  - b. Storage records must be maintained that identify the field number/source of product in, date and amount of product in/out, lot number, scale ticket, invoices for incoming or outgoing product, transportation method and name, and destination of product removed.
  - c. Records must be kept for all materials applied to OCIA-certified organic product and applied in or around any area/container where OCIA-certified product is kept. Those records must document the brand name and source of material applied, date of application, application rate and method, location of application and description of how organic product was protected.
  - d. Transportation records must provide the name of the product, declaration of organic status, lot number or demonstration of ability to track, owner of the product, amount of product shipped, clean truck documentation, buyer of product and location of product loading and unloading.

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### **Section Seven**

### 7.0 ADMINISTRATION

### 7.1. CERTIFICATION PROCEDURES: INSPECTORS

- 7.1.1. The third party inspector is to be demonstrably impartial and independent evaluator of applicant compliance with these standards or those of the chapter to which the applicant belongs.
  - a. The inspector shall not be a party to any transaction involving the certified products.
  - b. The inspector may not be an employee of or have any financial interest in any company that is a party to any transaction involving the certified products.
  - c. Advice provided by the inspector shall be limited to helping the member meet standards and improve organic production techniques. Consultation for an additional fee at any time within the certification year is unacceptable and constitutes grounds not only for dismissing the inspector, but also for revoking the applicant's right to use the seal.
  - d. The inspector shall not have worked for the applicant in any capacity in the 12 months prior to an inspection, and shall not work for the applicant in the 12 months following an inspection.
  - e. The applicant shall not have worked for the inspector in any capacity in the 12 months prior to an inspection and shall not work for the inspector in the 12 months following an inspection.
- 7.1.2. In cases of suspected contamination, in coordination with OCIA International or following a request from the chapter or the regional office, the inspector shall have the right to make unannounced visits, take samples, and require residue tests, all at applicant expense. OCIA International will require an analysis of the relevant products and possible sources of pollution (soil, water, air, inputs, etc.) to be undertaken to determine the level of contamination. Appropriate actions shall be taken, such as detection of contamination sources, examining background contamination, and other appropriate measures.
- 7.1.3. The relationship between inspector and applicant is one of confidence in all matters not pertaining directly to certification. In certain cases it may be necessary for the inspector to be bonded. It is also advisable for the inspector to carry liability and/or errors and omissions insurance.
- 7.1.4. Only OCIA approved inspectors will be authorized to do inspections for OCIA certifications.

### 7.2. CERTIFICATION PROCEDURES: CHAPTERS

- 7.2.1. It is recommended that all chapters, new or existing, implement a program of education for all applicants, pertaining to paperwork, audit trail and farming practices and Standards and Bylaws. Administration of this training will take place at the chapter level, with OCIA International supplying materials and technical support.
- 7.2.2. Chapters may have a Chapter Review Committee which consists of at least 50% farmers (a minimum of three should be OCIA-certified unless the chapter is in its first year of certification), and which may include two external committee members with no financial interests in the production or marketing of product. As an option, the chapter may delegate the responsibility of the Chapter Review Committee to the Chapter Administrator or other qualified person or persons.

7.2.3. The Chapter Review Committee having a much closer view and more in depth knowledge of the Chapter members shall:

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- a. Administer the certification application program including hiring the inspector, scheduling visits, coordinating paperwork, and ensuring that all requested documents are forwarded to the OCIA International Office.
- b. Forward to the Certification Decision Team (CDT) their recommendations or requirements they feel should be considered.
- 7.2.4. Annually, the certification inspector, shall, before the harvest begins:
  - a. Visit at least one third (<sup>1</sup>/<sub>3</sub>) of the total fields on the farm and at least one field of each crop to be certified on the farm and verify that practices conform to these standards and to written information in the application. The fields to be visited are to be picked at random at the discretion of the inspector.
  - b. Examine post-harvest handling facilities, evaluate the applicant's management skills and organizational ability, inventory materials, and ensure that equipment available for weed control, etc. is capable of doing the job required at the scale proposed.
  - c. Discuss potential problems and possible solutions with an emphasis on product quality, audit trailing, and organic crop improvement.
  - d. The first year that certification is granted only crops harvested after the inspection visit are eligible for certification status. Exceptions to this may be made at the discretion of the Chapter Review Committee for circumstances such as multi-cropping, livestock feeds or unavoidable delays in inspection scheduling on the part of the chapter and/or inspector. For farms being re-certified the members certification will be considered valid for a full year following the granting of certification by OCIA. In the case of operations seeking re-certification, harvest may begin prior to inspection. However, check-strips must be left in each harvested field (in the field itself and not the buffer) in order for the inspector to visually verify. Exceptions to this may be made at the discretion of the Chapter Review Committee or the recommendation of the Chapter Administrator for scheduling delays, etc. If exceptions are made, under no circumstances (livestock feeds excluded) may post-harvest tillage take place until after the inspection (except as provided in standard 4.9.5a).
- 7.2.5. The chapter shall sign a seal licensing agreement with the pertinent national OCIA Corporation. The chapter shall monitor that seal use complies with normal or accepted OCIA practices.
- 7.2.6. Only OCIA approved inspectors will be authorized to do inspections for OCIA certifications.

### 7.3. CERTIFICATION PROCEDURES: PRODUCER AT LARGE, PROCESSOR/HANDLER, COMMUNITY GROWER GROUP, CONTRACT GROWERS AND CONTRACT GROWER GROUPS

7.3.1. Certification procedures for Processor/Handlers, Community Grower Group, Contract Growers and Contract Grower Groups are identical to those for chapters.

### 7.4. CERTIFICATION PROCEDURES: CERTIFICATION DECISION TEAM (CDT)

- 7.4.1. The Certification Decision Team (CDT) shall be composed of the Certification Specialists.
- 7.4.2. The Certification Specialists shall be OCIA International office staff, whose responsibility it shall be to:

- a. Review all files in a timely manner and render certification decisions.
- b. Obtain standard interpretations from the International Standards Committee (ISC) when appropriate.
- Forward, complex, contentious, and/or conflicting files to the Quality Control Committee for final review.
- 7.4.3. The Executive Director (ED) shall not be a member of the Certification Decision Team (CDT).

### 7.5. APPEALS

- 7.5.1. An appeal may be initiated against either a refusal of certification or the granting of certification.
  - a. Any member, applicant, or staff member may initiate an appeal.
  - b. Burden of proof is on the party initiating the appeal.
  - c. Expenses will be borne by the losing party to the appeal.
- 7.5.2. Appeals of a file denied certification by the Certification Decision Team will first be reviewed by the Certification Decision Team.
  - a. The Certification Decision Team may decide to reverse the decision and grant certification.
  - b. The Certification Decision Team may uphold the decision to deny certification, in which case certification will remain denied unless the appellant appeals the file to an Internal Review Committee (IRC). The decision of the IRC will be final and binding.
- 7.5.3. Appeals of a file granted certification by the Certification Decision Team will first be reviewed by the Certification Decision Team.
  - a The Certification Decision Team may agree with the arguments placed in the appeal, in which case the file will be denied certification. The member whose certification is denied has the right to appeal this decision to the IRC. The decision of the IRC will be final and binding.
  - b The Certification Decision Team may uphold the decision to grant certification, in which case the appellant, if he/she so chooses, may appeal the file to the IRC. The decision of the IRC will be final and binding.
- 7.5.4. In the case of CDT denial of appeal, the notification to the appellant will include: notice of the appellant's right to appeal to the IRC Tribunal Process, and description of the appeal process.

Note: For further information about the IRC Appeals Procedure, please contact the OCIA International Office.

### 7.6. AMENDMENT PROCEDURES: CERTIFICATION STANDARDS

- 7.6.1. Standard proposals and amendments are subject to review at the General Membership Meeting, which is held in the first quarter of each year. Proposed changes in standards must be submitted by any member including chapters, producers at large or processor/handlers to the Standards Committee at least 90 days prior to the Annual General Membership Meeting. The Standards Committee can also formulate amendments for adoption by the general membership. The Standards Committee shall mail a copy of proposed deletions or additions to the last recorded address of each OCIA Associate at least 45 days before the general membership meets to consider their changes as referred to in the Bylaws.
- 7.6.2. Urgent Standards Revision and/or Amendment
  - a. The proposed change can be submitted by any member including Chapters, Producers at Large, Processors/handlers, CGG's or staff members.

- 1. The Urgent Standard revision or amendment proposal shall be submitted to the OCIA International Board of Directors (BOD). The BOD will first determine if the matter is of such an urgency that is should be dealt with under this Standard. Among other criteria "urgent" can be considered as: apparent contradictions within the Standards, issues that could severely damage OCIA's credibility as a certification organization, required compliance with laws governing certification, or issues that are creating serious problems in the accreditation process.
- 2. Standards that have been under clear debate during the latest AGMM cannot be considered under this procedure, unless important new arguments/evidence are brought forward.
- b. The BOD, having determined that the proposed change has satisfied the criteria for "urgent", shall request that the International Standards Committee (ISC) review and consider the proposal. The ISC may seek further information from other entities in order to come to a decision.
  - 1. Any such proposal shall be posted in the *Communicator* and on the OCIA web site for member comment. Any member shall have at least 6 weeks to reply to the proposal and deadlines shall be indicated. Replies shall be communicated to the ISC who shall make a final recommendation to the BOD.
- c. The BOD, acting as the representatives of the membership, may then have the authority to implement Urgent Standard changes by a 2/3 vote of the BOD.
  - Any and all Standard revisions or amendments adopted in this manner shall be published within 15 working days of their acceptance and disseminated to the membership for implementation.
  - 2. Any Standards revision resulting from the use of this Standard shall be confirmed by the members at the next AGMM according to normal Standard changing procedures.

### 7.7. EXTERNAL OVERSIGHT

7.7.1. The Membership Chapter Licensing Committee of OCIA International shall verify that the procedures of chapters meet a consistently high and uniform professional standard.

# **Section Eight**

### 8.0 ORGANIC STANDARDS FOR PERSONAL BODY CARE PRODUCTS

### 8.1. PROCESSING OF PERSONAL CARE PRODUCTS

In order to produce ingredients that are used in personal care products, chemical processing is often required to modify agricultural ingredients (vegetable oils, carbohydrates, proteins, etc.). This chemical processing (which is similar to some of the processing used in foods) is allowed, provided that no prohibited ingredient becomes part of the finished personal care product. Processing aids may be necessary in the production of personal care ingredients. These are allowed, providing that they are completely removed so they do not contribute negatively to the safety, functionality or organic integrity of the finished product.

- 8.1.1. Materials (other than water) used in skin care, hair care, and other body care products (emollients, emulsifying agents, surfactants, humectants, minerals and related compounds), shall be of natural origin excluding petrochemicals.
  - Only pure vegetable glycerins, lanolin, oils and other such natural materials should be used for organic personal care preparations. All petrochemical derivatives are prohibited.
  - b. All processing shall take place in OCIA-certified or OCIA-recognized-certified facilities.
  - c. The use of mined products shall be allowed as long as no prohibited materials are used to extract or further process the material.
  - d. Inorganic materials, including inorganic acids (such as hydrochloric acid), inorganic bases (such as sodium hydroxide) and elements (such as nitrogen, hydrogen, sulfur and oxygen) shall be allowed to modify agricultural ingredients to make them more useful in personal care products.
- 8.1.2. Given their functional need in many cosmetics and personal care products and having no true certified organic alternatives, non-certified ingredients are allowed under the following conditions:
  - a. Because of the inherent differences between personal care products and food products, up to 10% of the total formula may contain non-certified ingredients where no alternatives exist.
  - b. These raw materials shall be derived from natural ingredients.
  - c. The remaining 90% of the formula must consist of OCIA-certified or OCIA- recognized-certified organic ingredients.
  - d. The 90-10% rule shall apply for a period of five calendar years from this date, February 13, 1998. The intent is to allow development of certified organic personal care products to begin. At the end of five years, February 1, 2003, the 95-5% rule as applied in other parts of these standards shall apply.
  - e. No artificial colors, flavors or fragrances shall be allowed in organic personal care products.
  - f. The use of processing aids shall be limited to demonstrated need as expressed in the functionality of the ingredient, product, or process.
  - g. Materials used shall be prescribed by this section as well as by the Allowed/Prohibited materials of the OCIA Materials List.
- 8.1.3. Because of natural ingredients, long shelf life, and repeated contact with consumers, preservative systems may be required in most cosmetics and personal care products.
  - a. Naturally derived preservatives must be used when available.

b. Synthetic low impact preservatives of food grade quality may be minimally used where no other alternatives exist. Preservatives shall be within the 10% level of non-certified ingredients.

### 8.2. EXTRACTION METHODS

- 8.2.1. Allowable methods of extraction for the production of essential oils, herbal extracts, vegetable/fruit extracts and oils, sea products, etc. include:
  - a. Water, steam and vacuum distillation.
  - b. Aqueous and alcohol solutions and tinctures.
  - c. Mechanical expression.
  - d. Fractionation using approved distillation/extraction techniques.
  - e. Extraction of resinoids using only ethyl alcohol solvents or other natural solvents.
  - f. Glycolic extracts using non-synthetic glycerin and alcohols.
- 8.2.2. Sea gums (alginates, agar, carrageenan, etc.) may be allowed unless specifically prohibited by other sections of these standards. All products wild harvested must comply with section 4.6.

### 8.3. LABELING OF ORGANIC PERSONAL CARE PRODUCTS

- 8.3.1. The personal care products industry shall demonstrate the highest regard for ethics and integrity in all statements and claims made for products bearing the OCIA seal.
- 8.3.2. Labeling of certified organic personal care products shall conform to applicable local, national and international regulations as well as to the OCIA International Standard(s) for seal use.
- 8.3.3. All ingredients and processing aids shall be labeled as required by the FDA and/or other national and international regulatory agencies or accepted industry standards.

### 8.4. PACKAGING OF ORGANIC PERSONAL CARE PRODUCTS

- 8.4.1. Recognizing that plastic is the most accepted form used for individual packages, it is incumbent upon the organic industry to maintain a leadership position in regard to the search for sustainable materials and processes for the packaging of personal care products.
- 8.4.2 Materials used in the packaging of certified organic products should be from renewable or recyclable resources as much as possible.
- 8.4.3 Energy consumption from production through waste stream should be a major factor when considering elements of packaging.

### 8.5. SAFETY TESTING OF ORGANIC PERSONAL CARE PRODUCTS

- 8.5.1. All certified organic personal care products shall comply with applicable governmental cosmetic safety standards.
- 8.5.2 Recognizing that animal testing is not necessary any more, personal care products shall only be tested for their safety through the best available non-animal testing methods.

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### **Section Nine**

#### 9.0 MATERIALS LIST

### 9.1 DEFINITION OF CATEGORIES

- 9.1.1. ALLOWED (A) materials are materials which may be used on land and crops in the OCIA certification program.
- 9.1.2. RESTRICTED (R) materials are allowed by OCIA only with certain restrictions and only if no alternatives are feasible. The use of these materials is discouraged. In many cases, the permitted use of these materials is dependent on the specific source, and demonstration that the material is free from contamination. In some cases, there is simply not enough information available about a material.
- 9.1.3. PROHIBITED (P) materials may not be used on land in the certification program, or in the production of any crops grown on land in the certification program. At least three years must pass after the use of any prohibited substances before land, which has received that substance, may be certified.

Note: The International Standards Committee has a published policy, which will further clarify the use of allowed, restricted and prohibited materials. This document is available through the International Office.

#### 9.2 GEO/GMO PROHIBITION

9.2.1 The use of products made from organisms that have been modified by genetic engineering techniques (as defined in the Materials List) is prohibited and is in direct violation of the philosophy and organic intent of OCIA.

### 9.3 CROP PRODUCTION MATERIALS LIST

Key: F – Fertilizers, Plant Foods, and Soil Amendments CPA – Crop Production Aids

W – Weed Control N – Nematode Control

D – Disease Control AP – Vertebrate Animal Control

I – Invertebrate Pest Control

Fertilizers, plant foods, and soil amendments – substances that contain one or more recognized plant nutrients and are used primarily for their plant nutrient content. These may be applied to the soil or to the foliage of plants.

Crop Production Aids – usually used in conjunction with other materials and are often not directly applied to the crop or soil. (e.g. adjuvants, equipment cleaners)

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Acetic Acid	CPA, D,	A	Used as a drip irrigation cleaner, equipment cleaner and as an adjuvant to adjust the pH of sprays. Must be from natural sources.
Adhesive Traps	AP, I	A	May not be combined with otherwise prohibited synthetic pesticides.
Adjuvants, allowed	СРА	A	Non-synthetic adjuvants and adjuvants on the EPA Inert Ingredients List 4 are allowed unless explicitly prohibited. Other materials allowed by OCIA such as aquatic plant products, fish products, and water are allowed as adjuvants.
Adjuvants, prohibited	СРА	Р	All synthetic adjuvants that are not allowed or restricted are prohibited. Specifically, aromatic petroleum solvents and all materials on EPA Inert Ingredients Lists 1 and 2 are prohibited. See "Inert Ingredients".
Adjuvants, restricted	СРА	R	Petroleum distillates and detergents on EPA Inert Ingredients List 3 are regulated and must be reviewed on a case-by-case basis. See "Inert Ingredients", "Petroleum Distillates", and "Detergents".
Alcohol	СРА	R	Non-synthetic forms of ethyl and methyl alcohols are allowed. Synthetic sources of ethyl, methyl, and isopropyl alcohols may be used only as disinfectants or inert ingredients.
Alfalfa Meal	F	A	Allowed.
Alfalfa Pellets	F	A	Used as soil amendment. Typical Analysis: 3-1-2; Unknown growth factors.
Algae	F	A	See 'Aquatic Plant Products'.
Amino Acids, non-synthetic	CPA, F	A	Amino acids produced by plants, animals, and microorganisms that have not been genetically engineered and are extracted or isolated by hydrolysis, or by physical or other non-chemical means are considered non-synthetic. Non-synthetic amino acids may be used as plant growth regulators and chelating agents. See 'Amino Acids, synthetic'.
Amino Acids, synthetic	CPA, F	Р	Amino acids that are considered to be synthetically produced or produced from genetically engineered organisms are prohibited. See 'Genetically Engineered Organisms' for definition.
Ammonia Products	F	P	All synthetic ammonia products are prohibited for crop nutrition including: anhydrous ammonia, aqua ammonia, ammonium forms of micronutrients (See 'Ammoniated Micronutrients'), ammonium nitrate, ammonium phosphate, ammonium sulfate, and ammonium soaps.
Ammonia Products, cleaning agents	CPA	A	Allowed as cleaning agents only. Ammonia products are prohibited for crop use.
Ammoniated Micronutrients	F	Р	Includes ammonium molybdate, ammonium pentaborate, ammoniated zinc chloride, and ferrous ammonium sulfate. See 'Micronutrients, synthetic, prohibited'.
Ammonium Carbonate	CPA	R	Prohibited for crop use. For use as bait in insect traps only. Cannot be in contact with crop or soil.
Ammonium Lignosulfonate	CPA	P	See "Lignin Sulfonates".
Ammonium Nitrate	F	P	Typical analysis: 34-0-0.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Ammonium Soaps	AP	A	For use as an animal repellent. May not come in contact with crops or soil. See Processing and Handling Materials List for use in fruit waxes.
Animal By-Products and Materials	F		Parts of an animal and animal by-products that have specific uses in soil fertility. Includes meat, bone meal and animal urine. See individual products as specifically listed for more information.
Animal Urine	F	A	
Anti-coagulant Rodenticides	AP	P	Includes diphacinone and chlorophacinone. May not be used directly or in bait stations on certified land.
Antibiotics, avermectin	D	P	See 'Antibiotics, prohibited'.
Antibiotics, prohibited	D	P	Natural forms may be used (e.g. garlic). Synthetic antibiotics are prohibited unless explicitly allowed. Avermectin is prohibited in crop production.
Antibiotics, restricted	D	R	See 'Antibiotics, streptomycin sulfate' and 'Antibiotics, terramycin' for restrictions in crop production.
Antibiotics, streptomycin sulfate	D	R	Permitted for use as a fire blight control in apples and pears only.
Antibiotics, terramycin (oxytetracycline calcium complex)	D	R	Permitted for use as a fire blight control in apples and pears only.
Aquatic Plant Products	F	R	Origin of plant material must be considered (possible contamination) and extraction and formulation with synthetic (prohibited materials) is not allowed. Natural (non-synthetic) extracts are allowed. Extraction with synthetic solvents is prohibited except for potassium hydroxide and sodium hydroxide, provided the amount of solvent used does not exceed the amount necessary for extractions. May be stabilized with preservatives that are EPA List 4 of the FDA Generally Regarded as Safe List unless explicitly prohibited. Aquatic plant products are prohibited if they contain other synthetic preservatives, such as formaldehyde or are fortified with prohibited plant nutrients.
Arsenate Treated Lumber	СРА	P	Copper and chromium arsenate Arsenic treated lumber prohibited. Trellises, posts and other structures using arsenate treated lumber require a 36-month transition from installation, treatment or purchase. Arsenate treated lumber cannot be in contact with soil used to grow vegetables (box beds). See 'Treated Lumber'.
Arsenic	I	P	Arsenic applied to crops for pest control is prohibited.
Arthropod Pathogens	I	A	See 'Biological Controls'.
Arthropods	I	A	See 'Biological Controls'.
Ascorbic Acid	CPA	A	Used for cleaning irrigation lines, adjusting the pH of sprays, and as a natural growth promoter.
Ash	F	R	Ash from plant and animal sources only. Ashes from burning minerals, manure, or prohibited materials are prohibited. Wood stove ash is allowed only if not contaminated with colored paper, plastics, or other synthetic substances. Document non-contamination of ash obtained from off-farm sources. (Manure ash is prohibited because burning manure is wasteful of organic matter and nutrients.)
Avermectin	I	Р	** *** * *** <b>/</b>
Azadiracha Indica	D, I	R	See 'Botanical Pesticides'.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Bacillus Thuringiensis	I	R	GMOs are prohibited. Products may not be formulated with prohibited substances. See 'Inert Ingredients, allowed, restricted, and prohibited'.
Bacterial Preparations	F, D, I	A	See 'Microbial Products' and 'Microbial Inoculants'.
Bactericides, synthetic	D	P	
Basalt	F	A	Typical Analysis: 0-0-0; Good slow release trace elements, but only 3% potash. See 'Mined Minerals, unprocessed'.
Bee Repellent, synthetic	I	P	
Beneficial Organisms	AP, D, I,	A	Includes insects, nematodes, decollate snails, microbial fungicides. No genetically engineered organisms.
Bentonite	F, D, I, CPA	A	See 'Mined Minerals, unprocessed'.
Biodynamic Preparations	CDA, D, F	A	For Compost – chamomile (Prep 503), dandelion (Prep 506), oak bark (Prep 505), stinging nettle (Prep 504), valerian (Prep 507), and yarrow flowers (Prep 502) For Disease Control – horsetail spray (Prep 508), and horn silica (Prep 501). For Soil and Plants – horn manure spray (Prep 500), or horn silica (Prep 501). Other biodynamic preps are listed under plant disease, pest management, and production aids. (Standard 2.9.1)
Biological Controls	AP, D, I, N, W	A	Living organisms that benefit plant production through reducing pest populations. Including but not limited to: viruses, bacteria, protozoa, fungi, insects, nematodes, plants and animals. No genetically engineered organisms.
Biosolids	F	P	See 'Sewage Sludge' and 'Human Excrement'.
Biotite Mica	F	A	Typical Analysis: 0-0-1; Very slow release. See "Mined Minerals, unprocessed'.
Bird Baits	AP	P	
Bird Traps and Netting	AP	A	
Bleach	СРА	R	Includes calcium hypochlorite, sodium hypochlorite and chlorine dioxide. Flush water from cleaning irrigation equipment cannot exceed the Maximum Residual Disinfectant Limit under the Safe Drinking Water Act, currently 4 mg/L (4 ppm as Cl <sub>2</sub> ) expressed as Cl <sub>2</sub> . In livestock production for disinfecting facilities only. OK for disinfecting farm implements. Preferred to other synthetic disinfectants. See "Chlorine" for further restrictions.
Blood and Blood Meal	F	R	Use only if free of prohibited materials.
Bone Meal	F	R	Use only if free of prohibited materials.
Bones	F	R	Use only if free of prohibited materials.
Borate	CPA, D,	P	
Borate	F	R	See 'Boron Products'.
Borax	F	R	Also known as sodium tetraborate. See 'Boron Products'.  Mined materials preferred. Use with caution. Build-up of copper
Bordeaux Mixes	D	R	in soil may prohibit future use. See 'Copper Products'.
Boric Acid (H <sub>3</sub> BO <sub>3</sub> )	CPA	A	May be used for structural pest control. Not for use on edible product parts. Cannot be in direct contact with food, soil, or plant tissue.
Boron Products, prohibited	F	P	Ammonium pentaborate is prohibited for use in certified organic systems.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Boron Products, restricted (H)	F	R	May only be used if soil tests show deficiency. The following soluble boron products may be used: sodium tetraborate (borax and anhydrous) and sodium octaborate. See 'Micronutrients' for documentation requirements.
Botanical Pesticides	I	R	Botanical pesticides must be used in conjunction with a biorational pest management program, and cannot be the primary method of pest control in the Farm Organic System Plan. The least toxic botanicals must be used in the least ecologically disruptive way possible. All EPA label restrictions and directions need to be followed including restrictions concerning crops, livestock, target pests, safety precautions, pre-harvest intervals and work re-entry. The NOSB defines the following as non-synthetic botanical pesticides: neem, pyrethrum, rotenone, ryania, and sabadilla.
Calcium Carbide	CPA	P	
Calcium Carbonate	F	A	Used only to supplement other organic fertility practices. Oyster shell flour, dolomite (not slaked) aragonite, lime from sugar processing, and mined CaCO3 are acceptable. See 'Limestone'.
Calcium Chloride	CPA, F	R	Natural sources only. For foliar use to correct bitter pit in apples. Prohibited for soil application because of very high chloride content. May be used as a cotton desiccant only in cases of government declared weather emergencies to meet mandated plow down rates. May be used as a dust suppressant in non-crop areas.
Calcium Hydroxide	F	P	Prohibited as a soil amendment.
Calcium Hydroxide	D	R	Foliar application as a fungicide only.
Calcium Lignosulfonate	F, D	A	See 'Lignin Sulfonate'.
Calcium, Natural	F	A	-
Calcium Nitrate	F	P	
Calcium Oxide	F	P	Also known as quick lime or burned lime.
Calcium Polysulfide	D, I	R	See 'Lime Sulfur'.
Calcium Sulfate	F	A	See 'Gypsum'.
Calcium, Synthetic	F	P	
Cannery Wastes	F	R	May contain prohibited substances. Use only if certified organically grown, documented to be uncontaminated by pesticides, or thoroughly composted prior to use.
Carbamates	I	P	
Carbon Dioxide	CPA	A	Permitted for both post-harvest and soil use. May be used as fumigant in stored commodities.
Carbonates	F	A	OK for a trace element source.
Cardboard	F	R	Corrugated board contains synthetic preservatives and binders that are prohibited as soil amendments. Cardboard that is not waxed or impregnated with fungicide may be used as mulch or compost.
Cardboard, fungicide	F	P	Fungicide impregnated cardboard is prohibited for use as a mulch
impregnated			or compost ingredient.
Cardboard, waxed	F	R	Paraffin contained in waxed cardboard used as a mulch or compost ingredient cannot exceed .75% by weight of total feedstock.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Carrot Oil	W	Р	Use of petroleum oils to control weeds in carrot crops is prohibited.
Caustic Potash	CPA	P	Prohibited for crop use. See 'Potassium Hydroxide'.
Caustic Soda	CPA	A	Standard 4.2.2.e and 4.3.3.e
Chelates, allowed	СРА	A	Natural chelates (including, but not limited to: non-synthetic amino acids, citric acid, tartaric acid, and other di- and tri- acid chelates) and lignin sulfonate are allowed. See 'Amino Acids, non-synthetic', 'chelates, prohibited', and 'lignin sulfonates'.
Chelates, prohibited	СРА	P	Synthetic chelating agents are not allowed with micronutrients unless they are explicitly allowed for such use. Prohibited chelating agents include DTPA, EDTA, HEDTA, NTA, glucoheptonic acid and its salts, and synthetic amino acids. See 'Amino Acids, synthetic'.
Chilean Nitrate	F	P	See 'Sodium Nitrate'.
Chitin Nematicides	N	R	Must be from a natural source such as sea animals. Must not contain prohibited pesticides or other prohibited substances.
Chlorinated Hydrocarbons	I	P	
Chlorine (Cl)	СРА	R	Highly toxic and very volatile. Use with caution. Includes Sodium Hypochlorite. See 'Bleach'.
Citric Acid	СРА	A	Used as a drip irrigation cleaner, equipment cleaner, chelating agent, and pH adjuster.
Citrus Products	I	A	Natural source; may not contain any prohibited substances.
Clay	F	A	See 'Mined Minerals, unprocessed'.
Cocoa Bean Hulls	F	R	May contain residues of pesticides banned in U.S. Use only if certified organically grown, documented to be residue-free, or thoroughly composted prior to use. See 'Compost' listing for more information.
Colloidal Phosphate	F	A	Typical analysis: 0-2-0; Limited value unless mixed with manure; 18% total P2P5.
Composts	F	A	Composting refers to the process in which organic materials are digested aerobically or an aerobically by microbial action. In order to effectively stabilize the nutrients in compost, neutralize pesticide residues and kill weed seeds and pathogens, compost piles must reach a temperature of 130° F (55° C) for a minimum of four days. Compost should remain moist but not waterlogged for the whole decomposition period for best results. Written documentation of source of off-farm materials is required. No OCIA prohibited materials may be used in composting, including synthetically fortified compost starters. Growers should obtain a list of the main ingredients in any purchased composts. See also 'Microbial Compost Inoculants'.
Compost Tea	F	A	Compost must be made from material that meets compost standards.
Copper Hydroxide	D	R	Considered a Bordeaux. More toxic than copper sulfate, but application rate is less. See 'Copper Products'.
Copper Products	D	R	Copper hydroxide, copper oxide, and copper sulfate may be used as preservatives for wood.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Copper Products, prohibited	D, W, F	P	Copper ammonia base, copper ammonium carbonate, copper nitrate, and cuprous chloride are prohibited sources of copper used for plant nutrients. Copper products may not be used as a herbicide. See 'Copper Products, restricted' and 'Micronutrients, synthetic, prohibited'.
Copper Products, restricted	CPA, D, I, F	R	Copper compounds that are exempt from tolerance by the EPA may be used as algicides, bactericides, fungicides, invertebrate pest controls, or wood treatments. These include: Bordeaux mix, copper hydroxide, copper sulfates, copper oxychloride, and copper oxides. They must be used in a manner that prevents excessive copper accumulation in the soil. Build-up of copper in soil may prohibit future use. Use with caution. No visible residue is allowed on harvested crops. Basic copper sulfate, copper oxide, copper sulfate, and copper oxysulfate may be used to correct documented copper deficiencies. A maximum of 7 lbs/acre (8 kg/ha) per year can be used (on a rolling average basis).
Copper Salts	D, I	R	See 'Copper Products'.
Copper Sulfate	D	R	Considered a Bordeaux. Use with caution and restraint. May cause a copper accumulation in soil. See 'Copper Products'.
Coppers, fixed	D	R	See 'Copper Products'.
Corn Calcium	F	A	From non-GMO source. Corn calcium is a soluble by-product of corn fructose extraction and is a source of foliar trace minerals, sugar, and carbon.
Corn Gluten	F	A	From non-GMO source.
Corn Gluten	W	R	From non-GMO source. The need for and use of corn gluten for weed control must be explained in the Farm Organic System Plan.
Cotton Gin Trash	F	R	This material is potentially more contaminated than cottonseed meal because many residues are in the hull of the cottonseed. Composting is REQUIRED before use unless certified organic. See 'Cottonseed Meal'.
Cottonseed Meal	F	R	May contain substantial pesticide residues. Use only if documented to be residue-free or it MUST be composted prior to use. See "Compost" for guidelines. Proper composting has been shown to break down toxic residues. Use only if free of prohibited materials. Standard 2.8.2.c.
Creosote	CPA	P	See 'Arsenate Treated Lumber' and 'Treated Lumber'.
Crop Residues	F	A	Crop residues and green manures produced on the farm are allowed. Materials brought onto the farm are restricted. See 'Mulches'.
Cryolite, mined sources and synthetic	I	P	Synthetic material has very high environmental persistence. See 'Sodium Fluoaluminate, reacted'.
Cytokinins	CPA	A	A botanical. Only natural sources allowed.
Derris Root	I	R	See 'Rotenone'.
Detergents	СРА	R	Allowed as equipment cleaners. Also includes emulsifiers, surfactants and wetting agents used as inert ingredients. Evaluated on a case-by-case basis. See 'Inert Ingredients, allowed, restricted, and prohibited'.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Diatomaceous Earth	I	R	Non-heated forms only are allowed. Use a dust mask when applying to prevent lung irritation. Make sure no synthetic pesticides or synergists are added.
Dimethyl Sulfoxide		P	
Dolomite, fired	F	P	Fired dolomite is magnesium oxide and prohibited as a fertilizer.
Dolomite, mined	F	A	Magnesium carbonate and calcium carbonate. Must be from natural source. May cause a build-up of Magnesium. Use with caution.
Dolomite, slaked	F	P	This is magnesium hydroxide. See 'Lime, slaked'.
Dormant Oils	D, I	A	Approved for use as a dormant spray on woody plants only. May not contain any prohibited insecticides or other prohibited ingredients. See 'Suffocating Oils' and 'Petroleum Distillates'.
Drip Irrigation Cleaners, Allowed	CPA	A	Allowed drip irrigation cleaners include vinegar, citric acid, and other naturally occurring acids.
Drip Irrigation Cleaners, Prohibited	CPA	P	Cleaners, synthetic. Prohibited drip irrigation cleaners include nitric, phosphoric, and sulfuric acids.
Drip Irrigation Cleaners, Restricted	CPA	R	Restricted drip irrigation cleaners include bleach and detergents. See 'Bleach' and 'Detergents' for restrictions.
Dust Suppressants, Allowed	CPA	A	Water, lignin sulfonate and non-synthetic plant, mineral, or animal-based materials.
Dust Suppressants, Prohibited	C{A	Р	All materials for dust suppression not specifically allowed or restricted are prohibited, including, but not limited to, asphalt and all petroleum products. Certifiers should require maintenance of an appropriate buffer zone (i.e. 25 feet) between crops and the area treated with prohibited dust suppressants for three years following application.
Dust Suppressants, Restricted	СРА	R	Calcium chloride, magnesium chloride, emulsified plant resins and tall oils (a by-product of pulping process of pinewood). Long-term use is discouraged. Not allowed for the suppression of roadside vegetation.
Eggshell Meal	F	R	Only if free of prohibited materials. See 'Animal By-products and materials'.
Enzymes	F	A	Acceptable if derived microbiologically from natural materials and not fortified with synthetic plant nutrients.
Epsom Salts (Magnesium Sulfate)	F	A	May only be used with a documented Magnesium deficiency. See 'Magnesium Sulfate'.
Equipment Cleaners, allowed	CPA	A	Acetic acid, carbonic acid, citric acid, hydrogen peroxide, soap, water, and other non-synthetic cleaners.
Equipment Cleaners, prohibited	СРА	Р	All synthetic equipment cleaners that are not explicitly allowed or restricted are prohibited. Aromatic petroleum solvents are prohibited.
Equipment Cleaners, restricted	CPA	R	Bleach and detergent are restricted for cleaning spray tanks and other farm equipment. See 'Bleach' and 'Detergents'.
Essential Oils	AP, F, D, I, N, W	A	Plant derived. See 'Plant Extracts'.
Ethoxyquin	F	R	Use as a fertilizer.
Ethylene, synthetic (CH <sub>2</sub> CH <sub>2</sub> )	СРА	R	May be used only in cases where use is deemed essential to get the crop to market and requires chapter review committee pre- approval. Only gas of natural origin may be used.

### CROP PRODUCTION MATERIALS LIST

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Ethylene Oxide	CPA	R	Growers wishing to use it must obtain consent of the chapter review committee first.
Exhaust Fumes	AP	P	
Feather Meal	F	R	From known sources and free of contaminants.
Feldspar	F	A	Only from natural sources. See 'Mined Minerals, unprocessed'.
Ferric and Ferrous Compounds, prohibited	F	R	Includes ferric chloride and ferrous ammonium sulfate. Ferric and ferrous compounds are prohibited for pest, weed and disease control. See 'Iron Products, prohibited' and 'Micronutrients, synthetic, restricted'.
Ferric and Ferrous Compounds, restricted	F, I	R	Includes ferric oxide, ferric sulfate, and ferrous sulfate. See 'Iron products, restricted' and 'Micronutrients, synthetic, restricted'.
Fertilizer Products, blended, allowed	F	A	If composed entirely of allowed materials. See classification for each separate ingredient. Inert ingredients for pelletizers, etc. must be individually approved or be from natural sources.
Fertilizer Products, blended, prohibited	F	P	Prohibited if the product contains any prohibited materials.
Fertilizer Products, blended, restricted	F	R	Restricted if the product contains at least one restricted and not prohibited material. Growers using blended fertilizers containing restricted ingredients must adhere to the restrictions for all of the restricted products.
Fiber Row Covers	CPA	A	See 'Plastics for Mulch, Row Covers, and Solarization'.
Fish Emulsions and Solubles	F	A	See 'Fish Products'.
Fish Hydrolysate	F	A	See 'Fish Products'.
Fish Meal and Powder	F	A	See 'Fish Products'.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Fish Products, multi- ingredient	F	R	Liquid fish products that are blended with other allowed materials must contain at least 90% fish by liquid weight and have a final pH of no less than 3.5. Liquid fish products can be pH adjusted using citric, sulfuric, or phosphoric acid. Products may be stabilized with preservatives that are EPA List 4 or the FDA Generally Regarded as Safe List, unless explicitly listed as prohibited. Fish products are prohibited if they contain other synthetic preservatives or are fortified with otherwise prohibited plant nutrients.
			Liquid fish may be blended with the following allowed materials: 1. Potassium Sulfate 2. Aquatic products that are not extracted with synthetic solvents, or stabilized with synthetic acids, preservatives, or contain other synthetic nutrients. 3. Approved minerals and humates as long as these do not contain added synthetic stabilizers, extractants, preservatives, or nutrients. 4. Other approved nitrogen sources, such as dried blood or feather meal, as long as the material does not contain added synthetic stabilizers, preservatives, or nutrients.
			Single ingredient fish products that do not contain added synthetic stabilizers, extractants, preservatives, or nutrients may be blended at any percentage.
Fish Products, single ingredient	F	A	Liquid fish products that are blended with other allowed materials must contain at least 90% fish by liquid weight and have a final pH of no less than 3.5. Liquid fish products can be pH adjusted using citric, sulfuric, or phosphoric acid. Products may be stabilized with preservatives that are EPA List 4 or the FDA Generally Regarded as Safe List, unless explicitly listed as prohibited. Fish products are prohibited if they contain other synthetic preservatives or are fortified with otherwise prohibited plant nutrients.
Foliar Sprays, allowed	F	A	Allowed if composed entirely of allowed materials. Foliar feeding programs are not a substitute for a soil-building program that is required for certification.
Foliar Sprays, prohibited	F	P	Prohibited if the product contains any prohibited materials.
Foliar Sprays, restricted	F	R	Restricted if the product contains at least one restricted material and not prohibited materials.
Food by-products	F	R	Composted and free of contaminants. Standard 2.8.1.g
Forestry by-products	F	R	Composted and free of contaminants. Standard 2.8.1.g
Formaldehyde (H-CHO)	CPA	Р	
Fruit waxes	СРА	R	Must not contain any synthetic substances. May not be used on edible plant parts. Acceptable materials include carnuba or wood-extracted wax.
Fulvic Acids	F	A	Fulvic acids are the fractions of humates soluble at neutral to acid pH. May be extracted from allowed humates by use of hydrolysis or naturally occurring acids. See 'Humates'.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Fumigants	D, I	P	Cannot be used for soil treatment, post-harvest handling or in packing materials.
Fumigants Natural	I	A	Must be from a natural source. Includes carbon dioxide and nitrogen.
Fungicides, synthetic	D	P	•
Garlic	I	A	
Genetically Engineered Organisms (GEO's)	CPA, D, I, F, N, W, AP	P	Genetic engineering includes recombinant DNA, cell fusion, micro- and macro Sencapsulation, gene deletion and doubling, introducing a foreign gene, and changing the positions of genes. It shall not include breeding, conjugation, fermentation, hybridization, in-vitro fertilization or tissue culture. (Inputs, processing aids, and ingredients shall be traced back one step in the biological chain to the direct source organism from which they are produced to verify that they are not derived from genetically modified organisms.)
GEO/GMO	CPA, D, I, F, N, W, AP	Р	See 'Genetically Engineered Organisms'.
Gibberellic Acid	СРА	R	Acceptable if made from fermentation process and not fortified with synthetic substance. Fermentation process must not use genetically engineered organisms. See 'Growth Regulators'.
Glucose	F	A	
Granite Dust	F	A	Sources that are mixed with petroleum products, such as from stone engraving, are prohibited. See 'Mined Minerals'.
Green Manure	F	A	Crop residues and green manure produced on the farm are allowed. Materials brought onto the farm are restricted. See 'Plants'.
Greensand	F	A	Also known as glauconite. See 'Mined Minerals, unprocessed'.
Growth Regulators (enhancers) for plants, allowed	СРА	A	Plant or animal based. Natural plant hormones such as gibberellic acid, Indol Acetic Acid (IAA) and cytokinins are allowed. Vitamin B1 is also allowed. Must not contain prohibited materials. See 'Gibberellic Acid' and 'Cytokinins'. (Standard 2.8.4.b.)
Growth Regulators (enhancers) for plants, prohibited	СРА	P	Includes all formulations of the synthetic propagation hormone IBA (Indol-3-butyric acid), as well as the growth regulator NAA (1-Napthalene acetic acid).
Guano, Bat or Bird	F	A	Use must not result in excess nitrate accumulation in soils or plants. Must be decomposed and dried deposits from wild bats or birds. Domesticated fowl excrement is considered 'manure', not 'guano'. See 'Manures, raw, uncomposted' for regulation on uncomposted manure. See 'Compost'.
Gypsum by-product	F	Р	Gypsum produced as a by-product of superphosphate manufacture (the reaction of rock phosphate and sulfuric acid), from precipitation of sulfur dioxide gas with limestone, or from dry-wall rejects is prohibited.
Gypsum, mined source	F	A	Only mined forms are acceptable. See 'Gypsum, by-product'.
Herbal Preparations	CPA, I, N, AP, D	A	May not be extracted with synthetic chemicals.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Herbicides, plant and animal derived	W	R	The need for and use of herbicides derived from plant or animal sources must be explained in the Farm Organic System Plan.
Herbicides, synthetic	W	P	
Hoof and Horn Meal	F	R	Caution may contain additives or contaminates.
Hormones	CPA		See 'Growth Regulators (enhancers) for plants, allowed and prohibited'.
Human Excrement	F	R	Shall not be used on vegetation for human consumption, except where all sanitation requirements have been met. Sewage sludge and septic waste are prohibited. Procedures shall be in place that prevents transmission of pests, parasites, and infectious agents.
Humates	F	R	Caution may contain additives or contaminates. Humates are usually natural deposits that are mined and may have high trace mineral contents. Acceptable if derived from leonardite, lignite, or coal; not acceptable if fortified with synthetic nutrients.
Humic Acid Derivatives, prohibited	F	P	Humic acids extracted by ammonium hydroxide, sodium hydroxide, or synthetic bases other than potassium hydroxide are prohibited. Humic acid derivatives fortified with prohibited synthetic fertilizers, including potassium hydroxide, are prohibited.
Humic Acid Derivatives, restricted	F	R	Extracts from non-synthetic humates by hydrolysis or other non-synthetic method are allowed. Potassium hydroxide may also be used as an extractant but may not be used to fortify the potassium analysis. All other sources of humic acid derivatives are prohibited.
Hydrated Lime, prohibited	F	Р	Prohibited as a soil amendment.
Hydrated Lime, restricted	D	R	Foliar application as a fungicide only.
Hydrogen Peroxide H <sub>2</sub> O <sub>2</sub>	CPA, D	A	
Inert Ingredients, allowed	СРА	A	Minimum risk (EPA list 4) inert ingredients in EPA registered pesticides are allowed unless explicitly prohibited.
Inert Ingredients, prohibited	СРА	Р	Inert ingredients of toxicological concern (EPA list 1). Inert ingredients of probable toxicological concern (EPA list 2) are prohibited in EPA registered pesticides.
Inert Ingredients, restricted	СРА	R	Inert ingredients that have not been categorized by risk (EPA list 3) and are not explicitly allowed or prohibited must be evaluated on a case-by-case basis for all EPA registered pesticides. In such cases, OCIA relies on the evaluations of the Organic Materials Review Institute (OMRI). After January 1, 2002, all inerts on EPA list 1, 2, and 3 will be prohibited.
Inoculants	F	A	No additives. See 'Microbial Products' and 'Microbial Inoculants'.
Insect Extracts	I	A	("Bug juice", etc.).
Ionizing Radiation, prohibited	D, I	Р	e.g. irradiation or picowaved in food processing is prohibited.
Ionizing Radiation, restricted	CPA	R	Irradiation may only be used to sterilize carrier materials for legume inoculants used for crop production.
Iron Products, synthetic, prohibited	F, I	P	Includes ferrous ammonium sulfate, ferric chloride, iron nitrate, and synthetic iron phosphate. See 'Micronutrients, synthetic, prohibited'.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Iron Products, restricted	F	R	Ferric oxide, ferric sulfate, ferrous sulfate, iron citrate, iron sulfate, or iron tartrate may be used to correct documented deficiencies of iron. Ferric and ferrous compounds are prohibited for pest, weed and disease control. See 'Micronutrients, synthetic, restricted'.
Iron Sulfates	F	R	See 'Iron Products, restricted'.
Kelp Extracts	F	A	Not acceptable if containing formaldehyde or fortified with synthetic plant nutrients. See 'Aquatic Plant Products'.
Kelp Meal	F	A	
Kelp, Unprocessed	F	A	
Kieserite	F	A	See 'Mined Minerals, unprocessed'.
Killed Microbial Pesticides	I	P	These have been genetically engineered and therefore prohibited.
Kiln Dust	F	R	Toxic if used in excess, apply with caution. Requires analysis to assure products are free from contaminants.
Langbeinite	F	A	Also known as Sulfate of Potash Magnesia. See 'Mined Minerals, unprocessed'.
Latex Paint	CPA	A	No direct crop or soil contact allowed. See 'Plant Protectants' and 'Tree Seals'.
Leaf Mold	F	A	
Leather By-products	F	P	Residues from hide processing. Likely to be highly contaminated with synthetic metals or solvents that are used in leather processing. Includes leather meal, leather tankage, and leather dust.
Lignin Sulfonates	СРА	A	Lignosulfonic acid, calcium lignosulfonate and sodium lignosulfate are allowed as a chelating agent, inert ingredient, and dust suppressant. Ammonium lignosulfonate is prohibited.
Lime, burned	F	P	Calcium oxide, also known as quick lime.
Lime, slaked, prohibited	F	Р	Use as fertilizer is prohibited. See 'Calcium Hydroxide' Also known as quick lime
Lime, slaked, restricted	D	R	See 'Calcium Hydroxide'. Also known as hydrated lime.
Lime Sulfur	D, I	R	(Includes Calcium Polysulphide). Restricted to foliar application as a fungicide. May be used as an insecticide only if there are no feasible alternatives.
Limestone	F	A	Oyster shell flour, dolomite, and mined CaCO <sub>3</sub> are acceptable. Sugar beet lime is a restricted material. See 'Sugar Lime'.
Lye	CPA	P	Prohibited for use in crop production such as for adjusting pH. See 'Potassium Hydroxide' and 'Sodium Hydroxide'.
Magnesium Carbonate	F	R	Natural sources only and free of prohibited substances. Naturally occurring in dolomite and magnesite.
Magnesium Chloride	CPA, F	R	Natural sources only. Use discouraged because of high chloride content.
Magnesium Oxide	F	P	Produced by heating magnesium carbonate.
Magnesium Sulfate	F	A	Used only to supplement other organic fertility practices. Synthetically produced Epsom salts are prohibited. See 'Epsom Salts'.
Manganese Products, prohibited	F	Р	Manganese chloride, manganese nitrate, and potassium permanganate are prohibited. See 'Micronutrients, synthetic, prohibited'.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Manganese Products, restricted	F	R	Manganous oxide and manganese sulfate may be used to correct documented manganese deficiencies. See 'Micronutrients, synthetic, restricted'.
Manure, Aged	F	A	May be used with same restrictions as raw un-composted manures.
			OR
			May be used, as compost, <u>only</u> if documented to be at least 2 years old, to consist <u>only</u> of animal manure and plant based bedding or grasses, and <u>only</u> if documented to be free of human pathogens.
Manure, animal	F	A	Must be aerobically composted, preferably by turning and keeping moist and warm until well broken down. <i>See definition of composting under "Compost"</i> . Raw manures are considered restricted materials. See 'Manures, raw'. See "Manure, aged."
Manure, processed	F	R	Processed manure products are formulated from raw manure that has been heated to temperatures of over 150° F for one hour or more, dried to a moisture level of 12% or less, preserved or frozen. Because these products are highly soluble and have reduced biological activity, they should not be used as a primary source of nutrients. See 'Manure, tea'.
Manures, raw, uncomposted	F	R	Can be harmful to soil life and cause unhealthy levels of nitrates in produce and salt buildup in soils. Can also contain pesticide residues depending on what the animal has been eating. Composting strongly recommended since it can stabilize the nitrogen content, kill weed seeds, and help neutralize pesticide residues. See "Manures, Animal". Fresh and "sheet composted" manures are allowed only in MODERATE amounts and as a supplement to other soil-building practices. Please be especially careful when using on crops which can accumulate nitrates such as leafy greens, radishes and beets. Uncomposted manure that has been turned and free of internal frost for at least six months prior to application is permitted. Fresh, aerated, anaerobic, or "sheet composted" manures are permitted on perennials or crops not for human consumption, or when a crop for human consumption is not to be harvested for at least four months following the application. At application the soil must be sufficiently warm (about 10 C) and moist to ensure active microbial digestion. On radishes, leafy green, the beet family, and other known nitrate accumulators fresh, aerated, anaerobic, or "sheet composted" manures may not be applied less than four months before planting and the soil must be sufficiently warm and moist to ensure active microbial digestion. All manure sources and management techniques must be clearly documented as a part of the certification process.
Manure tea	F	R	Must be used with other soil building practices. See 'Manures, raw'.
Meat By-Products and Waste	F	R	May not contain prohibited materials.
Meat Meal	F	R	Many not contain prohibited materials.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Methyl Bromide	D	P	
Methyl Sulfoxide	F	P	
Mica	F	A	See 'Mined Minerals, unprocessed'.
Microbial Inoculants	F, I, D	A	Including rhizobia bacteria, mycorhizzae, azolla, Azotobacter, etc. See 'Microbial Products'.
Microbial Products	F, I, D	A	Naturally occurring microbes only. Including rhizobia bacteria, mycorhizzae fungi, azolla, Azotobacter, yeast, and other microorganisms. Microbial products may be used on compost, plants, seeds, soils, and other components of the agroecosystem. Genetically engineered organisms or viruses are not allowed. No synthetic preservatives or fortifications are allowed. The liquid preparations often contain sodium sulfites, which are NOT allowed. Powdered forms are recommended because of their natural origins and because they have been shown to generally be more effective.
Micronutrients, synthetic, prohibited	F	P	Synthetic micronutrients in ammonium chloride, nitrate, or polyphosphate forms are not allowed. See 'Ammoniated Micronutrients'. Micronutrients may not be used as a defoliant, herbicide, or desiccant. Synthetic carriers, fillers, chelating, and complexing agents not explicitly allowed are prohibited. See 'Chelates, prohibited'. These include heavy metals, industrial byproducts, fritted glasses, and other incidental ingredients, unless those substances are within established thresholds. See 'Micronutrients, synthetic, restricted' and 'Trace Minerals, natural'.
Micronutrients, synthetic, restricted	F	R	Materials derived from natural sources are recommended. Synthetic sources of micronutrients are allowed only to correct documented deficiencies that are determined by soil or plant tissue tests. Growers must submit a long-term plan to correct and avoid nutrient deficiencies and imbalances. Micronutrients include: boron, cobalt, copper, iodine, iron, manganese, molybdenum, selenium, and zinc. Carriers, fillers, chelating agents, and complexing agents must either be non-synthetic or explicitly allowed. Synthetic micronutrients may not contain heavy metals in excess of the thresholds listed in Table 1 at the end of this list. See 'Micronutrients, synthetic, prohibited' and 'Trace Minerals, natural'.
Milk	F, D	R	May not come from cows treated with BGH and must be free from other prohibited materials.
Mined Minerals, unprocessed	F	A	A mined mineral must not have undergone any change in the molecular structure through heating or combining with other substances. Mined minerals are regarded as supplements to a balanced organic soil-building program. Some of the minerals, which are mined, can also be made synthetically or are byproducts of industry; investigate the source of any new material. Acceptable if the material is not processed or fortified with synthetic chemicals. Examples of natural mined minerals include granite dust, greensand, kieserite, limestone, nutri-min, phosphate rock, soil-min, and zeolite.
Mineral Oils	D, I	R	See 'Petroleum Distillates'.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
			OCIA-recognized-certified organic is allowed. Non-organic
Molasses	F	A	molasses may be used provided no organic molasses is available.
Moth Balls/Crystals	I	P	See 'Naphthalene' and 'Paradichlorobenzene'.
			It is recommended that organic materials to be used for mulch be
Mulches	F, W	A	documented to be pesticide-free. See restrictions under 'Plastic
			Mulch'. Biodegradable plastic mulch is still synthetic so that the
			same restrictions apply as for plastic.
Muriate of Potash	F	R	Must be derived from a natural, mined source and applied in a
			manner that minimizes chloride accumulation in the soil.  Documented deficiency determined by a soil test. Shall be
			Documented deficiency determined by a soil test. Shall be obtained by physical procedures but not enriched by chemical
			processes.
			May contain substantial pesticide residues. Use only if
Mushroom Compost	F	R	documented to be residue-free or it MUST be recomposted before
			use. See 'Compost' for guidelines.
Mycorhizae	F, D, I	A	Must be naturally occurring and not a product of genetic
•	, ,		engineering technology. (Standard 2.9.1)
Nanotechnology Products	F, W, D,	P	All products made by using nanotechnology
	I, CPA,		as an extension of GMO technology are prohibited.
	N, AP		<i>o,</i> 1
Nanotechnology Products	F, W, D,	P	The use of artificial nanoscale processes, particles or structures is
and Processes	I, CPA,		prohibited.
	N, AP		*Notwithstanding the above, the use of naturally occurring
NY 1.1 1	т .	D	nanoparticles, as in traditional biodynamic practice, is allowed.
Naphthalene Neem and Neem Extracts,	I I, D, N	P A	See 'Botanical Pesticides'.
powder and seeds	1, D, N	A	See Botanical resticities.
Nematocides, Synthetic	N	P	Synthetically compounded.
Nicotine Nicotine	I	P	Prohibited because of extreme toxicity.
Niter	F	P	Also known as potassium nitrate. No mined sources of niter have
Titles	1	•	been verified at this time.
Nitrate of Soda-Potash	F	P	
Nitrogen Compounds,	LF	P	All uses are prohibited, including an inert ingredient.
Synthetic			
Organophosphates	I	P	
Oyster Shell Lime	F	A	Ground shells from oysters.
Paper	W	R	Glossy paper and colored ink are prohibited.
		_	Only for use as a starter medium. Must not contain artificial
Peat Moss	CPA	R	wetting agents. Wear a dust mask when working with peat moss
			as the dust from it has been shown to sometimes cause lung
Pelargonic Acid	CPA, W	P	infections.
Perlite	F	A	
Permanganate of Potash	F	P	
Pesticides, synthetic	D, I, N,	P	All synthetically derived pesticides not specifically mentioned by
	W W	•	name.
	. , ,	l .	1

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Petroleum Distillates	СРА	R	Restricted to narrow range (415 F-440 F) petroleum derivatives. Aromatic petroleum solvents including but not limited to benzene, naphthalene, toluene, and xylene are prohibited. Allowed for use in organic production as suffocation or stylet oils on foliage and as inert ingredients. Direct application to harvested crops is prohibited. Petroleum distillates may not be used as either weed or carrot oils. See also 'Inert Ingredients'.
Petroleum Oil, allowed	D, I	A	See 'Dormant Oils', 'Summer Oils', and 'Petroleum Distillates'.
Petroleum Oil, prohibited	W	P	See 'Dormant Oils', 'Summer Oils', and 'Petroleum Distillates'.
Petroleum Solvents, aromatic	CPA	P	These petroleum fractions are prohibited because they are definite health hazards.
pH Buffers	CPA	R	Must be from a natural source such as citric acid or vinegar. Lye and sulfuric acid are prohibited.
Pheromones	I	A	Naturally Derived pheromones are recommended. May not be combined with synthetic pesticides.
Phosphate Rock	F	A	Used only to supplement other organic fertility practices. Must not be fortified or processed with synthetic chemicals.
Phosphoric Acid	F	P	· ·
Piperonyl Butoxide	СРА	Р	Although this material is derived from a plant source originally, it has gone through a substantial molecular change in its extraction and processing. Check the labels on botanicals to make sure this is not in the product. See 'Synergists, synthetic'.
Plant Extracts, essential oils	AP, F, W, D, I, CPA	A	Parts of plants that have specific uses in pest control or fertility (i.e. marigolds, sesame chaff and equisetum [horsetails]) are permitted unless specifically restricted or prohibited. Allowed extractants include cocoa butter, lanolin, animal fats, alcohols, and water.
Plant Preparations	CPA, D, F, I, AP, W	A	Allowed unless specifically restricted or prohibited. See 'Plant Extracts'.
Plant Protectants, natural	СРА	A	Materials which protect plants from harsh environmental conditions such as frost and sunburn, or from infection, or the build-up of dirt on leaf surfaces, or injury by a pest. Natural substances allowed including Diatomaceous Earth, pine oil, pine resin and yucca. OCIA prohibits the use of interior latex paint on trees to prevent sunburn. Allow white latex paint and whitewash on fruit trees to prevent sunburn.
Plant Protectants, synthetic	CPA	Р	All synthetic plant protectants are prohibited unless specifically allowed.
Plant – derived pesticides	I	R	See 'Botanical Pesticides'.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Plants	D, I, W,	A	Crop residues and green manures produced on the farm are allowed. Materials brought onto the farm are restricted. Includes plant preparations of aquatic or terrestrial plants or parts of plants such as cover crops, green manures, crop wastes, hay, leaves, and straw. Parts of plants used for crop protection such as marigolds, sesame chaff, and Equisetum (horsetail) are permitted. Parts of plants used as insect repellents, such as cinnamon and garlic, are permitted. Botanical insecticides are restricted. Plants used as mulch for weed suppression and parts of plants with allelopathic properties such as rye grass and brassicas are permitted. See 'Plant Preparations', 'Plant Extracts', 'Corn Gluten', and 'Botanical Pesticides'.
Plants	F	A	Includes plant preparations of aquatic or terrestrial plants or parts of plants such as cover crops, green manures, crop wastes, hay, leaves, and straw. Parts of plants used as soil amendments and foliar feeds are permitted. Crop wastes that potentially contain significant levels of pesticide contaminants are restricted. See 'Cocoa Bean Hulls', 'Cotton Gin Trash', 'Cottonseed Meal' and 'Plant Extracts'.
Plastics for: Mulch, Row Covers, Solarization, and Silage Wrappings.	CPA, W	R	Only products based on polyethylene and polypropylene or other polycarbonates are allowed. Polychloride-based products are prohibited. Must not be incorporated into soil or left in field to decompose and they must not be burned into the farmland. Biodegradable plastic mulches are still made synthetically and so the same restrictions apply of not being incorporated into the soil.
Pomaces	F	R	Feedstock must be from certified organically grown fruits or vegetables, documented free of contaminants, or aerobically composted prior to use.
Potassium Bicarbonate	D	A	For disease control.
Potassium Chloride	F	R	Must be derived from a natural, mined source and applied in a manner that minimizes chloride accumulation in the soil. Documented deficiency determined by a soil test. Shall be obtained by physical procedures but not enriched by chemical processes.
Potassium Hydroxide (KOH)	CPA	Р	Prohibited for crop use.
Potassium Nitrate	F	P	
Potassium Permanganate, (KMnO <sub>4</sub> )	F	Р	
Potassium Sulfate, non- synthetic (K <sub>2</sub> SO <sub>4</sub> )	F	R	Only if from langbeinite or other natural sources. See 'Mined Minerals, unprocessed'.
Potassium Sulfate, synthetic	F	P	Includes potassium sulfate produced by acidulation or chemical reaction.
Potting Soil	F		See 'Transplant Media'.
Pressure Treated Lumber, prohibited	СРА	P	All synthetic wood preservatives are prohibited unless explicitly allowed or restricted. Lumber treated with Arsenic compounds (e.g. Chromated Copper Arsenate and Fluor-Chrome-Arsenate-Phenol). Creosote, or Pentachlorophenol treated lumbers are prohibited. See 'Arsenate Treated Lumber'.
Pressure Treated Lumber, restricted	CPA	R	See 'Copper Products'.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Pulverized Rock	F	A	See 'Mined Minerals, unprocessed'.
Pumice	F	A	, ,
Pyrethrins, Non-synthetic	I	R	Only naturally occurring forms are allowed. Pyrethroids are prohibited. Synthetic additives are not allowed. Extraction method must be verified. Must not include piperonyl butoxide. See 'Piperonyl Butoxide'.
Pyrethrins, Synthetic-	I	Р	Those extracted through Prohibited means are deemed synthetic and are prohibited for use in organic crop production.
Pyrethroids	I	P	Synthetic form of pyrethrins.
Pyrethrums	I	R	Only naturally occurring forms are allowed. Pyrethroids are prohibited. Synthetic additives are not allowed. Must not include piperonyl butoxide. See 'Piperonyl Butoxide'.
Quassia	I	A	A botanical extract.
Quick Lime	F	P	Also known as calcium oxide. Prohibited for crop use. See 'Lime'.
Repellents, vertebrates	AP	A	Acceptable if derived from a natural source, provided it does not contain synthetic additives or prohibited substances.
Rock Dust, unprocessed	F	A	See 'Mined Minerals, unprocessed'.
Rodent Traps	AP	A	Mechanical traps are acceptable but not with synthetic baits.
Rotenone	I	R	Very toxic, use with caution. Toxic to fish and others. Piperonyl butoxide may not be used as a synergist. See 'Botanical Pesticides' for restrictions.
Ryania	I	R	Very toxic, use with caution. See 'Botanical Pesticides' for restrictions.
Sabadilla	I	R	Very toxic, use with caution. See 'Botanical Pesticides' for restrictions.
Sand	F		See 'Mined Minerals, unprocessed'.
Sawdust	F	A	From untreated and unpainted wood only. See 'Plants'.
Sea Animal Wastes	N	A	Crab and shrimp shells are acceptable for nematode control if they do not contain any synthetic ingredients.
Sea Creatures	F	A	Non-mammalian species only. See 'Fish Products'.
Seaweed and Seaweed Products	CPA, F	A	See 'Aquatic Plant Products'.
Semiochemicals	I	A	Must be non-synthetic and must not be combined with synthetic insecticides. See 'Pheromones'.
Sewage Sludge	F	P	Likely to be contaminated with heavy metals.
Shells from Aquatic Animals	F	A	
Silica, mineral suspensions	D	A	
Soaps	CPA, D,	A	Insecticidal and herbicidal soaps consisting of fatty acids derived from animal or vegetable oils okay. May also be used as adjuvants, spreader stickers, surfactants and carriers.
Soaps, Synthetic	I	R	Non-food uses only; use on any food crop or fallow fields is prohibited. May be used in ornamental crop production only when specifically permitted by the product's label instructions. Allowed for use on roadways, ditches, right-of-ways, around buildings.
Sodium Bicarbonate	D	A	
Sodium Borate	F	A	For soil application or dilution and spraying.

 $Warning, \ materials \ on \ this \ page \ may \ contain \ GMOs. \ \ Freedom \ from \ GMO \ contamination \ must \ be \ demonstrated \ (see \ OCIA \ Standard \ 1.2.9).$ 

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Sodium Chlorate	CPA	P	
Sodium Chloride, prohibited	W	Р	Not for use as a herbicide.
Sodium Chloride, restricted	СРА	R	Natural sources only. For use as a cotton desiccant only in cases of government declared weather emergencies to meet mandated plow down dates; any other use as a desiccant or harvest aid is prohibited.
Sodium Fluoaluminate	I	P	
Sodium Hydroxide (NaOH)	I	Р	
Sodium Lignosulfate	CPA	A	See 'Lignin Sulfonates'.
Sodium Molybdate	F	R	Acceptable as a last resort to correct documented deficiencies. Use other sources of Molybdenum if at all possible. See 'Micronutrients, synthetic, restricted'.
Sodium Nitrate (Chilean Nitrate)	F	Р	Not allowed because of high sodium content, and lack of positive effects on soil building.
Soil Fumigants, synthetic	D	P	
Solvents	CPA		See 'Adjuvants, allowed, restricted and prohibited'.
Soybean Meal	F	A	From non-GMO source. Used as a soil amendment. Typical Analysis: 6-1-2.
Sphagnum Moss	F	A	Must not contain synthetic wetting agents. Observe worker safety precautions.
Spray Adjuvants	CPA		See 'Adjuvants, allowed, restricted, and prohibited'.
Spreaders-Stickers	CPA		See 'Adjuvants, allowed, restricted, and prohibited'.
Sterile Insect	I	A	See 'Biological Controls'.
Sticky Traps and Barriers	I, AP	A	Cannot contain prohibited pesticides or other prohibited substances.
Straw	W	A	Crop residues and green manure produced on the farm are allowed. Materials brought onto the farm are restricted.
Streptomycin Sulfate	D	R	For fire blight control on apples and pears only. See 'Antibiotics'.
Strychnine (C <sub>21</sub> H <sub>22</sub> N <sub>2</sub> O <sub>2</sub> )	AP	P	Including the botanical extract from Nux vomica.
Suffocating Oils, petroleum sources	I, D	R	See 'Petroleum Distillates'.
Suffocating Oils, vegetable sources	I, D	A	See 'Vegetable Oils'.
Sugar	F	A	
Sugar Lime	F	R	Calcium carbonate produced from the processing of beets or cane into sugar. May contain substantial herbicide residues and weed seeds. Use only if documented to be residue-free.
Sulfate of Iron	F	R	See 'Iron Products, restricted'.
Sulfate of Potash Magnesia	F	A	Sulfate of potash magnesia (derived from the mineral langbeinite) is acceptable. Also known as K Mag. See 'Mined Minerals, unprocessed'.
Sulfate of Zinc	F	R	May be used only to correct Iron deficiencies determined by soil or plant tissue testing. May be used as trace minerals. See 'Zinc Products, restricted'.
Sulfur	AP	R	Sulfur smoke bombs for rodent control must be used in conjunction with other methods.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Sulfur (S)	F, D, I	R	Must be from a mined source. Acceptable for foliar use as an insecticide, fungicide or fertilizer. May be used as a soil amendment where more buffered sources of sulfur are not appropriate. Prohibited for post-harvest treatment.
Sulfur Dioxide (SO <sub>2</sub> )	AP	Р	Allowed for use in sulfur smoke bombs for control of underground rodents.
Summer Oils, petroleum sources	D, I		See 'Petroleum Distillates' and 'Petroleum Solvents, aromatic'.
Summer Oils, vegetable sources	D, I	A	See 'Vegetable Oils'.
Super Phosphate	F	P	
Surfactants	CPA		See 'Adjuvants, allowed, restricted, and prohibited', 'Soaps' and 'Detergents'.
Synthetic Pesticides	I, D, W, N	P	All synthetically derived pesticides not specifically mentioned by name.
Terramycin	D	R	Oxytetracycline calcium complex. See 'Antibiotics'.
Tobacco Dust	I	P	
Trace Minerals, natural	F	A	Includes micronutrients from natural sources that are either unchelated or chelated materials listed as allowed. See 'Micronutrients, synthetic, restricted and prohibited'.
Transpiration Blockers, Synthetic	CPA	Р	
Transplant Media, allowed	CPA	A	Must be composed entirely of allowed materials.
Transplant Media, prohibited	CPA	Р	Prohibited if product is treated with or contains any prohibited materials.
Transplant Media, restricted	CPA	R	Restricted if the product contains at least one restricted and no prohibited materials.
Traps	I, AP	A	Physical traps are permitted but they must not contain synthetic bait because the target pest could introduce the toxic chemical into the agro-ecosystem through their body.
Treated Lumber, Borates	СРА	Р	Borate treated lumber allowed where not in direct contact with use in crop production. See 'Pressure Treated Lumber' for references to prohibited and restricted wood treatments. Wood cannot be treated with a prohibited material.
Treated Lumber, Other	СРА	P	All synthetic wood preservatives are prohibited unless explicitly allowed. Creosote and pentachlorophenol treated lumbers are prohibited. See 'Arsenic, Arsenate Treated Lumber' and 'Pressure Treated Lumber' for references to prohibited and restricted wood treatments. Wood cannot be treated with a prohibited material. All treated fence posts and lumber presently in the ground allowed: fence posts and lumber to be treated only as permitted by OMRI.
Treated Seed, non-synthetic	CPA, D	A	Seed treated with naturally occurring biological control agents are allowed. Genetically modified organisms are prohibited. Seed pelletized with clay, gypsum, or other non-synthetic coating is allowed. See 'Microbial Products' for Rhizobial bacteria coatings.

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Treated Seed, prohibited	CPA	P	Pelletization of seed with plastic polymers or other synthetic substances is prohibited. Seed treated with fungicides, insecticides, avicides, rodenticides, and/or other biocides are prohibited. Seeds, annual seedlings, and planting stock treated with prohibited substances may be used to produce an organic crop when the application of the materials is a requirement of applicable government phytosanitary regulations. An exemption may be granted by the Chapter Review Committee or the CDT for treated foundation seed stock, specifically for the production of organic seed when no other suitable alternatives are available. (Note: this does not conform with NOP Standards)
Tree Seals	СРА	A	Plant or milk-based paints are recommended but interior Latex paints may be used. Other petroleum materials may be used if there is no alternative. Must not be combined with fungicides or other synthetic chemicals.
Triple Phosphate	F	P	
Urea	F, CPA, AP, D, I, N, W	Р	All uses prohibited, including inert ingredient.
Vegetable Oil	СРА	A	Spreader-stickers, surfactants and spray adjuvants carriers. Plant oil based adjuvants must be comprised of at least 90% plant oil and may not contain synthetic pesticides.
Vermicasts	F	A	See 'Worm Castings'.
Vermiculite	F	A	
Vinegar	D, W	A	
Virus Sprays	Ι	A	Must be approved by the Certification Committee on a product specific basis. Codling moth Branulosis virus is acceptable. No genetically engineered viruses are allowed.
Vitamin Baits, synthetic	AP	P	Used as a rodenticide.
Vitamin D-3, cholecalciferol	AP	R	Vitamin D-3 cannot be the sole means of rodent control. Alternative methods for rodent control must be documented. Precautions must be taken to prevent killing non-target animals.
Vitamins, allowed	F	A	Non-synthetic sources of all vitamins and synthetic sources of vitamins B <sub>1</sub> , C and E may be used.
Vitamins, synthetic	F	P	All synthetic vitamins not explicitly allowed are prohibited.
Water Water, reclaimed	СРА	A R	See water standards 5.1.3 and 5.1.4 for guidelines.  Reclaimed water must comply with federal, state/provincial, and local standards and may be used only on non-edible parts of food crops and on crops not for human consumption. Use on edible parts and root crops is prohibited.
Water Softeners	CPA	R	Only natural forms of softener agents allowed.
Weed Oils	W	R	Petroleum fractions used as weed oil are prohibited. Vegetable or animal derived oils are restricted. Use with caution.
Wetting Agents, natural	CPA	A	Includes soaps, saponins, and microbial wetting agents. See 'Adjuvants, allowed' and 'Soaps'.
Wetting Agents, synthetic	CPA	Р	Polyacrylimides and other synthetic wetting agents are prohibited. See 'Adjuvants, prohibited'.
Wetting Agents, restricted	CPA	R	See 'Adjuvants, restricted', 'Detergents', and 'Inert Ingredients'.
Whey, dairy	F	A	Used as soil amendment.

#### CROP PRODUCTION MATERIALS LIST

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Wood Ash	CPA, F	R	Wood ash must be produced exclusively from untreated and unpainted wood. Wood stove ashes must be free of contaminants from colored paper, plastic, etc. Excessive applications of ash can cause pH and nutrient imbalance.
Wood Chips and Shavings	F	A	From untreated and unpainted wood only. See 'Plants'.
Worm Castings	F	A	
Yeast	F	A	See 'Microbial products'.
Zeolite	F, D, I, CPA	A	See 'Mined Minerals, unprocessed'.
Zinc Products, prohibited	F	Р	Zinc ammonium sulfate, zinc chloride, and zinc nitrate are prohibited. See 'Micronutrients, synthetic, prohibited'.
Zinc Products, restricted	F	R	Zinc oxide and zinc sulfate may be used to correct documented zinc deficiency. See 'Micronutrients, synthetic, restricted'.
Zinc Sulfate	F	R	See 'Zinc Products, restricted'.

#### 9.3.1 LIVESTOCK PRODUCTION MATERIALS LIST

Key: LF – Feed, Feed Additives, and Feed Supplements

LPA – Livestock Production Aids LH – Health Care Products

MATERIAL	CLASS	STATUS	SPECIFICATIONS
Acetic Acid	LF, LH	A	Must be from natural sources.
Acupuncture	LH	A	
Alcohol, derived from	LH	R	Allowed in medications and as a topical disinfectant.
fermentation			
Alcohol, ethyl	LH	A	Allowed for use in medical treatments and as a disinfectant.
Alcohol, ethyl	LF	P	Prohibited for use as a feed additive.
Alcohol, isopropyl	LH	A	Approved for use only as a disinfectant.
Algae, natural forms	LF	A	See 'Aquatic Plant Products'.
Alkali Carbonates	LPA	R	For disinfecting livestock facilities only.
Amino Acids, allowed	LF	A	Natural forms only.
Amino Acids, prohibited	LF	P	Pure forms only.
Ammonia Products,	LPA	A	Allowed as cleaning agents only.
cleaning agents			
Anesthetics	LH	R	All anesthetics not explicitly allowed must be used under the supervision of a licensed veterinarian. Procaine and lidocaine may be administered by producers. Withdrawals for parenterally administered anesthetics are at least 90 days for slaughter stock and 7 days for milk animals. May only be used to minimize suffering caused by physical alterations and surgical procedures. (Standard 3.13)
Animal By-Products	LF	Р	The feeding of poultry and mammalian slaughter by-products to organic poultry and mammals is prohibited.
Antibiotics	LF, LH	P	Natural forms may be used. (e.g. garlic)
Appetizers, synthetic	LF	P	Standard 3.7.3
Aquatic Plant Products	LF	R	Natural (non-synthetic) extracts are allowed. Extraction with synthetic solvents is prohibited except for potassium hydroxide, provided the amount of solvent used does not exceed the amount necessary for extraction. May be stabilized with preservatives that are EPA List 4 or the FDA Generally Regarded as Safe List unless explicitly prohibited. Aquatic plant products are prohibited if they contain other synthetic preservatives, such as formaldehyde or are fortified with prohibited plant nutrients.
Arsenate Treated Lumber	LPA	Р	Copper and chromium arsenate Arsenic treated lumber is prohibited. Trellises, posts and other structures using arsenate treated lumber require a 36-month transition from installation, treatment or purchase. See 'Treated Lumber'.
Aspirin	LH	A	Approved for health care to reduce inflammation.
Bacillus Thuringiensis	LH	R	GMOs are prohibited. Products may not be formulated with prohibited substances. See 'Inert Ingredients, allowed, restricted, and prohibited'.
Biotin	LF	A	See 'Vitamins'.
Bactericides, synthetic	D	P	All synthetic bactericides that are not explicitly allowed or

MATERIAL	CLASS	STATUS	SPECIFICATIONS
			restricted are prohibited.
Bee Repellent, synthetic	LPA	P	(Standard 4.2.5.1)
Beneficial Organisms	LPA	A	Includes insects, nematodes, decollate snails, microbial fungicides. No genetically engineered organisms.
Biological Controls	LPA, LH	A	Including but not limited to viruses, bacteria, protozoa, fungi, insects, nematodes, plants and animals. No genetically engineered organisms.
Bleach	LPA	R	May be used for disinfecting livestock facilities and apicultural tools.
Bone Meal	LF	Р	Prohibited for use in animal feed.
Botanical Pesticides	I	R	Botanical pesticides must be used in conjunction with a biorational pest management program, and cannot be the primary method of pest control in the Farm Organic System Plan. The least toxic botanicals must be used in the least ecologically disruptive way possible. All EPA label restrictions and directions need to be followed including restrictions concerning crops, livestock, target pests, safety precautions, pre-harvest intervals and work re-entry. The NOSB defines the following as non-synthetic botanical pesticides: neem, pyrethrum, rotenone, ryania, and sabadilla.
Brewer's Yeast	LF	A	Cannot be produced by recombinant DNA technologies.
Calcium Hypochlorite	LPA	R	See 'Bleach'.
Carbon Dioxide	LPA	A	May be used as a fumigant in stored commodities.
Caustic Potash	LPA	R	For disinfecting livestock facilities where adequate rinsing is provided. (From Potassium Hydroxide)
Chlorhexidine	LH	A	Not for use as a routine teat dip. Allowed for surgical procedures conducted under the supervision of a licensed veterinarian.
Chlorine (Cl)	LPA	R	Highly toxic and very volatile. Use with caution. Includes Sodium Hypochlorite. See 'Bleach'.
Cleaning Agents, allowed	LPA	A	Alcohol, soap, and water.
Cleaning Agents, prohibited	LPA	P	All synthetic cleaning agents not explicitly allowed or restricted are prohibited. These cannot be used in certified facilities or in the presence of certified livestock.
Cleaning Agents, restricted	LPA	R	Alkali carbonates, bleach, potassium permanganate, sodium hydroxide, and caustic potash. May not be used in direct contact with animals or soil.
Coal Tar	LH	P	
Cobalt	LF	R	See 'Minerals, non-synthetic'.
Coloring Agents, artificial	LF	P	In livestock feed supplements.
Colostrum for newborns	LH	A	Cannot be from cows treated with recombinant Bovine Growth Hormone (rBGH).
Colostrum whey/antibodies	LF	A	Cannot be from cows treated with recombinant Bovine Growth Hormone (rBGH).
Copper (Cu)	LF, LH	R	May be fed or injected to treat documented mineral deficiencies.
Copper Sulfate	LH, LF, LPA	R	For use as an essential nutrient and for topical use.
Detergents	LPA	R	Allowed as equipment cleaners. Also includes emulsifiers, surfactants and wetting agents used as inert ingredients and

MATERIAL	CLASS	STATUS	SPECIFICATIONS
			which are evaluated on a case-by-case basis. See 'Inert
			Ingredients, allowed, restricted, prohibited'.
	LF, LH,		Non-heated forms only are allowed. Use a dust mask when
Diatomaceous Earth	LPA	R	applying to prevent lung irritation. Make sure no synthetic
			pesticides or synergists are added.
Dolomite	LF	A	
Electrolytes	LH	A	May not contain antibiotics.
Enzymes, natural	LF, LH	A	Must be derived from non-pathogenic bacteria, non-pathogenic
			fungi, or edible non-toxic plants that are not genetically
			engineered. Co-factors must either be organically produced or
			appear in the OCIA Materials List. This includes water and substances that are insoluble in feed but removed from the feed
			after processing.
Epsom Salts	LF	A	See 'Magnesium Sulfate'.
Equipment Cleaners,	LPA	A	Acetic acid, carbonic acid, citric acid, hydrogen peroxide, soap,
allowed		1.	water, and other non-synthetic cleaners.
			All synthetic equipment cleaners that are not explicitly allowed
Equipment Cleaners,	LPA	P	or restricted are prohibited. Aromatic petroleum solvents are
prohibited			prohibited.
Equipment Cleaners,	LPA	R	Bleach and detergent are restricted for cleaning spray tanks and
restricted			other farm equipment. See 'Bleach' and 'Detergents'.
Essential Oils	LH, LPA	R	Plant derived. See 'Plant Extracts'.
Ethoxyquin	LF	P	Standard 3.7.3
External Parasiticides, non-	LH	R	Essential oils such as citronella or cedar oil that are extracted
synthetic			with water, oil, or alcohol. Pyrethrum may also be used
			against external parasites. See 'Pyrethrum'.
External Parasiticides,	LH	P	No synthetic external parasiticides may be used unless
synthetic			explicitly allowed. See 'Hydrated Lime' and 'Lime Sulfur'.
Fish Liver Oils	LF	A	Livestock feed supplement (Standard 3.7.1.h)
Fish Meal	LF	A	
Folic Acid	LF	A	See 'Vitamins'.
Formic Acid	LH	A	For apiculture pest and disease control. (Standard 4.2.2.e.)
Formaldehyde	LPA	P	
(H-CHO)	111	<u> </u>	
Garlic	LH	A	Genetic engineering includes recombinant DNA, cell fusion,
Genetically Engineered	LPA, LF,	P	micro-and macro Sencapsulation, gene deletion and doubling,
Organisms (GEO's)	LFA, LF,	r	introducing a foreign gene, and changing the positions of
Organisms (GLO s)	211		genes. It shall not include breeding, conjugation, fermentation,
			hybridization, in-vitro fertilization or tissue culture. (Inputs,
			processing aids, and ingredients shall be traced back one step
			in the biological chain to the direct source organism from
			which they are produced to verify that they are not derived
			from genetically modified organisms.)
GEO/GMO	LPA, LF,	P	See Genetically Engineered Organisms.
<u> </u>	LH		
Glucose	LH	A	The second transfer of the second sec
Glycerin	LH	A	For use as a livestock teat dip. Must be produced through hydrolysis of fats and oils.
Growth Promoters,	LF	P	(Standard 3.7.3.a)

 $Warning, \ materials \ on \ this \ page \ may \ contain \ GMOs. \ \ Freedom \ from \ GMO \ contamination \ must \ be \ demonstrated \ (see \ OCIA \ Standard \ 1.2.9).$ 

MATERIAL	CLASS	STATUS	SPECIFICATIONS
synthetic			
Growth Suppressants, Synthetic	LF	P	(Standard 3.7.3.a)
Herbal Preparations	LH	A	Herbs and herbal preparations taken internally by livestock must be certified organically grown and prepared.
Homeopathic Preparations	LH	A	(Standard 3.9.4)
Honey	LH	A	As an external disinfectant.
Honey, organic	LF	A	For apicultural use. Certified organic honey from capped combs for feeding bees when pollen supply is inadequate.
Hormones	LF	P	All hormones that are not explicitly allowed are prohibited for livestock production. May not be used as growth promoters.
Hydrated Lime	LH	R	Not permitted to cauterize mutilations. Not permitted for soil application or for deodorizing animal wastes.
Hydrogen Peroxide H2O2	LH	A	
Inert Ingredients, allowed	LPA	A	Minimum risk (EPA List 4) inert ingredients in EPA registered pesticides are allowed unless explicitly prohibited.
Inert Ingredients, prohibited	LPA	P	Inert ingredients of toxicological concern (EPA List 1). Inert ingredients of probable toxicological concern (EPA List 2) are prohibited in EPA registered pesticides.
Inert Ingredients, restricted	LPA	R	Inert ingredients that have not been categorized by risk (EPA List 3) and are not explicitly allowed or prohibited must be evaluated on a case-by-case basis for all EPA registered pesticides. In such cases, OCIA relies on the evaluations of the Organic Materials Review Institute (OMRI). After January 1, 2002, all inerts on EPA List 1, 2, and 3 will be prohibited.
Iodine (I)	LPA, LF, LH	A	Allowed as a feed supplement and for use as a topical disinfectant.
Ionizing Radiation	LPA, LF, LH	P	i.e. irradiation or picowaved.
Kelp Extracts	LF	A	Not acceptable if containing formaldehyde or fortified with synthetic plant nutrients. See 'Aquatic Plant Products'.
Kelp Meal	LF	A	See 'Aquatic Plant Products'.
Kelp, Unprocessed	LF	A	See 'Aquatic Plant Products'.
Lactic Acid	LH	A	For apiculture pest and disease control. (Standard 4.2.2.e)
Lidocaine	LH	R	See 'Anesthetic'.
Lime	LPA, LH	A	For disinfecting livestock facilities.
Lime Sulfur	LH	R	(Includes Calcium Polysulphide) May be used as a footbath. Not permitted to cauterize mutilations. Not permitted for soil applications or to deodorize animal wastes.
Local Anesthetics	LH	R	All anesthetics not explicitly allowed must be used under the supervision of a licensed veterinarian. Procaine and lidocaine may be administered by producers. Withdrawals for parenterally administered anesthetics are at least 90 days for slaughter stock and 7 days for milk animals. May only be used to minimize suffering caused by physical alteration and surgical procedures. (Standard 3.13)
Magnesium Oxide	LF	R	Restricted to a trace element in livestock supplements. (Standard 3.7.1.d)
Magnesium Sulfate	LH	A	Synthetically produced Epsom salts are prohibited.
Manure Refeeding	LF	P	

Warning, materials on this page may contain GMOs. Freedom from GMO contamination must be demonstrated (see OCIA Standard 1.2.9).

EN-QS-M-003, Revision S OCIA INTERNATIONAL CERTIFICATION STANDARDS

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MATERIAL	CLASS	STATUS	SPECIFICATIONS
Marl	LF	A	See 'Minerals, non-synthetic'.
Menthol	LH	A	For apiculture used to control tracheal mite parasite. (Standard 4.2.2.e)
Milk/Milk Byproducts	LF	R	In emergencies, whey, skim, milk and other by-products from OCIA-certified or OCIA-recognized-certified organic milk processing facilities. (Standard 3.6.3) May not come from cows treated with BGH and must be free from other prohibited materials.
Milk/Milk Byproducts	LH	R	Topical applications.
Milk Replacer	LF	R	Must be free of medications and prohibited substances. Milk replacers based on non-milk products or from rBGH treated animals are not permitted. No antibiotics may be added. Emergency use only when fresh not available. Milk from certified animals is preferred. Document need for commercially formulated replacer instead of the use of whole milk.
Mineral Oil	LH	R	For topical use and as a lubricant.
Minerals, non-synthetic	LF	A	Includes mined minerals.
Molasses	LF	A	OCIA-recognized-certified organic is allowed. Non-organic molasses may be used provided no organic molasses is available.
Nanotechnology Products	LF, LPA, LH	P	All products made by using nanotechnology as an extension of GMO technology are prohibited.
Nanotechnology Products and Processes	LF, LPA, LH	P	The use of artificial nanoscale processes, particles or structures is prohibited.  *Notwithstanding the above, the use of naturally occurring nanoparticles, as in traditional biodynamic practice, is allowed.
Newspaper	LPA	A	Allowed for use as bedding. Glossy paper and colored ink are prohibited.
Nitrogen Compounds Synthetic	LF	Р	All uses are prohibited, including as an inert ingredient.
Oxalic Acid	LH	A	For apiculture pest and disease control. (Standard 4.2.2.e)
Oyster Shells	LF	A	Livestock supplement. (Standard 3.7.1.i)
Oxytocin (hormone)	LH	P	
Paper	LPA	R	Glossy paper and colored ink are prohibited.
Parasiticides	LH	P	
Petroleum Oil, prohibited	LF	P	
Petroleum Oil, restricted	LH	R	See 'Mineral Oil'.
Phosphoric Acid	LPA	R	For use only as an equipment and facility cleaner. Direct contact with organic livestock or land is prohibited. The farm plan must demonstrate wastewater discharge does not create pollution in surface water.
Piperonyl Butoxide	LPA	P	
Plant Extracts, essential oils	LH	A	Parts of plants that have specific uses in pest control (e.g. marigolds, sesame chaff and equisetum [horsetails]) are permitted unless specifically restricted or prohibited. Allowed extractants include cocoa butter, lanolin, animal fats, alcohols, and water.
Plastic Feed Pellets	LF	P	THE THEFT
Potassium Hydroxide	LPA	R	For disinfecting livestock facilities or cleaning processing
i otassium Hydroxide	LIA	IV.	1 of distincting restock facilities of cleaning processing

MATERIAL	CLASS	STATUS	SPECIFICATIONS
(KOH)			plants where adequate rinsing is provided.
Potassium Permanganate (KMnO4)	LPA	R	For disinfecting livestock facilities only.
Preservatives	LF	P	Except when used as a processing aid in livestock supplements. (Standard 3.7.3.c)
Probiotics	LH	R	Permitted when diseases are known to exist and cannot be controlled by other techniques. (Standard 3.9.5)
Procaine	LH	R	Allowed as a local anesthetic.
Pyrethrins	LH	P	Pyrethrins are the synthetically extracted form of Pyrethrum. They are not natural.
Pyrethroids	LH	P	Synthetic form of pyrethrins.
Pyrethrums	LH	R	Only naturally occurring forms are allowed. May be used as an external parasiticide. Producers must comply with all label instructions for administration of parasiticides to livestock in addition to the specific regulations pertaining to organic production systems. Document lack of alternatives. See 'Botanical Pesticides' in crops materials list. Synthetic additives are not allowed. Must not include piperonyl butoxide. (See Piperonyl Butoxide in the Crop Materials List).
Quick Lime	LH, LPA	P	See 'Lime'.
Salt	LF	A	Allowed as a livestock supplement and silage preservative. See 'Sodium Chloride'. (Standards 3.5.8.b and 3.7.1.a)
Seaweed	LF	A	See 'Aquatic Plant Products'.
Selenium (Se)	LH	A	May be fed or injected to livestock to treat for documented deficiencies.
Silage Preservatives	LF	A	Bacteria, fungi, course rock salt, and sea salt are allowed. Non-organic sugar or sugar products such as molasses may be used provided no organic molasses is available. (Standard 3.5.8)
Soaps	LH	A	May be used as a disinfectant for livestock and facilities.
Sodium Chloride	LF	A	Allowed as a livestock feed supplement and silage preservative. (Standard 3.5.8.b and 3.7.1.a)
Sodium Hypochlorite	LPA	R	See 'Bleach'.
Sodium Sulfate	P, LF, LPA	R	Allowed as trace mineral feed supplement or additive only. All other uses prohibited.
Stimulants	LF, LH	P	(Standard 3.7.3.a and 3.11.8)
Sugar	LF	A	Organic when available (Standard 3.5.8.c)
Tranquilizers	LPA	P	(Standard 3.11.8)
Urea	LF	P	All uses prohibited, including an inert ingredient.
Vaccines	LH	R	Legally required vaccines are allowed. Permitted when diseases are known to exist and cannot be controlled by other techniques. (Standard 3.9.5)
Vinegar	LF	A	
Vitamins, natural	LF	A	
Vitamins, synthetic	LF	R	Allowed for use as a feed supplement in livestock. Natural vitamins are preferred.
Water	LF	A	
Water, reclaimed	LF	P	Reclaimed water may not be used as a drinking water source for organic livestock.
Yeast	F	A	Cannot be produced by recombinant DNA technologies.

#### 9.4 HANDLING AND PROCESSING

#### 9.4.1 **DEFINITIONS**

#### Additives

Food Additives are substances that are used in direct contact with food, either as an ingredient or a processing aid. A food additive is any substance that becomes a component of food or other wise affects the characteristics of food.

#### Ingredient

An Ingredient is a food additive – a substance added to food – which is present in the final product.

#### **Non-Organic Ingredient**

Non-organic ingredients are materials that are not organically produced, either because they are not agricultural products or because they are secondary ingredients that are not yet available in organic form.

#### Non-agricultural Ingredients

These can be either natural materials or synthetic materials.

#### **Processing Aids**

A Processing Aid is a substance that is added to food, but which is not present in the final product.

#### 9.4.2 STATUS CODES

- Non-Organic Ingredients
  - ALLOWED (A) May be present in a processed food.
  - RESTRICTED (R) May be used only in certain foods and/or under only certain conditions.

#### **Processing Aids**

- ALLOWED (A) May be used in direct contact with the food, but may not be present as an ingredient in the final product. Many allowed Processing Aids have annotations that limit their application and use.
- RESTRICTED (R) May be used in direct contact with food or on food contact surfaces with certain restrictions as specified on the list.

Key: CDS – Cleansers, Disinfectants, and Sanitizers OI – Organic Ingredients

PPA – Processing Production Aids

PPC - Processing Pest Control

NOI – Non-organic ingredients for use in products labeled as "organic" or "made with organic ingredients.

WOI – Ingredients for use only in foods labeled as "made with organic ingredients".

#### 9.4.3 PROCESSING MATERIALS LIST

MATERIAL	CLASS	INS	STATUS	SPECIFICATIONS
Acetic Acid	CDS		A	Must be from natural source.
Acetic Acid	OI		A	Vinegar used as an ingredient must be from an organic source.
Acetic Acid	PPA		P	

MATERIAL	CLASS	INS	STATUS	SPECIFICATIONS
Acetic Acid bacteria	NOI		A	See 'Microbial Products'.
Agar agar	NOI	406	A	Allowed
Alcohol, ethyl	CDS		R	Allowed as a disinfectant.
Alcohol, ethyl	OI		A	Alcohol used as an ingredient must be from an
				organic source.
Alcohol, isopropyl	CDS		R	Isopropyl alcohol may be used as a disinfectant only when non-synthetic ethyl alcohol is not an acceptable substitute.
Alginates	NOI		A	Allowed
Alginic Acid	NOI			Allowed
Ammonia Products	CDS		A	Allowed as cleaning agents only.
Ammonium Bicarbonate	NOI	503	A	Limited to use as a leavening agent only.
Ammonium Carbonate	NOI	503	A	Limited to use as a leavening agent only.
Ammonium Phosphates	NOI	342	P	<i>g</i>
Ammonium Soaps	PPA		P	Prohibited for use in processing as a wax.
Ammonium Sulfate	NOI	517	P	1 5
Arabic Gum	NOI	414	R	Allowed only for milk products, fat products, confectionery, sweets, and eggs.
Argon	NOI	938	A	7 7 50
Ascorbic Acid	NOI	300	A	Allowed
Attapulgite Clay	PPA		A	See 'Clay'.
Autolyzed Yeast	NOI		A	See 'Yeast'.
Baker's Yeast	NOI		A	See 'Yeast, baking' and 'Microbial Products'.
Baking Powder	NOI		A	All components must be classified as "allowed non- organic ingredient" and be aluminum free.
Baking Soda	NOI		A	See "Sodium Bicarbonate".
Bark Preparations	PPA		R	For sugar processing only.
Beeswax	NOI	901	A	Allowed for use as wax only. Must be from an organic source.
Bentonite	NOI	558		
Bleach	CDS		A	Includes calcium hypochlorite, sodium hypochlorite, and chlorine dioxide. Allowed as a sanitizer on food contact surfaces. Wash water treated with chlorine compounds as a disinfectant is subject to OCIA Standard 5.1.4.
Botanical Pesticides	PPC		R	Botanical Pesticides must be a part of a biorational pest management program, and cannot be the primary method of pest control. The least toxic botanicals must be used in the least ecologically disruptive way possible. All EPA label restrictions and directions need to be followed including restrictions concerning target pests, safety precautions, and worker reentry. Botanicals are defined as neem, pyrethrum, rotenone, ryania, and sabadilla.
Brewer's Yeast	NOI		A	See 'Yeast, brewer's' and 'Microbial Products'.
Calcium Carbonate	NOI	170	A	Allowed
Calcium Chloride	NOI	509	A	Allowed
Calcium Citrate	NOI	333	A	

MATERIAL	CLASS	INS	STATUS	SPECIFICATIONS
Calcium Hydroxide	NOI, PPA		R	Allowed as a food additive for maize tortilla flour and as a processing aid for sugar.
Calcium Hypochlorite	PPA		A	See 'Bleach'
Calcium Oxide (lime)	CDS		A	Allowed for cleaning processing plants where adequate rinsing is provided.
				Mono-calcium phosphate is allowed for raising flour.
Calcium Phosphate	NOI	341	R	
Calcium Sulfate, natural	NOI	516	R	Allowed for soybean products, confectionery and in bakers' yeast.
Calcium Sulfate, synthetic	NOI		P	
Carbon, activated	PPA		A	
Carbon Dioxide	NOI, PPA, PPC	290	A	Must be derived from oil-free source.
Cardboard, fungicide impregnated	PPC		P	
Carnauba Wax	NOI	903	R	See 'Wax, restricted'.
Carrageenan	NOI	407	A	Allowed
Casein	NOI		R	Allowed for wine processing only.
Caustic Potash (KOH)	CDS		R	Allowed for cleaning processing plants where adequate rinsing is provided.
Charcoal	PPA		A	Allowed for use as a clarifier of filtering agent. May not be present in final product.
Chlorine	CDS		R	Highly toxic and very volatile. Use with caution. Includes 'Sodium Hypochlorite'. See 'Bleach'.
Chlorine Dioxide	CDS		R	See 'Bleach'.
Chymosin Microbial Rennet: genetically modified	NOI		P	
Citric Acid	NOI	330	A	Must be produced by microbial fermentation of carbohydrate substrates.
Citrus Products	PPC		A	Must be labeled for food processing and handling use.
Clay, attapulgite	PPA		A	Allowed for use as a clarifier or filtering agent. May not be present in the final product.
Clay, bentonite	PPA		A	Allowed for use as a clarifier or filtering agent. May not be present in the final product.
Clay, fuller's earth	PPA		A	A porous colloidal aluminum silicate (clay) which has high natural adsorptive power.
Clay, kaolin	PPA	559	A	Allowed for use as a clarifier or filtering agent. May not be present in the final product.
Colloidal Silica	PPA	551	P	. 1
Cornstarch	NOI		A	Non-synthetic and non-GMO sources only.
Cornstarch (modified)	NOI		P	
Cultures, dairy	NOI		A	Must not be products of genetic engineering technology.

MATERIAL	CLASS	INS	STATUS	SPECIFICATIONS
Detergents	CDS		R	Allowed as equipment cleaner. Also includes emulsifiers, surfactants, and wetting agents used as inert ingredients. Must be evaluated on a case-by-case basis. Surfaces must be rinsed to pH neutral.
Diatomaceous Earth	PPA		A	For food filtering only.
Diatomaceous Earth	PPC		A	Non-heated forms only are allowed. Use a dust mask when applying to prevent lung irritation. Make sure no synthetic pesticides or synergists are added.
Egg white Albumen	PPA		A	Allowed for wine only.
Enzymes, natural	NOI		A	Natural enzymes allowed. Enzymes that are produced by microorganisms that have been genetically engineered are synthetic and prohibited.
Ethanol	CDS		A	See 'Alcohol, ethyl'.
Ethylene	PPA		R	May only be used in cases where use is deemed essential to get the crop to market and requires chapter review committee pre-approval. Only gas of natural origin may be used. For use as a ripening agent for bananas only.
				Processors wishing to use it must obtain consent of
Ethylene Oxide	PPA		R	the chapter review committee first.
Ferrous Sulfate	NOI		A	May only be used where "enrichment" is required by law. <i>See "Minerals"</i> .
Filtering Materials	PPA		R	Must be asbestos free. Filtration techniques that chemically react with or modify organic food on a molecular basis are restricted.
Flavors, natural	NOI, WOI		A	All of the flavor constituents used in the natural flavor are from natural sources and have not been chemically modified in a way that makes them different than their natural chemical state. The natural flavor has not been produced using any synthetic solvent and carrier systems or any artificial preservatives. Natural flavors used in products that are labeled "Made with organic ingredients" may not contain propylene glycol or any artificial preservatives, and may not be hexane extracted
Fruit Waxes				See 'Wax' and listings for individual wax ingredients.
Fuller's Earth	PPA		A	See 'Clay'.
Fumigants Natural	PPC		A	Must be from a natural source. Includes carbon dioxide and nitrogen.
Fungicides	PPC		P	Includes fumigants and fungicide-impregnated papers used in packaging.
Gelatin	PPA		R	Allowed for fruits and vegetables and in winemaking.

MATERIAL	CLASS	INS	STATUS	SPECIFICATIONS
Genetically Engineered Organisms	NOI, PPA, WOI, OI, CDS, PPC		P	Genetic engineering includes recombinant DNA, cell fusion, micro- and macro S. —encapsulation, gene deletion and doubling, introducing a foreign gene, and changing the positions of genes. It shall not include breeding, conjugation, fermentation, hybridization, invitro fertilization or tissue culture. (Inputs, processing aids, and ingredients shall be traced back one step in the biological chain to the direct source organism from which they are produced to verify that they are not derived from genetically modified organisms.)
GEO/GMO	NOI, PPA, WOI, OI, CDS, PPC		Р	See 'Genetically Engineered Organisms'.
Glycerin	NOI		A	Must be produced by hydrolysis of fats and oils. For use in extracts and tinctures only or in personal care products.
Guar Gum	NOI	412	A	See 'Gums, vegetable'.
				Includes arabic, carob bean, guar and locust bean.
Gums, vegetable	NOI		A	Must be water extracted.
Hydrogen Peroxide	CDS		A	Allowed.
Inert Ingredients, allowed	PPC, CDS		A	Minimum risk (EPA List 4) inert ingredients in EPA registered pesticides are allowed unless explicitly prohibited.
Inert Ingredients, prohibited	PPC, CDS		Р	Inert ingredients of toxicological concern (EPA List 1). Inert ingredients of probable toxicological concern (EPA List 2) are prohibited in EPA registered pesticides.
Inert Ingredients, restricted	PPC, CDS		R	Inert ingredients that have not been categorized by risk (EPA List 3) and are not explicitly allowed or prohibited must be evaluated on a case-by-case basis for all EPA registered pesticides. In such cases, OCIA relies on the evaluations of the Organic Materials Review Institute (OMRI). After January 1 2002, all inerts on EPA List 1, 2, and 3 will be prohibited.
Ionizing Radiation	PPA		P	e.g. irradiation or picowaved
Isinglass	PPA		R	Allowed for wine only.
Kaolin	NOI	559	A	
Kelp	NOI		A	Allowed for use as a thickener and dietary supplement as defined in the CFA. Note: 21. CFR Section 172.365 contains information on the use of kelp as a dietary supplement.
Kombu	NOI		A	
Lactic Acid	NOI	270	A	Allowed. May not be from products of genetic engineering technology.
Lactic Acidophilus	NOI	270	A	See 'Cultures, dairy'.
Lecithin (bleached)	WOI		A	See Cultures, daily.
Lecithin (bleached)  Lecithin, unbleached	NOI	322		Allowed
Lecium, unbleached	NOI	322	A	Allowed

MATERIAL	CLASS	INS	STATUS	SPECIFICATIONS
Lignin Sulfonates	PPA		A	Allowed for use in floating tree fruits.
				For cleaning processing plants where adequate
Lime	CDS		A	rinsing is provided.
Locust Bean Gum	NOI	410	A	See 'Gums, vegetable'.
Lye	PPA		R	Prohibited as a pH adjuster. See 'Potassium Hydroxide' and 'Sodium Hydroxide'.
Magnesium Carbonate, reacted	WOI		R	Allowed in products labeled made with organic ingredients.
Magnesium Chloride,	Nor	<b>711</b>		
natural (nigari)	NOI	511	R	Allowed only for soybean products. See 'Nigari'.
Magnesium Chloride, refined	NOI		R	Allowed only if extracted from seawater. Synthetic extraction (i.e. by hydrochloric reaction) is not allowed. Allowed only for soybean products.
Magnesium Silicate	PPA		P	
Magnesium Stearate	NOI		P	Prohibited for use in organic foods.
Magnesium Stearate	WOI		R	Allowed only in products labeled "made with organic" ingredients. See section 5.6.3 (b)(4).
Magnesium Sulfate	NOI		R	Non-synthetic sources are allowed.
				Allowed. Must not be product of genetic engineering
Malic Acid	NOI	296	A	technology.
Methyl Bromide	PPC		P	
Microbials	PPC		A	Including but not limited to: Bacillus thuringiensis Metarizium anesophilae *Must not be GMO or GEO origin
Microbial Products	NOI		R	Includes cultures and yeasts, as well as enzymes and gums derived from microorganisms. Products made from organisms that have been genetically engineered are prohibited. Microorganisms must be grown on substances that consist entirely of organic ingredients or permitted ingredients under the OCIA Handling and Processing Materials List.
3.51				When required by law or regulation, or recommended
Minerals	NOI		A	by an independent professional body.
Mono/diglycerides Nanotechnology	NOI All uses		R P	For use in drum drying of food only.  All products made by using nanotechnology
Products				as an extension of GMO technology are prohibited.
Nanotechnology	All uses		P	The use of artificial nanoscale processes, particles or
Products and Processes				structures is prohibited.
				*Notwithstanding the above, the use of naturally
				occurring nanoparticles, as in traditional biodynamic
				practice, is allowed.
Nigari	NOI		R	Allowed only for soybean products. The double salts of magnesium chloride and magnesium sulfate extracted from seawater, known commonly as nigari or bittern, must meet the Food Chemicals Codex requirements for both salts, with the exception of sulfate, and be labeled as containing both salts.

MATERIAL	CLASS	INS	STATUS	SPECIFICATIONS
Nisin	NOI, WOI		Р	Prohibited (Nisin is a polypeptide antibiotic produced by Streptococcus lactis which is used as a preservative, especially for cheese and canned fruits and vegetables.)
Nitrogen Gas	PPA	941	A	Only oil-free grades from non-oil source.
Non-Organic agricultural ingredients.	NOI		A	Non-organic agricultural ingredients are subject to the requirements of OCIA Standards Sections 5.1 and 5.6.
				Porphyra spp including crispate, perforata,
Nori	NOI		A	suborbiculata, and tenera.
Nutrient Minerals	NOI		A	See 'Minerals'.
Nutrient Vitamins	NOI	0.40	A	See 'Vitamins'.
Oxygen Gas	NOI	948	A	Only from a non-oil source.
Ozone	NOI		A	Allowed
Paraffin	NOI		P	See 'Wax, prohibited'.
Pectin	NOI	440-H	A	Both high-methoxy and low-methoxy forms are allowed. Must be unmodified.
Pectolytic Enzymes	NOI		A	See 'Enzymes, allowed'.
Perlite	PPA		A	Allowed as a filter aid in food processing.
pH Adjusters, allowed	PPA		A	Must be from a natural source such as citric acid, sodium bicarbonate, or vinegar.
pH Adjusters, synthetic	PPA		P	Synthetic pH adjusters are prohibited. Lye and sulfuric acid are explicitly prohibited.
Pheromones	PPC		A	Allowed for use only in traps or dispensers. May not be combined with synthetic pesticides or other prohibited substances.
Phosphoric Acid	CDS		A	For cleaning food contact surfaces and equipment in dairy production. Must not have direct contact with food.
Potassium Acid Tartrate	NOI	336	A	
Potassium Carbonate	NOI	501	A	Allowed only for applications where natural sodium carbonate is not an acceptable solution.
Potassium Chloride	NOI	508	A	Allowed
Potassium Citrate	NOI	332	A	
Potassium Hydroxide	PPA		R	May not be used in lye-peeling fruits or vegetables and where non-synthetic sodium carbonate is an acceptable substitute. Prohibited as a pH adjuster.
				For cleaning processing plants where adequate
Potassium Hydroxide	CDS		R	rinsing is provided.
Potassium Iodide, natural	NOI		A	
Potassium Iodide, synthetic	WOI		R	Allowed only in products labeled "made with organic" ingredients. See section 5.6.3 (b)(4).
Potassium Metabisulfite	NOI	224	P	· · · · · · · · · · · · · · · · · · ·
Potassium Phosphate	WOI		R	Allowed only in products labeled "made with organic" ingredients. See section 5.6.3 (b)(4).
Potassium Phosphate, tribasic	CDS		A	For use as an equipment cleaner.

MATERIAL	CLASS	INS	STATUS	SPECIFICATIONS
Pyrethrum	PPC		R	Only naturally occurring forms are allowed. Pyrethroids and pyrethrins are prohibited. See 'Botanicals' for restrictions. Piperonyl butoxide may not be used as a synergist.
Rice Hulls	PPA		A	
Rotenone	PPC		R	See 'Botanicals' for restrictions. Particularly toxic to fish. Piperonyl butoxide may not be used as a synergist.
Ryania	PPC		R	See 'Botanicals' for restrictions.
Sabadilla	PPC		R	See 'Botanicals' for restrictions.
Salt (sodium chloride)	NOI		A	May not contain flow agents or bleaching additives.
Sand, steamed	NOI		A	For use as an anti-caking agent and substitute for silicon dioxide.
Sea Salt	NOI		A	
Shellac	NOI		P	
Silicon Dioxide	PPA	551	R	Allowed only as a gel or colloidal solution for winemaking and fruits/vegetables.
Smoke Flavoring	NOI		A	See 'Flavors, natural' and 'Yeast, smoked'.
Soap	CDS		A	Allowed for equipment and food contact surfaces. Allowed for post harvest wash.
Sodium Bicarbonate	NOI	500	A	1
Sodium Carbonate	NOI	500	A	
Sodium Chloride	NOI		A	
Sodium Citrate	NOI	331	A	
Sodium Hydroxide	NOI	524	R	Prohibited for use in lye peeling of fruits and vegetables and where the natural sodium bicarbonate is an acceptable substitute. Prohibited as pH adjuster. Allowed only for sugar processing and for the surface treatment of traditional bakery products.
Sodium Phosphates	NOI		R	Use as an ingredient restricted to dairy foods.
Sodium Silicate	PPA		A	Allowed for floating tree fruits.
Sodium Tartrate	NOI	335	P	
Sorbic Acid	NOI		P	
Steam	NOI		A	Steam in contact with food may not contain boiler chemicals and subject to the requirement of OCIA Standard 5.2.4.
Sulfites	NOI		P	See 'Sulfur Dioxide'.
	PPC,		P	
Sulfur	PPA			Prohibited for post-harvest treatment.
Sulfur Dioxide	NOI	220	R	For use in organic wine processing only; may not be added to wine at levels greater than 100 ppm; the level of free sulfites may not exceed 35 ppm in the final product.
Sulfuric Acid	CDS		R	May only be used as equipment cleaner.
Sulfuric Acid	PPA		P	
Talc	PPA	553	A	
Tannic Acid	PPA	184	R	Allowed only as wine filtration aid.
Tannin	PPA	181	R	Allowed only for winemaking.

MATERIAL	CLASS	INS	STATUS	SPECIFICATIONS
Tartaric Acid	NOI	334	R	Non-synthetic forms are acceptable. Allowed only for wine production.
Tocopherols	NOI	306	A	Must be derived from vegetable oils when rosemary extracts are not a suitable alternative.
Traganth Gum	NOI	413	A	See 'Gums, vegetable'.
Traps, Insect			A	Considered a Cultural Practice  May not be combined with otherwise prohibited synthetic pesticides.
Traps, Rodent			A	Considered Cultural Practice  Mechanical traps are acceptable but not with synthetic baits.
Ultra-sonic deterrent devices			A	Cannot be the only means of rodent control.  Alternative methods for rodent control must be documented in the handling plan.
Vinegar	CDS		A	Allowed as a cleaner.
Vinegar	OI		R	Must be from an organic source.
Vitamins			A	For enrichment or fortification when required by law or regulation, or recommended by an independent professional body.
Vitamin D-3 (Colcalciferol)			R	Cannot be the only means of rodent control. Alternative methods for rodent control must be documented in the handling plan. Must be used in tamper proof bait station.
Water			A	See OCIA Standards 5.1.3 and 5.1.4.
Wax, prohibited	PPA		Р	Petroleum derived waxes and waxes that contain synthetic fungicides or preservatives are prohibited. Waxes containing ammonium soaps and shellac are prohibited.
Wax, restricted	PPA		R	Must not contain any prohibited substances. Acceptable sources include carnauba or wood- extracted wax. Products that are coated with approved wax must be indicated as such on shipping container.
Will Don't	NOI			Must be from an organic source to be used as an
Whey Protein	NOI		A	organic ingredient.
Wine Yeast	NOI		A	See 'Yeast'.
Wood Rosin X-rays	NOI PPA		R	See 'Wax, restricted'.  Use of radiation (x-rays) for the inspection of organic is allowed.
Xanthan Gum	NOI	415	A R	Allowed only for fat, fruit, and vegetable products and cakes and biscuits. See 'Microbial Products'.
Yeast	NOI		٨	Yeast (used for source) that is a product of rDNA technology is prohibited.
Yeast, autolysate	NOI		A	See 'Yeast'.
1 casi, autorysate	NOI		A	Yeast (used for source) that is a product of genetic
Yeast, baker's			A	engineering technology is prohibited.
Yeast, nutritional			A	Yeast (used for source) that is a product of genetic engineering technology is prohibited. Growth on petrochemical substrates and sulfite waste liquor is prohibited. See 'Microbial Products'.

MATERIAL	CLASS	INS	STATUS	SPECIFICATIONS
Yeast, smoked	NOI		A	Smoked yeast grown on petrochemical substrates and sulfite waste liquor is prohibited. The handler must document in the Handling Organic System Plan that the smoke flavoring used is produced using a non-synthetic process that does not use synthetic processing aids or additives. See 'Yeast'.

### 5 TABLE 1: Maximum Concentrations of Elemental Contaminants Contained in Synthetic Micronutrients.

	Maximum Allowable Concentration
Element	ppm*
Arsenic (As)	10
Cadmium	20
Cobalt (Co) ^	150
Chromium (Cr)	210
Copper (Cu) ^	1000
Lead (pb)	90
Mercury (Hg)	5
Molybdenum (Mo) ^	20
Nickel (Ni)	180
Selenium (Se) ^	14
Zinc (Zn) ^	1850

<sup>\*</sup>mg/Kg dry weight

<sup>^</sup> Maximum level allowed in products that do not make a nutrient claim for this element on the label.

## **Section Ten**

#### 10.0 DOCUMENT REVIEW/CERTIFICATE TRANSFERENCE PROCESS

#### 10.1 **DEFINITIONS**

#### 10.1.1. DOCUMENT REVIEW

The method by which OCIA certification is granted to a product which was originally certified by another recognized certification agency. This process is used at all levels of certification. While its primary purpose is to alleviate emergency situations, the document review may be used to fulfill normal contracts.

#### 10.1.2. CHAPTER DOCUMENT REVIEW

Chapters may do document reviews only in the cases of feed, forage, livestock and food products coming in to an on-farm processor. Refer to Section 3.5.7 in the OCIA International Certification Standards.

#### 10.1.3. CERTIFICATE TRANSFERENCE

Certificate Transference of products certified by an IFOAM-accredited certifier to be used in production or processing operations certified to the OCIA International Program.

For additional information on the process and/or documentation for obtaining Certificate Transference, please contact the OCIA International Office.

#### 10.2 **PROCEDURE**

- 10.2.1. The requesting party must be a certified member of OCIA. The requesting member must document that they have attempted to locate OCIA-certified farmers or processors in their area, before requesting the document review. If none are available in their area, a document review may be conducted.
- 10.2.2. The appropriate fee must be paid by Corporate Members or Members at Large. The chapter fee is decided by the chapter.
- 10.2.3. All correspondence for a document review must be conducted in writing. The following information is required from the other certifying body:
  - Inspection report;
  - Organic System Plan;
  - Field histories:
  - Farm diagram;
  - Certification program's recommendations or requirements and/or a copy of the certificate;
  - Proof of inspector's independence and competency.
- 10.2.4. The certification committee must review the above paperwork to determine the following:
  - Completeness of documentation;
  - Whether entity in question meets OCIA Standards and certification procedures.

- 10.2.5. Decision of the certification committee, being either approved or denied, will be communicated to the requesting member directly in writing and carbon copy will be sent to the other certification agency.
- 10.2.6. If the certification committee approves a document review, "inventory" resulting from the decision is added to the member's database and a Transaction Certificate is issued.
- 10.2.7. If the document review is done annually on a single ingredient product, for a particular OCIA member, and there is no change in the certification or the source of that product, or its ingredient, that document review may stand for all of the product shipped on all occasions to that particular OCIA member. The member must ascertain from the producer and the producer's certifying body that the product has not changed

# Addendum to the OCIA International Standards

The following sections serve as an addendum to the OCIA International Standards. These are guidelines.

Guidelines are the testable index of management practices. Standards, in some cases, may be broad in scope, requiring many specific management elements to be in place to assure that organic integrity is established and maintained.

Guidelines serve an important part in the development of new standards. Guidelines often are the detailed management plan that a practitioner uses in a specific farming region, or in a new practice (e.g., aquaculture). While they demonstrate how the practitioner intends to achieve the goals as defined by organic principles, these practices are too specific to be used by all practitioners within the given discipline. By formally adopting a guideline, a new practice or process may be used by all practitioners within the given discipline. By formally adopting a guideline, a new practice or process may be certified. As more practitioners are involved in this guidelines aspect of certification, guidelines are broadened, the specificity is removed and the key points evolve to become operational standards that define organic integrity within the discipline.

## **Section Eleven**

#### 11.0 ORGANIC AQUACULTURE PRODUCTION GUIDELINES

The guidelines in this section of the OCIA International Certification Standards, are the "Aquatic Production Standards" from the *IFOAM Norms for Organic Production and Processing Version 2005*. The aquatic production section is copied directly from the IFOAM Basic Standards (IBS) Section 9., pages 47 thru 51. The numbering from the IBS is retained and all references within what is copied here refer to sections of the IFOAM IBS. (To view the complete IFOAM Norms documents contact www.ifoam.org)

#### 9. Aquaculture Production Standards

#### 9.1 Conversion to Organic Aquaculture

#### General Principle

Conversion in organic aquaculture production reflects the diversity of species and production methods.

#### Recommendation

Production units should have an appropriate distance from contamination sources and conventional aquaculture.

#### Standards shall require that:

- **9.1.1** Operators comply with all the relevant general requirements of chapters 3 and 5.
- **9.1.2** The conversion period of the production unit shall be at least one life cycle of the organism or one year, whichever is shorter.
- **9.1.3** Operators shall ensure that conversion to organic aquaculture addresses environmental factors, and past use of the site with respect to waste, sediments and water quality.

#### 9.2 Aquatic Ecosystems

#### General Principle

Organic aquaculture management maintains the biodiversity of natural aquatic ecosystems, the health of the aquatic environment, and the quality of surrounding aquatic and terrestrial ecosystem.

#### Recommendations

Production should maintain the aquatic environment and surrounding aquatic and terrestrial ecosystem, by using a combination of production practices that:

- a. encourage and enhance biological cycles;
- **b.** utilize preventive, system based methods for disease control;
- **c.** provides for biodiversity through polyculture and maintenance of riparian buffers with adequate plant cover.

#### Standards shall require that:

**9.2.1** Aquatic ecosystems shall be managed to comply with relevant requirements of chapter 2.

- **9.2.2** Operators shall take adequate measures to prevent escapes of introduced, or cultivated species and document any that are known to occur.
- **9.2.3** Operators shall take verifiable and effective measures to minimize the release of nutrients and waste into the aquatic ecosystem.
- **9.2.4** Fertilizers and pesticides are prohibited unless they appear in Appendices 2 and 3.

#### 9.3 Aquatic Plants

General Principle

Organic aquatic plants are grown and harvested sustainably without adverse impacts on natural areas.

#### Recommendation

The act of collection should not negatively affect any natural areas.

Standards shall require that:

- **9.3.1** Aquatic plant production shall comply with the relevant requirements of chapters 2 and 4.
- **9.3.2** Harvest of aquatic plants shall not disrupt the ecosystem or degrade the collection area or the surrounding aquatic and terrestrial environment.

#### 9.4 Breeds and Breeding

General Principle

Organic animals begin life on organic units.

Recommendations

Breeds should be locally adapted and regionally established.

Aquatic animal husbandry should not be dependent on conventional raising systems.

Aquatic animals should be reproduced and bred by natural methods.

Standards shall require that:

**9.4.1** Animals shall be raised organically from birth.

If organic animals are not available, brought-in conventional animals shall spend not less than two thirds of their life span in the organic system.

When organic stock is not available, conventional sources may be used. To promote and establish the use of organic stock, standard-setting organizations shall set appropriate standards and/or time limits for the selected use of non-organic sources.

**9.4.2** Operators shall not utilize artificially polyploided organisms.

#### 9.5 Aquatic Animal Nutrition

General Principle

EN-QS-M-003, Revision S Effective Date: 27 August 2015 Organic aquatic animals receive their nutritional needs from good quality, organic and other sustainable sources.

#### Recommendations

Operators should design feed rations to supply most of the nutritional needs of the animal from organic plants and animals appropriate for the digestive system and metabolism of the species.

Feed brought into the operation should be comprised of by-products from organic and wild sources not otherwise suitable for human consumption.

Operators should maintain the biological diversity of areas that are managed and maintain adequate representation of naturally-occurring organisms.

Operators should design good quality balanced diets according to the physiological needs of the organism.

Operators should feed animals according to their natural feeding behavior.

Operators should feed animals efficiently, with minimum losses to the environment.

Operators should design systems so that the production area comprises the entire food chain with minimal reliance on outside inputs.

Standards shall require that:

#### **9.5.1** Animals shall be fed organic feed.

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

- a. organic feed is of inadequate quantity or quality;
- b. areas where organic aquaculture is in early stages of development.

In no case may the percentage of non-organic feed of agricultural origin exceed 15% dry matter calculated on an annual basis.

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

- a. are harvested from independently verified sustainable sources;
- b. are verified to have contamination levels below limits established by the standard-setting body, and
- c. do not constitute 100% of the diet.

The standard-setting or certification body shall set:

- a. an appropriate percentage requirement of organic ingredient as diet;
- b. an implementation date for requiring at least 50% of diet be of organic ingredients.
- **9.5.2** The dietary requirements for aquatic animals shall comply with the requirements of 5.6.4 and 5.6.5.

#### 9.6 Aquatic Animal Health and Welfare

#### General Principles

Organic management practices promote and maintain the health and well-being of animals through balanced organic nutrition, stress-free living conditions appropriate to the species and breed selection for resistance to diseases, parasites and infections.

EN-QS-M-003, Revision S Effective Date: 27 August 2015

#### Recommendations

Operators should identify the cause of outbreaks of disease or infection.

Operators should implement management practices, including criteria for choosing a site that can diminish causative events and future outbreaks of disease.

Operators should use natural methods and medicines, as the first choice, when treatment is necessary.

#### Standards shall require that:

- **9.6.1** Operators shall comply with relevant requirements of section 5.7.
- **9.6.2** Prophylactic use of veterinary drugs is prohibited.
- **9.6.3** Use of chemical allopathic veterinary drugs and antibiotics is prohibited for invertebrates.
- **9.6.4** Synthetic hormones and growth promoters are prohibited for use to artificially stimulate growth or reproduction.
- **9.6.5** Stocking densities do not compromise animal welfare.
- **9.6.6** Operators shall routinely monitor water quality, stocking densities, health, and behavior of each cohort (school) and manage the operation to maintain water quality, health, and natural behavior.

#### 9.7 Aquatic Animal Transport and Slaughter

#### General Principle

Organic animals are subjected to minimum stress during transport and slaughter.

#### Recommendations

A person specifically responsible for the well being of the animals should be present during transport.

To avoid unnecessary suffering, organisms should be in a state of unconsciousness before slaughter.

#### Standards shall require that:

- **9.7.1** Operators shall comply with relevant requirements of section 5.8.
- **9.7.2** The operator shall handle live organisms in ways that are compatible with their physiological requirements.
- **9.7.3** Operators shall implement defined measures to ensure that organic aquatic animals are provided with conditions during transportation and slaughter that meet animal specific needs and minimize the adverse effects of:
- a. diminishing water quality;
- b. time spent in transport;
- c. stocking density;
- d. toxic substances;
- e. escape.

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9.7.4	Aquatic vertebrates shall be stunned before killing. Operators shall ensure that	
equipmen	t used to stun animals is sufficient to remove sensate ability and/or kill the organism and	is
maintaine	d and monitored.	

9.7.5	Animals shall be handled, transported and slaughtered in a way that minimizes stress and
suffering, ar	d respects species-specific needs.

## **Appendix**

#### A DEFINITIONS

**Administered** (to livestock) – to be ingested, injected, or otherwise topically or internally introduced to livestock.

**Agriculture** - the science, art and business of cultivating the soil, producing crops and/or raising livestock.

**Agricultural product/product of agricultural origin** - any product or commodity of agriculture, raw or processed, including any commodity or product derived from livestock, that is marketed for human or livestock use or consumption.

**Agroecosystem** - a diverse biological system composed of soil, air, water, microorganisms, plants, and animals that produces food and fiber for the use of humans or domestic animals.

**Agroecosystem health** - the capacity of an agroecosystem to sustain optimum levels of biological productivity, including the quality of soil, water, air and any other environmental elements that affect the organisms present within the farm operation.

**Allowed (permitted)** - materials and/or practices that may be used for the production of organic crops, livestock, and processed products with no restrictions in the OCIA certification program.

**Animal** - any mammals, birds, or insects including cattle, sheep, goats, or swine.

**Animal drug** - any drug that is intended for use in livestock, including for use in livestock feed.

**Annual crop** - a crop produced by a plant that will complete its entire life cycle within the same crop year in which it was planted.

**Antibiotic** - any of various substances, such as penicillin or streptomycin, that are used to inhibit or destroy the growth of microorganisms in the prevention and/or treatment of diseases.

**Appeal** - the process whereby an operator can request a decision made by a certification committee be reconsidered.

**Applied** (materials) - introduced, incorporated within, added to, or placed upon any seed, crop, plant, livestock, soil, growing medium, or agricultural product; and, used in, on, or around any facility or area in which a food or agricultural product is handled or stored.

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

Audit trail - a comprehensive system of documentation, or parts therein, which verifies the

integrity of organic products and/or ingredients, from production through harvest, storage, transport, processing, handling, and sales.

**Biennial crop** - a crop produced by plants that normally require two years to reach maturity, produce harvested portions, and then die.

**Biological diversity** - the existence of complex ecological systems as indicated by the presence of varied species of plants, animals, and other organisms such as are found in natural systems.

**Biologics** - all viruses, serums, toxins, and analogous products of natural origin, such as diagnostics, antitoxins, vaccines, live microorganisms, killed microorganisms and the antigenic or immunizing components of microorganisms intended for use in the diagnosis, treatment or prevention of diseases of animals.

Botanical pesticide - natural (non-synthetic) pesticide derived from plants.

**Breeding** - selection of plants or animals to reproduce desired characteristics in succeeding generations.

**Broker** - an agent for others in negotiating a sales contract; a selling broker generally represents a shipper; a buying broker generally acts as a purchasing agent for a buyer.

**Buffer zone** - a clearly defined and identifiable boundary area located between a certified organic production site and an adjacent land area that is not maintained under organic management. A buffer zone must be sufficient in size (a minimum of 25 feet [8 meters]) or other features (e.g. windbreaks or a diversion ditch) to prevent contact with organic crop by a prohibited substance applied to an adjacent non-organic land area.

**Certificate** - an annual written assurance, which identifies the name and address of the entity certified, effective date of certification, certification number, and types of products and/or processes certified.

**Certification** – the process used to ensure that each producer or handler of organic food or fiber meets the OCIA International Standards for production, processing and handling. Certification always includes on-site inspections.

**Certification agent (agency)** – any company, organization or government body that offers the service of organic certification.

**Certification applicant** - a producer, processor, or handler of agricultural products who applies for OCIA certification.

**Certification seal** – the OCIA logo, sign, or mark, which may be used to identify products or operations, certified as being in compliance with OCIA International Standards.

**Certified organic farm** - a farm, or portion of a farm, where agricultural products are produced, that is certified by a certification agent as utilizing a system of organic management which is in compliance with OCIA International Standards.

**Certified organic handler** - a processing or handling operation, or a portion of an operation, that is certified by a certification agent as utilizing a system of organic management, which is in compliance with OCIA International Standards.

**Certified organic wild crop harvesting operation** - a clearly identified wild crop harvesting site or operation that is certified by OCIA as utilizing a system of organic management which is in compliance with OCIA International Standards.

**Commercially available** – the availability of a production input or ingredient in an appropriate form, quality, quantity, or variety to be feasibly and economically used to fulfill an essential function in a system of organic farming, processing, and/or handling.

**Commercially unavailable** – the documented unavailability of a production input or ingredient in an appropriate form, quality, quantity, or variety to be feasibly and economically used to fulfill an essential function in a system of organic farming, processing, and/or handling.

**Commingling** -the mixing together, or physical contact between, organic products and non-organic products which are unpackaged or permeably packaged, which leads to a loss of integrity of the organic product, during production, processing, transportation, storage, or handling, other than the processing of multi-ingredient products which contain both organic and non-organic ingredients.

**Compost** - the product of a carefully managed aerobic process by which natural materials are digested by microorganisms. Materials added to the composting process are limited to those permitted for crop production by these standards. Sewage sludge, biosolids or mixed municipal solid wastes are prohibited. Organic materials for compost must be managed appropriately to reach temperatures for the duration necessary to effectively stabilize nutrients and kill human pathogens.

**Contaminant** - a residue of a prohibited substance that persists in an organic product or the environment.

**Contamination** - the introduction of prohibited substances to organic products, ingredients, production areas, handling processes, or to the environment.

**Contract growers/grower groups** – producers whose products are indirectly certified under the sponsorship of a certified processor/Handler.

**Contract processor** – a contract processor's processing activities are covered by the organic certification of the party that seeks its processing services. A contract processor does not take legal title to the ingredients or final products that are manufactured for another party.

**Conversion (transition)** - the act of establishing organic management practices in accordance with OCIA International standards.

**Conversion period (transition period)** - the time between the start of organic management and certification of the crop or livestock production system or site as organic.

**Crop** - a plant or part of a plant intended to be marketed or consumed as an agricultural product.

**Crop production aid** – substances used in conjunction with other materials, which are often not directly applied to the crop or soil. Examples include adjuvants, equipment cleaners, insect traps, and plastic mulch.

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

**Crop year** - the normal growing season for a given crop.

**Cultural practices** - management methods which are used to enhance crop or livestock health and/or prevent weed, pest or disease problems without the use of external inputs, including, but not limited to: selection of appropriate varieties and breeds; selection of appropriate planting sites; control of timing and density of plantings; construction of livestock facilities designed to optimize animal health; management of stocking rates; etc.

**Distributor** - a handler that purchases product under its own name, usually from a shipper, processor, or another distributor. Distributors may or may not take physical possession of the merchandise.

**Drift** - the physical movement of pesticides, fertilizers, genetically engineered organisms, or other prohibited materials onto an OCIA-certified organic field, farm, or facility.

**Extract** – to produce a substance by dissolving the soluble fractions of a plant, animal or mineral in water or another solvent; or the product thereof.

**Facility** - a processing, manufacturing, livestock housing, or other site or structure maintained or operated to grow, raise or handle organically produced agricultural products that is part of an OCIA-certified organic farm, wild crop harvesting, livestock, or handling operation.

**Farm** - an agricultural operation maintained for the purpose of producing agricultural products.

**Feed** -edible materials that are consumed by livestock. Feed may be concentrates (grains) or roughages (hay, silage, fodder). The term feed encompasses all agricultural products, including pasture, ingested by livestock for nutritional purposes.

**Feed additive** – a substance that is added to feed in micro quantities to fulfill a specific nutritional need; (i.e., essential nutrients in the form of amino acids, vitamins, and minerals).

**Feed supplement** - an essential nutrient or nutrients added to livestock feed to improve the nutritive balance or performance of the total ration and intended to be: (1) diluted with other feeds when fed to livestock; (2) offered free choice with other parts of the ration if separately available; or (3) further diluted and mixed to produce a complete feed.

**Fertilizer** – a single or blended substance containing one or more recognized plant nutrient(s) which is used primarily for its plant nutrient content and which is designed for use or claimed to have value in promoting plant growth.

**Fiber** - a natural filament, such as of cotton, flax, hemp, silk, or wool, including material made of such filaments, which are products of organic agricultural systems.

**Field** - an area of land identified as a discrete and distinguishable unit within a farm operation.

**Fogging** - the application of a liquid or solid insecticide that is vaporized by heat or atomization to penetrate free air space to kill insect pests.

**Foliar nutrient** - any liquid substance applied directly to the foliage of a growing plant for the purpose of delivering nutrients.

**Food** - material, usually of plant or animal origin, containing or consisting of essential body nutrients, as carbohydrates, fats, proteins, vitamins, and/or minerals that is taken in and assimilated by an organism to maintain life and growth.

**Food additive** - a substance, the intended use of which results or may reasonably be expected to result, directly or indirectly, either in the substance becoming a component of food or otherwise affecting the characteristics of food. A material used in the production of containers and packages is subject to the definition if it may reasonably be expected to become a component, or to affect the characteristics, directly or indirectly, of food packed in the container. A substance that does not become a component of food, but that is used in preparing an ingredient of the food to give a different flavor, texture, or other characteristic in the food, may be a food additive.

**Forage** – vegetative material in a fresh, dried, or ensiled state (pasture, hay, or silage) that is fed to livestock.

**Fumigation** – the application of a gas to a sealed space to permeate areas and products to kill all pests, including eggs and larvae.

**Fungicide** - any substance that kills or inhibits the growth of a fungus or mold.

Genetically engineered/modified organisms (GEO/GMOs) – organisms made with techniques that alter the molecular or cell biology of an organism by means that are not possible under natural conditions or processes. Genetic engineering includes recombinant DNA, cell fusion, micro- and macro- encapsulation, gene deletion and doubling, introducing a foreign gene, and changing the positions of genes. It shall not include breeding, conjugation, fermentation, hybridization, in-vitro fertilization, and tissue culture.

**Green manure** - a crop that is grown and then plowed into the soil or left to decompose for the purpose of soil improvement.

**Grower groups** - small holder producer collectives, the members of which are located in close proximity to one another, raise the same crops using the same management practices and inputs, have a common management structure, and market their products in common.

**Growth promoters** - a substance that is added to livestock feed for promotion of growth at levels above those needed for adequate nutrition. Adequate nutrition is considered a maintenance level suitable to life stage of the animal, as evidenced by normal growth rate for the species.

**Handle** - to sell, process, package, or store agricultural products.

**Handler** - any person engaged in the business of handling agricultural products, except such term shall not include retailers of agricultural products that do not process agricultural products.

**Handling operation** - any operation or portion of an operation (except final retailers of agricultural products that do not process agricultural products) that receives, processes, packages, or stores agricultural products.

**Herbicide** - a substance used to kill plants, especially weeds.

**Homeopathic treatment** - treatment of a disease based on the administration of remedies prepared through the dilution and succession of a substance that in massive amounts produces symptoms in healthy animals similar to those of the disease itself.

**Incidental additive** - (i) substances that have no technical or functional effect but are present in a food by reason of having been incorporated into the food as an ingredient of another food, in which the substance did have a functional or technical effect; (ii) processing aids; and (iii) substances migrating to food from equipment or packaging or otherwise affecting food that are not food additives.

**Inert ingredient in a pesticide formulation** - any substance or group of structurally similar substances other than an active ingredient which is intentionally included in a pesticide product.

**Ingredient** - any substance used in the preparation of a food or fiber product that is still present in the final product as used or consumed, even if in a modified form.

**Ingredient panel** – the list of ingredients contained in a product shown in their common and usual names in the descending order of predominance.

**Insecticide** - a substance or mixture of substances used to prevent, destroy, repel, mitigate, or kill insects.

**Inspection** – the act of evaluating and examining the production and/or handling operation of an applicant for OCIA certification to assess compliance with OCIA International Standards.

**Inspector** - a person independent from the decision-making process who is accredited to perform inspections for OCIA.

**Ionizing radiation (irradiation)** - high energy emissions from radionuclides, (such as cobalt-60 or cesium-137), capable of altering a food's molecular structure for the purpose of controlling microbial contaminants, pathogens, parasites and pests in food, preserving a food, or inhibiting physiological processes such as sprouting or ripening.

**Labeling** - any written, printed or graphic representation that is present on the label of a product, accompanies the product, or is displayed near the product at the point of sale.

Landless - as in livestock operations, pertaining to indoor facilities with confined spaces or pens

with little or no access to sunlight, fresh air or room for natural movement.

**Licensing agreement** - an agreement or contract that grants an Associate, Chapter, or Partnership the right to use the OCIA seal in accordance with OCIA policies, procedures, standards, and bylaws.

**Livestock** - any cattle, sheep, goats, swine, poultry, equine animals, domesticated game, bees, or other cultivated animals raised for food, fiber, or the production of food or fiber.

**Livestock production aid** – materials used on animals and in their living areas. Cleaners, disinfectants, and other materials used on facilities and equipment that may come into direct contact with livestock and livestock products must either be non-synthetic or explicitly allowed or restricted in the OCIA Livestock Materials List.

**Loss of organic integrity** – contamination of an OCIA-certified product by commingling with a non-organic product or by contact with prohibited substances.

**Manure** - feces, urine, bedding, and other waste incidental to an animal. It does not include sewage sludge or human waste products.

**Manure, raw** - feces, urine, bedding, and other waste incidental to an animal, which has not been composted or processed to reduce pathogens. It does not include sewage sludge or human waste products.

**Municipal sludge (biosolids)** - semi-solid residuals produced by municipal wastewater treatment processes.

**Nanotechnology** - a technique that allows scientists to manipulate matter at the scale of atoms and molecules smaller than 100 nanometers (1nm = one billionth of a meter). With this technology, scientists are able to alter molecular structures, resulting in new and unexpected properties. These substances are being developed in all industries worldwide, including medicine, electronics, agriculture, food products and packaging. The impact of this technology has numerous ethical, social, legal and philosophica implications. Current developments in the industry remain unregulated and unlabeled.

Nanoparticles - particles of less than 100nm in diameter that exhibit new or enhanced size-dependent properties compared with larger particles of the same material. Synthetic[manufactured] nanoparticles do not exist in nature and therefore may cause unpredictable and unknown risk.

**Natural** – a substance derived from plant, animal or mineral source that has not undergone a synthetic process.

**Non-Organic Ingredient** – materials that are not organically produced, either because they are not agricultural products or because they are secondary ingredients that are not yet available in organic form.

**Nutrient management** - managing the amount, source, placement, form and timing of the application of nutrients and soil amendments.

**OCIA Certified organic product** - a product that has been produced and handled in accordance with OCIA International Standards by an OCIA-certified organic farm or handler, as verified by the existence of a valid OCIA certificate

**OCIA Recognized Certified Organic** – products, ingredients, processes or facilities certified by OCIA to national or regional standards or by another recognized accredited certification body.

**Operator** - a person who owns, directs or manages a production or handling enterprise.

**Organic agriculture** - a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity; emphasizes the use of management practices over the use of off-farm inputs; and utilizes cultural, biological and mechanical methods as opposed to synthetic materials.

**Organic control point** - any point or procedure in an organic production, processing or handling system where there is a high probability that improper control may cause, allow or contribute to a loss of organic integrity.

**Organic integrity** - the qualities of an organic product which are obtained through adherence to OCIA standards at the production level, which must be maintained through handling to the point of final sale, in order for the final product to be labeled and/or marketed as organic.

**Packer** - a type of handler such as a produce-packing operation that receives raw agricultural products and packs the products for shipping. A produce packer may also store products and apply post-harvest materials. A meat packer converts live animals to carcass meats and possibly to primal cut or boxed meat and other fresh meat forms.

**Parallel production** - the simultaneous production, processing or handling of organic and nonorganic (including transitional) crops, livestock and/or other agricultural products of the same or similar (indistinguishable) varieties.

Parasiticide - a substance or compound used to kill parasites, either internal or external.

**Pasture** - land used for grazing of livestock that is under management measures designed to maximize soil fertility, provide feed value, protect the environment from degradation, and support range land health.

**Percent calculation** - the total percentage of organically produced ingredients in a food, calculated from the actual amounts of the listed ingredients, excluding air, water and salt (sodium chloride), on the basis of: a) weight; b) fluid volume if all ingredients of the food are liquid; or c) single-strength concentration for food concentrates reconstituted with water, if the food is identified as being from concentrate on the principal display panel.

**Perennial crop** - any crop, other than a biennial crop, that can be harvested from the same planting for more than one crop year, or that requires at least one year after planting before harvest.

**Pest** - an injurious or unwanted plant, animal, microbe or other organism.

**Pesticide** - any substance or mixture of substances intended for preventing, destroying, repelling,

or mitigating any pest, and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

**Pheromone** - substances secreted by animals, including insects, which influence specific patterns of behavior in other members of the same species.

**Planting stock** - any plant or plant tissue, including rhizomes, shoots, leaf or stem cuttings, roots, crowns, or tubers used in plant production or propagation.

**Primary Ecosystem -** An area that has not previously been altered by human involvement, and is of sufficient size to sustain its own unique biological life.

**Processing** - cooking, baking, heating, drying, mixing, grinding, churning, separating, extracting, cutting, fermenting, slaughtering, eviscerating, preserving, dehydrating, freezing, dyeing, sewing, or otherwise manufacturing, including packaging, canning, jarring, or otherwise enclosing in a container, other than normal post harvest packing of crops performed by producers.

**Processing aid (food)-** includes: (a) substances that are added to a food during the processing of such food but are removed in some manner from the food before it is packaged in its finished form; (b) substances that are added to a food during processing, are converted into constituents normally present in the food, and do not significantly increase the amount of the constituents naturally found in the food; or (c) substances that are added to a food for their technical or functional effect in the processing but are present in the finished food at insignificant levels and do not have any technical or functional effect in that food.

**Processor** - a person or company who performs any type of processing operation, including cooking, baking, heating, drying, mixing, grinding, churning, separating, extracting, cutting, fermenting, slaughtering, eviscerating, preserving, dehydrating, freezing, or otherwise manufacturing, including packaging, canning, jarring, or otherwise enclosing in a container, other than normal post harvest packing of crops performed by a producer.

**Producer** - a person or company who engages in the business of growing or producing food, feed, fiber crops, or livestock.

**Production** - operations undertaken to grow or raise agricultural products in the form which they occur on the farm, including the initial packaging and labeling of the product.

**Prohibited** – materials that may not be used on land in the certification program, or in the production of any crops grown on land in the certification program. At least 36-months must pass after the use of any prohibited substances before land, which has received that substance, may be certified.

**Receiver** - an operator, located at a destination point, who purchases and takes physical possession of truck lots or car lots and resells them intact or in jobbing lots in the local area.

**Reciprocity** - mutual or co-operative recognition between organic certification agents based on equivalent standards and verified competency assessment or accreditation.

**Records** - any information in written, visual, or electronic form that documents that the activities undertaken by producers, processors, handlers, inspectors, and certification agents comply with

organic standards. Records include Organic System Plans, field maps, field logs, journals, calendars, harvest, storage and sales records, animal health reports, receipts, invoices, billing statements, bills of lading, inventory control reports, production reports, facility diagrams, process flow charts, questionnaires, affidavits, inspection reports, laboratory analysis reports, minutes of meetings, personnel files, correspondence, photographs, and other materials.

**Repacker** - an operator who receives products from growers or other sources, removes the products from the original containers, may or may not sort the products, and repacks the products for resale either in the original container or in different containers.

**Restricted** – materials allowed by OCIA with certain restrictions, and only if no alternatives are feasible. The use of these materials is discouraged. In many cases, the permitted use of these materials is dependent on the specific source, and demonstration that the material is free from contamination.

**Rodenticide** - a pesticide or other applied material used to kill or destroy rodents.

Routine use - regularly scheduled or periodic administration of substances or management.

**Shipper** - a handler that is located at growing or other shipping/intermediate points. A shipper sells products that it has grown and/or packed under its own name. A shipper may sell for the account of growers or other shippers.

**Slaughter stock** - any animal that is slaughtered for human consumption.

**Soil amendment** - a substance applied to the soil to improve physical qualities or biological activity; complement or increase soil organic matter content; or complement or adjust a soil nutrient level. Includes fertilizers, as well as materials other than fertilizers, such as lime, sulfur, gypsum, and organic materials.

**Specifications** - notes accompanying methods and substances allowed for use in organic production and handling which are required conditions for the specific use and application of such methods and substances.

**Split operation** - an operation that produces or handles non-organic agricultural products in addition to agricultural products produced organically.

**Substantially transform** - actions by a handler of organic products that change the nature of the product or packaging. Includes any processing actions and post harvest treatments that contact products not in closed impermeable containers. Does not include inspection of products and storage procedures such as refrigeration, freezing, or controlled atmosphere.

**Subtherapeutic use** - administration of a veterinary drug at levels that are below the levels used to treat clinically sick animals, for the purpose of preventing disease, increasing weight gain, or improving feed efficiency.

**Suspension of certification** - an action taken by a certification body that results in the temporary loss of ability of a farm, livestock, wild crop harvesting, or handling operation, or a portion of such operation, to market its products as organic or made with organic ingredients.

**Synthetic** - a substance that is formulated or manufactured by a chemical process or by a process that chemically changes a substance extracted from naturally occurring plant, animal, or mineral sources, except for those substances created by naturally occurring biological processes.

**Termination of certification** - an action taken by a certification committee that results in the loss of ability of a farm, livestock, wild crop harvesting, or handling operation to market its products as organic or made with organic ingredients.

**Third party** - a person or body that is recognized as being independent of the parties involved as concerns the issue in question.

**Transition (conversion)** - the act of establishing organic management practices in accordance with organic standards.

**Transition period (conversion period)** - the time between the start of organic management and certification of the crop or livestock production system or site as organic.

**Transplant** - a seedling or cutting raised to be replanted in another situation in order to raise an agricultural product.

**Treated (seeds and nursery stock)** - seeds, planting stock, or transplants to which permitted materials have been applied.

**Trucker** - an operator who transports products between farms, processing plants, other handling operations, or other facilities, who does not open product containers, or mix, combine, or otherwise handle the products while in custody.

**Untreated (seeds and nursery stock)** - seeds, planting stock, or transplants to which neither permitted nor prohibited materials have been applied.

**Vaccine** - a diluted suspension of killed or live microorganisms, which when inoculated creates immunity or increases a resistance to a disease-causing organism.

**Veterinary drug** - any medicinal substance applied or administered to any animal, whether used for therapeutic, prophylactic or diagnostic purposes, or for modification of physiological functions or behavior.

**Warehouser** - an operator who receives and stores products, does not take legal title to the products, and does not open product containers, or mix, combine, or otherwise handle the products while in custody.

**Wild harvested** - plants or portions of plants that are collected or harvested from defined sites that are maintained in a natural state and are not cultivated or otherwise managed.

#### B GUIDELINES TO ASSESS MATERIAL INPUTS

CRITERIA TO EVALUATE MINERALS AND SUBSTANCES PREPARED FROM LOCAL PLANTS, ANIMALS AND MICROORGANISMS

It is the associate's responsibility to determine the acceptability of a material not listed in the OCIA International Standards, Section 9, Materials for use in organic crop and livestock production. The OCIA materials list is not a comprehensive listing of all materials; therefore, there may be materials that are useful and appropriate in organic crop and livestock production not listed in the OCIA International Standards. When materials are not listed in Section 9, of the OCIA International Standards, the member/certification committee refers to the OMRI List of Materials for guidance. When the material is not listed in the OCIA International Standards or the OMRI List of Materials the associate must determine the acceptability of the material in question. In addition, associates should know the nature and source of all material inputs to be investigated to ensure compliance to all of the following criteria.

- 1. **Necessity**. Materials and products are an adjunct to, not a replacement for effective management (*See OCIA Standard 1.2.4*). Associates must look at alternatives to using the input in terms of management practices or other available materials allowed in the OCIA International Standards. Each input must be necessary in the context in which the product will be used and in compliance with state/provincial and federal regulations.
  - a. The basis for the necessity of an input may be derived upon factors such as yield, product quality, environmental safety, ecological protection, landscape, human and animal welfare.
  - b. Certification Committees may impose restrictions to inputs:
    - Specific crops (especially perennial crops) or animal species.
    - Specific regions and/or weather conditions.
    - Specific nutrient requirement essential to achieve or maintain soil fertility.
    - Specific pests, diseases, weeds or illness.
    - Specific conditions under which the input may be used or administered to livestock.

## 2. Natural, Method of Production, and Collection.

- 2.1 **Natural**. The origin of the material should be:
  - Natural vegetative, animal, microbial materials are allowed except when specifically prohibited in the OCIA International Standards. These materials must also be free of prohibited materials. Raw materials of OCIA-certified or OCIA-recognized-certified origin must be used when available in quantities and variety needed.
  - Mineral

Non-natural products that have been chemically synthesized or contain synthetic substances are prohibited if not specifically allowed in the OCIA International Standards, Section 9, Materials List.

When there is a choice in the selection of materials the order of preference is:

- renewable inputs,
- mineral inputs,
- chemical inputs specifically allowed in the OCIA International Standards.

## 2.2 Method of Production

The ingredients of plant, animal, microbial, or mineral origin may undergo the following processing methods:

- a. Mechanical (i.e. extraction with water, ethanol, plant and animal oils, vinegar, carbon dioxide, nitrogen, or carboxylic acids, and refining without chemical treatment. *OCIA International Standards 3.7.1.c and 5.1.5.3\**)
- b. Physical (i.e. precipitation, thermal)
- c. Biological/enzymatic (OCIA International Standard 3.7.1)
- d. Microbial (i.e. fermentation, composting)

#### 2.3 Collection

The harvesting or gathering of raw materials must not exceed the sustainable yield of the ecosystem (See OCIA International Standard 4.6.2), affect the stability of the environment nor affect the preservation of any species within the collection area.

3. **Environmental Safety**. The input must not have a negative effect on the biological or chemical interactions in the agroecosystem, including the physiological effects of the substance on soil organisms (including the salt index and solubility of the soil), crops and livestock. The input should not give rise to unacceptable pollution of surface or ground water, air, or soil during manufacture, use, misuse or disposal of the material.

## 3.1 **Input Characteristics**

- **Degradability** Inputs must be degradable to carbon dioxide (CO<sub>2</sub>), water (H<sub>2</sub>O), and/or to their mineral form. Natural substances used as inputs that are not considered toxic do not need to be degradable within a specific period of time.
- Acute toxicity to non-target organisms Inputs that have a relatively high acute toxicity for non-target organisms are restricted. Maximum allowable application amounts may be determined by the certification committee. The use of the input may be prohibited if it is not possible to take adequate measures to protect non-target organisms.
- Long-term chronic toxicity Inputs that accumulate in organisms or systems of organisms and inputs that have or are suspected of having mutagenic or carcinogenic properties are prohibited. Sufficient measures must be taken to prevent long lasting negative environmental effects.
- **Heavy Metals** The application of heavy metals to land must not exceed the Maximum Concentrations of Metal Contaminants provided in *Table 1, Section 9.5* of the *OCIA International Standards*. Copper and copper salts are an exception for the time being due to the long-standing, traditional use in organic agriculture and lack of an alternative material. The use of copper in any form in organic agriculture must be viewed as temporary and used in a manner that prevents excessive copper accumulation in the soil. Build up of copper in soil may prohibit future use (*OCIA International Standard, Section 9, Materials List*).

## 4.0 Human Health and Quality

- 4.1 **Human Health** Inputs must not have detrimental effects to human health taking into account all stages of processing, use and degradation.
- 4.2 **Product Quality** Inputs must not have negative effects on the product quality or integrity.
- 4.3 **Ethical Aspects Animal Welfare** Inputs must not have negative effects on the behavior and well being of livestock kept at the farm.
- 4.4 **Socio Economic Aspects** Inputs should be compatible with a system of organic agriculture and should not meet resistance or opposition from consumers of organic products e.g. genetic engineering. Consumers may consider an input unsafe to the environment or human health, although this has not been scientifically proven.

## SPOT SPRAY POLICY

 $\boldsymbol{C}$ 

## SPOT SPRAYING AND OCIA CERTIFICATION

Historically organic growers have found that aggressive soil building and soil balancing in a multiple point program emphasizing the biological aspects of the soil system decreases the competition from tough perennials and with diligence eliminates them.

The International Standards Committee (ISC) recognizes that there are circumstances that are out of control of members. In the event of spot spraying OCIA-certified fields, the ISC has established the following parameters to uphold the integrity of the OCIA seal, while allowing members to remain certified. It is the position of the ISC that spraying with prohibited materials is not allowed. Fields that have been sprayed must be decertified.

(OCIA International Standards: Preamble, All of 2. and specifically 2.4.)

- A. If the farmer chooses to use prohibited materials on an OCIA-certified organic field, the farm must be decertified.
- B. If a government agency has required the use of prohibited materials then:
  - B.1 Established, documented minimum borders (8m or 25 ft.) must be maintained around sprayed area. This must include paths taken by spray equipment as well (if on OCIA-certified land).
  - B.2 Documentation is required of crops harvested from sprayed areas as well as buffer zones being sold on the conventional market. This documentation shall include, but is not limited to, the following: harvest and storage records, and sales receipts. This data will be verified during the next annual inspection
  - B.3. The field may remain out of certification for 1 or a number of years and then be reoffered for certification upon undergoing a three year transition period from the date of the last application of prohibited material.
  - B.4 Because of the special circumstances, the farm certification under section 2.1.1 shall not be jeopardized. This shall not be considered rotation of fields in and out of organic certification.
- C. If a producer chooses to remove a field from certification to "regain control of a weed situation", this shall be allowed only as a one time occurrence, and under the following conditions:
  - C.1. The farmer shall remove the field from his/her application before the certification application is submitted for the crop year at issue.
  - C.2. If for some reason the farmer has not removed this field from the certification application, he/she must make a request of the certification committee, and have an answer, in writing, before a prohibited substance is applied. The field may remain out of certification for a number of years and be re-offered for certification upon undergoing a three-year transition period from the date of the last application of the prohibited material.

## D STANDARD INTERPRETATIONS

August 2000

Re: **Hydroponic Systems** 

Organic production systems are soil-based systems, devoted to maintaining and improving soil fertility. Therefore, it is impossible to certify hydroponic systems under our current standards.

March 2002

The committee met to make a ruling in answer to two questions asked from the floor of the AGMM.

After two to three hours of discussion, the following decision was made by the OCIA ISC by consensus.

## Question #1

If a member procures a GMO test that reveals that there are no GMOs present in commercial feedlot manure, is that sufficient documentation for use as per Standard 2.8.1.d.?

## Question #2

Can a producer use manure from non-organic livestock that have been fed GMO feeds?

Ruling: The answer to both questions is the same.

OCIA International Standard 2.8.1.d. (2001) states that a producer may use "composted and uncomposted manure, preferably produced on the farm, or which is free of contaminants, if acquired elsewhere." If a producer believes that there may be a source of contamination of a manure input, then the manure <u>must</u> be tested, and if the tests show contamination, the manure may not be used.

January 8, 2002

The CDT requests clarification from the International Standards Committee on Standard 3.5.7. Of concern is what constitutes "sufficiently documented" and "pre-approved". The current interpretation of this standard is that if a member can verify the feed/forage is certified, that if the committee allows purchase of the product prior to use, it can be allowed without a document review, regardless of the certification agency. As the Standard is in place to alleviate emergency situations, it is the understanding of the CDT that the certified-but-not-by-OCIA feed/forage is allowed without a document review due to the emergency situation.

ISC response: A document review would not be required.

June 27, 2007

## OCIA Standard 3.1.1

"Livestock shall be registered with OCIA for at least 6 months before it may be eligible to seek

certification. Poultry shall be registered with OCIA for at least 30 days before it may be eligible to seek certification."

1. What does it mean to "register" livestock with OCIA?

Answer: The "registration date" starts when the animals arrive at the farm and/or begin being managed organically. This information must be indicated in the Organic Livestock Plan Outline. The producer must keep records documenting the beginning of the organic protocol and must have these available at the time of inspection and during the certification process. Members must notify the Chapter of any new additions to their livestock inventory via phone, fax, and/or email at the time of purchase and/or delivery. The member must also add the livestock to their Organic Livestock Plan Outline. Records must be available for the inspector. The timing of inspection is not important.

2. Will the animals be eligible and the offspring as long as the standards are fulfilled?

Answer: The breeding stock will be eligible for organic certification as breeding stock one year after they are handled and fed according to the standards. The offspring will be eligible as slaughter stock as long as the mother has been fed and handled organically since before the third trimester of pregnancy, and the offspring are continuously handled and fed according the to the standards until the time of slaughter (3.8).

3. Will the member need another inspection?

Answer: The member will not need another inspection.

Documentation about the animal's arrival, feeding, and handling should be available for the inspector and the animals that are in transition should be listed as such on the application.

July 31, 2007

**OCIA International Standards Committee (ISC) response** to inquiry from Deb Miller re the implications for OCIA certified farmers in the areas that will be sprayed with Malathion during a provincial government program for control of the West Nile Virus mosquito:

The OCIA ISC expresses great sympathy with producers who will be effected by the provincial government's decision to spray their area with Malathion for the control of the West Nile Virus mosquito.

However, Malathion is an organophosphate and is specifically prohibited by the OCIA International Certification Standards (OCIA ICS) (Pg. S9.16 Crop Production Materials List).

It is the position of the ISC that the Standards do not allow any exception to the requirement to place contaminated (sprayed) land into a 36-month transition. (See OCIA ICS 2.4.1, pg. S2.2 and archived standards interpretation re a similar situation "*Spot Spraying and OCIA Certification*".- attached.)

As noted in the latter document the farmer shall *not* be considered in violation of OCIA ICS 2.1.1 (going in and out of certification); and other lands under his/her supervision which have not been sprayed shall (with applicable buffers) continue their certification status.

A negative residue test on land that has been sprayed does not exempt the land from the three-year transition requirement (OCIA ICS 2.4.1).

## Attachments:

Spot Spraying and OCIA Certification (see previous pages in Standards) OCIA International Certification Standards 2007 – 2.4.1

## **OCIA Intl Certification Standard (2007)**

(Section highlighted in blue in reference to interpretation re government spray program by ISC on July 31, 2007)

2.4.1 In cases where there is reason to suspect contamination (an adjoining farm is growing sprayed crops, or there is other possibility of contamination), there must exist adequate physical barriers or a 25 foot (8 meter) minimum distance between organic pastures and crops and sprayed pastures and crops to maintain the integrity of certified fields. Where a field has been contaminated by a prohibited material, a 36-month transition period is required. Although testing is permitted, the amount of contamination or residue is not the issue. Even when subsequent testing may imply there are no residues of a prohibited material, the land is still not eligible to be brought back into certification without undergoing a 36-month transition period.

## ISC Interpretation April 22, 2008 - Ivermectin

## **Ouestion:**

Ivermectin is being required for use on livestock for lice/ warbles in some jurisdictions. Standard 3.9.5 allows for preventative vaccinations, probiotics (and similar preventive techniques) when "diseases" are known to exist in a region and vaccines when required by law. Lice and warbles are not a disease, but would the committee allow this treatment as it is legally required by the county?

#### Answer:

No. The OCIA Intl Standards do not allow the use of parasiticides such as ivermectin as a medication for use with organic livestock. Ivermectin is not a vaccination. It is not a preventative treatment for a "disease". Ivermectin has no indication to be used as a preventative measure, but rather as treatment for an infestation. Ivermectin is a synthetic parasiticide and its use does not fall under Standard 3.9.5.

The Livestock materials list (Section 9.3.1) of the OCIA Intl Standards lists both "parasiticides" and "external parasiticides, synthetic" as prohibited. The Livestock Materials list does list "external parasiticides, non-synthetic" and "botanical pesticides" as restricted. There are some allowable non-synthetic pesticides listed there.

In addition the ISC points to Standards 3.9.7 and 3.9.8 which require that animals needing treatment must be treated, "...even when doing so results in the loss of organic status for that animal."

## ISC Interpretation June 18, 2008 – Storage Facilities (Processing)

## Question:

Under OCIA 6.1 all handling and storage facilities must be inspected and certified by OCIA unless two exemptions apply. Both exemptions are dependent on the fact that the product is in its final consumer package.

In a situation where the product is **not in final packaging**, is it possible that the broker/handler certified to OCIA/IFOAM could have a storage facility inspected as an integral part of his application? Both the broker and the warehouse would be one certification unit. In this scenario, the warehouse would not need to be an independently certified member.

#### Answer:

ISC interpretation of OCIA 6.1: If the product is not in it's final packaging, a broker/trade (handler) could have an off-site storage facility inspected as an integral part of his/her certification application.

## ISC Interpretation August 20, 2008 – Spraying of Noxious Weeds

## Question:

When standard 2.1.1 says "This program of organic crop improvement must be submitted in writing to the certification committee by the third year of certification and be designed to bring 100% of the farm acres into organic management or transition within at least 5 years following the first certification of any portion of that farm,"

Does "into organic management" mean the operator can choose to organically manage the pastures (i.e. stop spraying), but not request them for certification?

#### Answer:

If the operator wants to maintain complete control over pasture land, they must commit to putting a plan in place for organic crop improvement for the entire acreage. The member may want to look at others methods to be released of the responsibility of managing the land organically. Any portions of the farm that are under the control of the operator must be on maps and field histories. Maps and field histories should be updated to show where spraying occurs.

## OCIA ISC Interpretation - Integrity Visits and Parallel Production September 29, 2008

The ISC has revisited its interpretation of September 29, 2008 re parallel production, integrity visits, and buffer strips.

The reason for our re-examination of this issue is that there is a point of fact that had not been previously considered.

2.2.4.c...1&2 and clearly states that "in cases where the crops in parallel production are not visually distinguishable, at least 2 inspections must occur. . ."

Standard 2.4 does not contain any information that would imply exception to 2.2.4.c..

However, the fact is that the Standard is silent on the connection between the issue of parallel production, and buffer strips. The two standards 2.2.4 and 2.4.1 are not tied in with any connective language.

The concept being newly considered by the ISC is the fact that buffer strips are *not and may not be* managed conventionally. In order to be a buffer strip, the piece of land MUST be managed organically by the organic farmer. The reason that the buffer crop must be harvested and disposed of as a conventional crop, is that it may have become contaminated by the adjoining conventional land management. The buffer crop is not a crop of "parallel production" as defined in 2.2.4.

The problems concerning commingling of the buffer crop and the organic crop are still apparent. There is also still the need for the buffer area of eight meters or more (25 feet or more) to be clearly defined in the field and on the maps.

Because of this, the ISC continues to recommend that farmers consider management of buffer strips by either growing crops or crop varieties that are visually distinguishable, or leaving buffers fallow; or planting grasses that can be mowed or let stand or developing natural strips with bushes, trees or other natural flora.

However, since we conclude the buffer crop is not a crop of "parallel production" and the Standard is silent on the issue of "buffer crops", both the management and disposal of the buffer crop has been left to the satisfaction of inspectors. It is necessary for the farmer to have excellent records of the harvest and disposal of the buffer crop. The inspector may request some proof of buffer harvest records prior to the file proceeding to the certification decision. The producer must be able to demonstrate that the organic crop is harvested and stored and sold separately from the buffer crop. The farmer must also describe to the inspector's satisfaction how the buffer strip is clearly defined on the field.

In some cases an inspector may feel that the records do not demonstrate the ability to prevent commingling, and may request an integrity visit.

## OCIA ISC interpretation – December 16, 2008

Question re use of treated fence posts and possibility of allowance to purchase "used" treated fence posts.

The OCIA International Certification Standards 2008 lists treated fence posts as "prohibited" in every entry. So treated fence posts need to be viewed as other prohibited substances are viewed.

## Exceptions:

1) When the Standards proposal making treated fence posts prohibited was brought in there was a clause, see Section 9 – Crop production Materials List "Treated Lumber, Other" – grand-fathering in "all treated fence posts and lumber presently in the ground". The Standard is at least 10 years old.

If a farmer purchases a piece of land on which there are treated fence posts, and that land is to be used as crop land or pasture for organic crops, he/she must discover the date which the posts were put in the ground and keep a record of that date in his/her prior land use affidavits and field histories. The posts must undergo the same 36-month transition period that conventional fields must undergo.

2) The entry for arsenate treated lumber in Section 9 – Crop Production Materials List shows "P" as status, but a note states, "all trellises, posts and other structures using arsenate treated lumber require a 36-month transition from installation, treatment or purchase."

So, organic farmers are prohibited under the OCIA International Certification Standards, from using treated fence posts, but there is and exception based on documented circumstance on a case-by-case basis.

If it is established that a producer cannot find suitable untreated fence posts available within reasonable distance, or within the region recognized as the region by the agricultural community, and it can be documented that the producer searched for acceptable fence posts within the region, then the producer may purchase formerly treated or treated fence posts but must take the following measure before using them where organic crops are being produced.

- Obtain written confirmation from the seller re the date of treatment of the posts and keep record of that date. The posts may not be used until 36 months from that date has passed, OR
- Record the date of purchase of new or used posts and, if the date of treatment cannot be
  established and documented, consider the date of purchase and record it as the starting time
  for the 36-month transition period required before the post can be used in organic field or
  pasture.

If an uninformed producer has mistakenly purchased and set treated fence posts into an organic field or pasture, this must be considered an unintentional use of a prohibited substance, and the appropriate buffer must be established until the 36-month transition has elapsed.

## OCIA ISC Interpretation – April 15, 2009

Question: I am reviewing a body care products file and have an urgent question; I am hoping you all can consult via email and get back to me within a week or so; I think you may have already discussed this when talking about the seed issue at AGMM.

Standard 8.1.2.c and d indicate that 95% ingredients in OCIA/IFOAM-certified products must be OCIA-certified or OCIA-recognized-certified ingredients.

Does "OCIA-recognized-certified" refer to those certifiers for which we view their IFOAM to be equivalent to OCIA's? Or would this include NOP ingredients, too?

The language for other processed products (5.1.1) says "OCIA approved organization," so I wanted to see if the view of the ISC on body care and and other processed products is the same—ingredients need to be OCIA/IFOAM certified or equivalent IFOAM (per the agreement list) or document reviews would need to occur.

ISC Response: Historically, when the words "ocia certified organic" appear within the standards, it means, as Cindy has stated above: "ingredients need to be OCIA/IFOAM certified or equivalent IFOAM (per the agreement list) or document reviews would need to occur.".

IF you look in the definitions, in regard to OCIA Standards, "certified organic product" means "a product that has been produced and handled in accordance with OCIA Intl Standards .." Now because we (OCIA) certify to other standards as well..this definition itself may need some revision before next years AGMM.

In 2006, we changed the livestock standard 3.5.1 (to accommodate for any product certified by an accredited cb.) We had the opportunity at that time to change the processing requirement, but we did not do that. The issue that precipitated the 3.5.1 change was an issue specific to livestock. Therefore we have no approval from the membership to change the original intent of the processing requirement 5.1.1, or that in 8.1.2.c.

There are other places within the Standards document where the word "organic" is used. This has not been interpreted with the same meaning as "ocia certified organic" or "ocia-equivilant". So, for instance, the requirement 2.8.3 to use organic seed, is a requirement to use seed that is certified organic by any accredited body.

But to answer the original question: According to 5.1.1 and 8.1.2.c, the ingredients must be OCIA/IFOAM certified or equivalent IFOAM (per the agreement list) or document reviews would need to occur.

ISC may want to point out that the document review process it self was made less cumbersome for some processors with an amendmet brought in at the 2007 AGMM See 10.2.7.

#### OCIA ISC Seed interpretation – February 5, 2009:

Question: Do seed and seedlings need to be certified to OCIA/IFOAM or would NOP-organic seed and seedlings be considered "organic" by the OCIA/IFOAM standards?

ISC Response: There is <u>no requirement</u> in the OCIA International Certification Standard 2.8.3 that the seed or seedlings need to be certified by OCIA/IFOAM or its equivalent.

Section 3.5, Livestock Feed, and Section 5.1 Raw Materials for Processing, are the only sections in the Standard that require OCIA or OCIA "equivalent" products.

These sections are not intended to, and do not set a precedent for such requirements elsewhere in the Standards. When these added restrictions were brought in they were specific to livestock feed and processing ingredients.

Therefore ISC advises that organic seed as required in 2.8.3 is any seed that is certified organic by any accredited certifying body.

As agreed at the ISC Meeting, Thursday Feb. 5, 2009

# OCIA ISC Interpretation - Integrity Visits and Parallel Production March 12, 2009

The ISC has revisited its interpretation of September 29, 2008 re parallel production, integrity visits, and buffer strips.

The reason for our re-examination of this issue is that there is a point of fact that had not been previously considered.

2.2.4.c...1&2 and clearly states that "in cases where the crops in parallel production are not visually distinguishable, at least 2 inspections must occur. . ."

Standard 2.4 does not contain any information that would imply exception to 2.2.4.c..

However, the fact is that the Standard is silent on the connection between the issue of parallel production, and buffer strips. The two standards 2.2.4 and 2.4.1 are not tied in with any connective language.

The concept being newly considered by the ISC is the fact that buffer strips are not and may not be managed conventionally. In order to be a buffer strip, the piece of land MUST be managed organically by the organic farmer. The reason that the buffer crop must be harvested and disposed of as a conventional crop, is that it may have become contaminated by the adjoining conventional land management. The buffer crop is not a crop of "parallel production" as defined in 2.2.4.

The problems concerning commingling of the buffer crop and the organic crop are still apparent. There is also still the need for the buffer area of eight meters or more (25 feet or more) to be clearly defined in the field and on the maps.

Because of this, the ISC continues to recommend that farmers consider management of buffer strips by either growing crops or crop varieties that are visually distinguishable, or leaving buffers fallow; or planting grasses that can be mowed or let stand or developing natural strips with bushes, trees or other natural flora.

However, since we conclude the buffer crop is not a crop of "parallel production" and the Standard is silent on the issue of "buffer crops", both the management and disposal of the buffer crop has been left to the satisfaction of inspectors. It is necessary for the farmer to have excellent records of the harvest and disposal of the buffer crop. The inspector may request some proof of buffer harvest records prior to the file proceeding to the certification decision. The producer must be able to demonstrate that the organic crop is harvested and stored and sold separately from the buffer crop. The farmer must also describe to the inspector's satisfaction how the buffer strip is clearly defined on the field.

In some cases an inspector may feel that the records do not demonstrate the ability to prevent commingling, and may request an integrity visit.

# OCIA/ISC RESPONSE TO A REQUEST FOR INTERPRETATION: Received APRIL 30, 2012

FROM OCIA New Brunswick, Canada, SUSAN TYLER, producer:

"I have an issue for interpretation by the Standards Committee (ISC) regarding our OCIA International Standards. I first must declare that I became aware of this issue because of a local product which is used by our chapter members, including myself. So I do declare conflict of interest and, having done that, I will go on to state the issue.

I have pasted on first the definition of compost in the directory section of the OCIA International Standards (2012), Then the "Compost" entry in Crop Production Materials List Section 9.3.

#### OCIA International Standards 2012 - Definitions Section

Compost - the product of a carefully managed aerobic process by which natural materials are digested by microorganisms. Materials added to the composting process are limited to those permitted for crop production by these standards. Sewage sludge, biosolids or mixed municipal solid wastes are prohibited. Organic materials for compost must be managed appropriately to reach temperatures for the duration necessary to effectively stabilize nutrients and kill human pathogens.

#### - CROP PRODUCTION MATERIALS LIST

"composting refers to the process in which organic materials are digested aerobically or an aerobically by microbial action. In order to effectively stabilize the nutrients in compost, neutralize pesticide residues and kill weed seeds and pathogens, compost piles must reach a temperature of 120 to 140 degrees F. for a period of about 6 weeks. Compost should remain moist but not waterlogged for the whole decomposition period for best results. Written documentation of source of off-farm materials is required. No OCIA prohibited materials may be used in composting, including synthetically fortified compost starters. Growers should obtain a list of the main ingredients in any purchased composts. See also 'Microbial Compost Inoculants'."

There is a vaguery about the way our allowable compost is listed in Section 9.3.

First, the goal of achieving compost status is stated both in the Definitions section and in the initial part of the entry in 9.3: I have underlined this above.

The next part of the paragraph in 9.3 describes a method of achieving this status: I have coloured this section in blue.

Now some history: This wording was inserted on advice of a person knowledgeable about compost standards at the time, more than 10 years ago (in Guatemala). Since then there have been various systems developed to achieve the goal of compost status. Some techniques involve higher temperatures, longer or shorter time for temperature to be maintained, and number and manner in which compost is turned, or aerated.

The goal stated initially is the reason that the method of achieving this goal which is described in *blue* is there. However, what is stated is *only one* method, among many, and the language of the description lends

credence to the idea that this is not meant as an exact and necessary process. The words temperature of 120 to 140 degrees F implies some variation. And the word "about" 6 weeks is definitely vague. The next statement discusses a suggestion for "best results". These parts should not be considered mandatory requirements.

It is currently a fact that some composting facilities are able to achieve the goal of compost status using higher heat or more frequent turning in time as short as 2 to 3 weeks without adding artificial compost starters or other prohibited products.

I would suggest that an interpretation of this standard should be made to allow variances in methods involving time and turning and temperature, as long as the desired status as compost is achieved. This desired status can by documented in various ways including but not limited to testing of compost to show that nutrients are stabilized and pathogens etc are neutralized. Further, since these various methods of achieving compost status are now generally accepted, that the requirement in the standard should refer to the goal, and mention techniques "such as".in any discussion about how compost is to be manufactured.

I would further suggest that the ISC develop a broader description re methodology and a revision of the wording in 9.3 and present it as a standards amendment proposal for next year's AGMM."

## ISC Response, May 8, 2012

The OCIA ISC agrees that the time and temperature rates stated in section 9.3, OCIA Crop Production Materials List, are outdated and should be considered as approximate values. The ultimate goal of successful composting is to stabilize nutrients and neutralize pathogens, as stated in both 9.3 and the Definitions Section of the OCIA Intl Standards. If this result is achieved in a shorter amount of time, with perhaps higher temperatures, it would be permitted. Conversely, if lower temperatures consistently existed, the timeline to achieve successful results may be far beyond six weeks. Testing for pathogens and nutrient stabilization can be used as a valid way to prove successful results of composting for both on farm and off farm inputs.

The committee is considering an amendment proposal to revise this section of 9.3 for the 2013 AGMM. The section should be updated to reflect current and varied composting practices used.

#### **Conclusions:**

The status of on-farm composting procedures will be documented to show that time and temperature are closely monitored and these figures are approximate to the guidelines currently suggested in 9.3 or that they are in line with the currently acceptable methods for composting in the a particular region on organic farms.

In the case of off farm compost, as with all inputs, suppliers provide their list of ingredients. For all compost use, if final test results are submitted showing the compost process is complete, free of pathogens and contaminants, then the product shall be considered safe for use. However as stated above, documentation of method, and not testing, would normally be sufficient for on-farm composting.

## **Recommended Reading:**

The committee encourages producers to review the following country specific compost guideline documents:

- 1) "Compost and Vermicompost in Organic Crop Production", United States Department of Agriculture, Agriculture Marketing Service, National Organic Program, NOP 5021, July 22, 2011
- "Organic Production Systems, Permitted Substances Lists, National Standard of Canada, June 2011
- 3) "Guidance for Compost Quality", Canada Council of Ministers of the Environment, 2005

OCIA/ISC RESPONSE TO A REQUEST FOR INTERPRETATION RE: Section 8, Certification for Body Care Products Received MAY 16, 2012

#### From Cindy Elder:

#### Good afternoon,

I have a question of interpretation for you both, though I think this has come up in passing previously but never formalize. Back in 2009 I asked the following question:

## OCIA ISC Interpretation – From April 15, 2009

Question: I am reviewing a body care products file and have an urgent question; I am hoping you all can consult via email and get back to me within a week or so; I think you may have already discussed this when talking about the seed issue at AGMM. Standard 8.1.2.c and d indicate that 95% ingredients in OCIA/IFOAM-certified products must be OCIA certified or OCIA-recognized-certified ingredients. Does "OCIA-recognized-certified" refer to those certifiers for which we view their IFOAM to be equivalent to OCIA's? Or would this include NOP ingredients, too? The language for other processed products (5.1.1) says "OCIA approved organization," so I wanted to see if the view of the ISC on body care and and other processed products is the same—ingredients need to be OCIA/IFOAM certified or equivalent IFOAM (per the agreement list) or document reviews would need to occur.

ISC Response in 2009: Historically, when the words " ocia certified organic" appear within the standards, it means, as Cindy has stated above: "ingredients need to be OCIA/IFOAM certified or equivalent IFOAM (per the agreement list) or document reviews would need to occur." IF you look in the definitions, in regard to OCIA Standards, "certified organic product" means "a product that has been produced and handled in accordance with OCIA Intl Standards. Now because we (OCIA) certify to other standards as well, this definition itself may need some revision before next year's AGMM. In 2006, we changed the livestock standard 3.5.1 (to accommodate for any product certified by an accredited cb.) We had the opportunity at that time to change the processing requirement, but we did not do that. The issue that precipitated the 3.5.1 change was an issue specific to livestock. Therefore we have no approval from the membership to change the original intent of the processing requirement 5.1.1, or that in 8.1.2.c. There are other places within the Standards document where the word "organic" is used. This has not been interpreted with the same meaning as "ocia certified organic" or "ocia-equivilant". So, for instance, the requirement 2.8.3 to use organic seed, is a requirement to use seed that is certified organic by any accredited body. But to answer the original question: According to 5.1.1 and 8.1.2.c, the ingredients must be OCIA/IFOAM certified or equivalent IFOAM (per the agreement list) or document reviews would need to occur. ISC may want to point out that the document review process itself was made less cumbersome for some processors with an amendment brought in at the 2007 AGMM See 10.2.7.

## Cindy Elder's Question of May 16, 2012:

Since this interpretation was made (in 2009) OCIA has dropped IFOAM, thus our list of IFOAM recognized certifiers doesn't really apply any longer. The ISC has recognized that seed certified as organic to any program can be considered organic under the OCIA standards.

My question is, does this extend to processing as well? I believe there was a change this year to address this with livestock, but in the OCIA standards there is no definition for "OCIA-recognized-certified" or "OCIA approved organization" for processing.

The majority of our processors are sourcing ingredients from various suppliers, and many of them aren't OCIA-certified. If they are made to only source from OCIA-certified suppliers, most of their products will not be compliant. I had continued reviewing (when I did review files) under the old interpretation, so it meant that was most processors were found to be compliant to OCIA for their process, but none of their actual products.

#### ISC Response: June 12, 2012:

The pertinent information here is that OCIA is no longer part of the IFOAM accredited bodies. The reference in our interpretation of 2009 does note that we intended to ask the membership for their opinion on the issue. Unfortunately we neglected to do that in 2009. Shortly afterward, OCIA dropped the IFOAM accreditation.

The committee thinks it would be appropriate to continue the practice that we have begun, to consider acceptable for processing, as we do for seed and livestock and feed. "OCIA approved" must mean any product that is certified organic by an accredited certifying body.

For history, the clause regarding the use of only OCIA certified feed, seed, livestock, ingredients etc, was put in when there were only a few certifying bodies and standards. We hoped to encourage all of our members to buy from other OCIA members. In today's world, we think we have reason to interpret the standard regarding safe guarding organic integrity, by simply requiring what we have suggested, The committee intends to bring a formal amendment proposal(s) to the next AGM regarding this issue in Section Eight, Organic Standards for Body Care Products and to clearly define "OCIA approved" and "OCIA recognized organic".

## August 13, 2012 Integrity Visit clarification

OCIA Intl Standards <u>do allow</u> for new fields to be brought into production on previously whole farm certified organic farms. Allowance is made for dealing with transition of new fields into elligiblity for organic production.

2.2 pertains to crops which are to be <u>sold (or designated) as ocia certified organic.</u> If a specific crop is not requested to be certified, even if it is managed organically, because the farm has specific time line or other circumstances which necessitate this, until all conditions can be met, then it is not subject to 2.2 because there is no parallel production and no organic crop for sale.

If a situation exists on an organic farm where conventional livestock are being raised, and a particular cropgrown on the farm is used, <u>exclusively</u>, to feed that livestock, then the status of the fields can be maintained by documented field histories, and the crop taken off can be documented as removed from the request for certification so handling re mixing and storage requirements for organic crops do not have to be met

The farmer would not be considered moving in and out of organic, in this case as long as conventional inputs were not used on the crop and the field was documented to be managed organically.

So if there is no integrity visit, the crop may <u>not be sold</u> and I <u>would also stress "or represented"</u> as <u>ocia</u> <u>certified organic.</u> The advice to a producer in this situation would be to <u>withdraw the request to certifiy</u> this crop since the standards cannot be met re parallel production.

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