

DEPARTMENT CIRCULAR

No. <u>09</u> Series of 2020

SUBJECT: NATIONAL LIST OF PERMITTED SUBSTANCES FOR ORGANIC AGRICULTURE

WHEREAS, Rule 4.4 of the Implementing Rules and Regulations of the Republic Act No. 10068 otherwise known as the Organic Agriculture Act of 2010 states that products such as organic fertilizers, biological plant nutrition, plant/livestock/aquaculture protection and pest management shall comply with the requirements of the Philippine National Standards (PNS) for Organic Agriculture;

WHEREAS, the Department Circular No. 01, Series of 2018 (Revised Guidelines for the Official Accreditation of Organic Certifying Bodies) requires the use of PNS relevant to organic agriculture as the minimum requirements for organic certification;

WHEREAS, Department Circular No. 07, Series of 2020 (Guidelines for the Establishment, Maintenance, and Amendment of the National List of Permitted Substances for Organic Agriculture) provides the guidelines for the establishment, maintenance, and amendment of the National List of Permitted Substances for Organic Agriculture;

IN VIEW THEREOF, this Circular serves as the National List of Permitted Substances for Organic Agriculture.

Section 1. Permitted Substances for Organic Agriculture

The substances and materials listed in this Circular shall be from natural sources, non-synthetic, and non-GM, unless otherwise, stated in the conditions for use of a specific substance or material. The use of this list shall be in combination with the applicable Philippine National Standards (PNS) relevant to organic agriculture.

A. Organic Crop Production

A.1 Seed Treatments

Substances and materials listed herein are permitted to be used for treatment of seeds.

A.1.1 Bacterial preparations

(A.3.3.1)

e.g. Bacillus thuringiensis, Bacillus subtilis

A.1.2 Carbon dioxide and nitrogen gas (D.1.20, D.1.54)

A.1.3 Clay (A.2.2.6)

e.g. bentonite, perlite, vermiculite, zeolite

A.1.4 Ethyl alcohol (B.2.6, D.2.2)

A.1.5 Silicates

e.g. sodium silicates, quartz

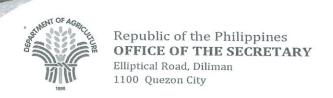
A.1.6 Wood ash (A.2.1.18)

CONTA C. BROGAS

Records Division

Cartified True Copy





A.2 Soil Amendments

Substances and materials listed herein are permitted to be used to produce organic soil amendments (i.e. organic fertilizers, compost/soil conditioners, microbial inoculants, and organic plant supplements). These can be applied directly to the soil as soil amendment, or as decomposers as in the case of microbiological organisms and preparations derived from them.

A.2.1 Plant & Animal Origin

A.2.1.1 Animal manure

includes dried manure, slurry, urine, compost

Condition for use:

The use of factory farm manure is only permitted if it undergoes full decomposition (e.g. composting/fermentation).

A.2.1.2 Biodegradable processing by-products, plant or animal origin (A.2.3.1)

e.g. by-products of food, feed, oilseed, brewery, distillery, sugar press mud/mud press or textile processing

A.2.1.3 By-products from oil, palm, coconut and cocoa

including empty fruit bunch, coir, husks, palm oil mill effluent (pome), cocoa peat and empty cocoa pods

A.2.1.4 Blood meal, meat meal, bone, bone meal (C.1.4)

A.2.1.5 Calcium lignosulfate

A.2.1.6 Compost made from ingredients listed in this group list, spent mushroom waste, humus from worms and insects and vermiculture substrate

A.2.1.7 Corn gluten meal (A.3.1.3)

A.2.1.8 Crop and vegetable residues, mulch, green manure, straw, azolla

A.2.1.9 Fish and fish products (fish emulsion, fish amino acid and fish hydrolysate)

Conditions for use:

pH can be adjusted with organic vinegar, organic citric acid or phosphoric acid. The amount of acid used shall not exceed the minimum needed to reach pH 3.5.

A.2.1.10 Guano

A.2.1.11 Hoof and horn meal, feather meal, wool, fur, hair, dairy products

A.2.1.12 Kitchen waste

A.2.1.13 Naturally occurring biological organisms (e.g. worms)

A.2.1.14 Peat

Conditions for use:

Permitted for seed, potting module composts. Not permitted as a soil conditioner.

A.2.1.15 Plant and plant products (A.3.1.7)

Include plant preparations, extracts and other products derived from plants

CONCRITA C. BROSAS
Administrative Officer V
Records Division

Certified True Copy





A.2.1.16 Seaweed, and seaweed products (A.4.11)

Condition for use:

As far as obtained by: (i) physical processes including dehydration, freezing and grinding; (ii) extraction with water or potassium hydroxide solutions, provided that the minimum amount of solvent necessary is used for extraction; (iii) fermentation

A.2.1.17 Segregated biodegradable market waste

A.2.1.18 Wood, bark, sawdust, wood shavings, wood ash, wood charcoal, wood/bamboo vinegar (A.1.6)

Conditions for use:

Should not be treated by synthetic chemical

A.2.2 Mineral Origin

A.2.2.1 Aluminum calcium phosphate

Condition for use:

Cadmium should not exceed 90mg/kg P205

A.2.2.2 Basic slag

A.2.2.3 Calcareous and magnesium amendments

A.2.2.4 Calcium chloride (D.1.15)

A.2.2.5 Chloride of lime (A.3.2.3, C.2.4, D.2.6)

Other name(s): Calcium hypochlorite, calcium oxychloride, hypochlorous acid calcium salt

A.2.2.6 Clay (A.1.3)

e.g. bentonite, perlite, vermiculite, zeolite

A.2.2.7 Gypsum (calcium sulfate) (C.1.6, D.1.19)

A.2.2.8 Limestone, marl, maerl, chalk, sugar beet lime

A.2.2.9 Magnesium rock, kieserite and Epsom salt (magnesium sulfate)

A.2.2.10 Mineral potassium

e.g. sulfate of potash, muriate of potash, kainite, sylvanite, patentkali *Conditions for use:*Obtained by physical procedures but not enriched by chemical processes to increase its solution

A.2.2.11 Natural phosphates

e.g. Rock phosphate Conditions for use: Cadmium should not exceed 90mg/kg P₂O₅

A.2.2.12 Pulverized rock, stone meal

A.2.2.13 Rock potash, mined potassium salts (e.g. kainite, sylvinite)

Conditions for use: Less than 60% chlorine

A.2.2.14 Sodium chloride (B.1.2.11, C.1.23, C.2.34, D.1.72)

Conditions for use:

Mined, or produced from seawater without the use of chemical treatment.

A.2.2.15 Stillage and stillage extract

Conditions for use:

Ammonium stillage excluded

A.2.2.16 Sulfur

CONTINUE C. BROSAS
Administrative Officer V
Records Division







A.2.2.17 Trace minerals

e.g.: boric acid, sodium borate, calcium borate, borethanolamin, cobalt-acetate, cobalt-sulfate, copper oxide, copper sulfate, copper hydroxide, copper silicate, copper carbonate, copper citrate ferric oxide, ferric sulfate, ferrous sulfate, iron citrate, iron sulfate, or iron tartrate manganous oxide, manganese sulfate and manganese carbonate selenic acid, selenous acid, sodium molybdate, molybdic oxide, zinc carbonate, zinc oxide, zinc silicate, and zinc sulfate Condition for use:

Use restricted to cases where soil/plant nutrient deficiency is documented by soil or tissue testing or diagnosed by an

independent expert. Micronutrients in either chloride or nitrate forms are prohibited.

A.2.3 Microbiological

A.2.3.1 Biodegradable processing by-products of microbial origin (A.2.1.2)

e.g. by-products of brewery or distillery processing

A.2.3.2 Microbiological preparations

e.g. Trichoderma, Rhizobia, Mychorrizae, and others

A.2.4 Others

A.2.4.1 Biodynamic and Agnihotra preparations

A.3 Crop Protectants and Biological Control Agents

Substances and materials listed herein are permitted to be used to produce or formulate organic crop protectants and biological control agents. These can be used and applied directly to the crop unless otherwise indicated in the condition for use.

A.3.1 Plant and Animal Origin

A.3.1.1 Chitin nematicides

Conditions for use:

Chitin nematicides should not be processed by acid hydrolysis

A.3.1.2 Coffee grounds

A.3.1.3 Corn gluten meal (A.2.1.7)

A.3.1.4 Fermented product from Aspergillus

A.3.1.5 Natural acids

e.g. vinegar

CONCLITA C. BROKAS
Administrative Officer V
Records Division

Certified True Copy





A.3.1.6 Plant and animal oils (A.4.2)

A.3.1.7 Plant and plant products (A.2.1.15)

Include plant preparations, extracts and other products derived from plants

A.3.1.8 Plant-based repellents

A.3.1.9 Preparations from *Quassia* amara

A.3.1.10 Preparations from Ryania (Ryania speciosa)

A.3.1.11 Preparations of Chrysanthemum cinerariaefolium

Conditions for use:

Use of synthetic Piperonyl butoxide as synergist to Chrysanthemum preparation is prohibited.

A.3.1.12 Preparations or products from Neem (*Azadirachta indica*)

A.3.1.13 Preparations of Rotenone from *Derris elliptica*, *Lonchocarpus, Thephrosia* spp.

Conditions for use:

The substance should be used in such a way as to prevent its flowing into waterways.

A.3.1.14 Sabadilla

A.3.1.15 Tobacco tea

Conditions for use:
Pure nicotine is prohibited.

A.3.2 Mineral Origin

A.3.2.1 Calcium hydroxide (C.2.3, D.1.17, D.2.4)

Other name(s): hydrated lime, slaked lime Conditions for use:

For foliar application only

A.3.2.2 Calcium oxide (B.2.3, C.2.5, D.2.5)

Other name: Quicklime Condition for use:

Limited to use for the preparation of

Bordeaux mixture

A.3.2.3 Chloride of lime (A.2.2.5, C.2.4, D.2.6)

Other name(s): Calcium hypochlorite, calcium oxychloride, hypochlorous acid calcium salt

A.3.2.4 Copper salts

e.g. sulfate, hydroxide, oxychloride, octanoate, cuprous oxide, Bordeaux mixture and Burgundy mixture *Conditions for use:*As a fungicide on condition that the substance is used in such a way as to minimize copper accumulation in the soil. Restricted to a maximum application of 6 kg/ha per year

A.3.2.5 Diatomaceous earth (D.1.26)

A.3.2.6 Iron phosphates

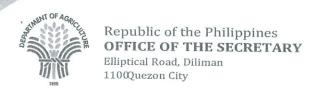
A.3.2.7 Lime sulfur (Calcium polysulfide)

A.3.2.8 Paraffin oil

CONCESTA C. BROSAS
Administrative Officer V
Records Division







A.3.2.9 Potassium bicarbonate (A.4.9, C.2.27)

Other name(s): potassium hydrogen carbonate, potassium acid carbonate, carbonic acid, potassium ion bicarbonate

A.3.2.10 Potassium permanganate (C.2.29)

Other name(s): Chameleon mineral, Condy's crystals, argucide

A.3.2.11 Potassium soap (B.2.17, C.2.31, D.2.21)

Other name(s): potassium salt of fatty acid, soft soap

A.3.2.12 Sodium bicarbonate (C.1.24)

A.3.2.13 Sulfur (in elemental form)

A.3.2.14 Sulfur dioxide (D.1.80)

A.3.2.15 Mineral oils

A.3.3 Microbiological

A.3.3.1 Bacterial preparations (A.1.1)

e.g. Bacillus thuringiensis, Bacillus subtilis

A.3.3.2 Fungal preparations

e.g. Metarhizium anisopliae, Trichoderma harzianum, Beauveria bassiana

A.3.3.3 Spinosad

Conditions for use:

Use only where measures are taken to minimize the risk to parasitoids and to minimize the risk of development of resistance.

A.3.3.4 Viral preparations

e.g. granulosis virus, Nuclear Polyhedrosis Virus (NPV), baculovirus, etc.

A.3.4 Others

A.3.4.1 Mulches (including plastic mulch), nets

A.3.4.2 Pheromones and attractants

Conditions for use:

Use in traps and dispensers only

A.3.4.3 Preparations on the basis of metaldehyde containing a repellent to higher animal species

Conditions for use:
As far as applied in traps

A.3.4.4 [Release of] parasites, predators and sterilized insects e.g. *Trichogramma* sp., ladybird beetle,

earwig and lacewing

Conditions for use:

Release should be subject to appropriate
existing phytosanitary regulations and
measures

A.3.4.5 Rodenticides

A.3.4.6 Thermal controls

CONCEUTA C. BROSAS
Administrative Officer V

Records Division

Certified True Copy





A.3.4.7 Traditional preparations (of non-synthesized chemical nature) based on natural products

A.3.4.8 Physical methods (e.g. chromatic traps, mechanical traps)

A.4 Plant Growth Regulators

Substances and materials listed herein are permitted to be used to produce or formulate organic plant growth regulators. These can be used and applied directly to the crop unless otherwise indicated in the condition for use.

A.4.1 Algal preparations

Conditions for use:

As far as obtained by: (i) physical processes including dehydration, freezing and grinding; (ii) extraction with water or potassium hydroxide solutions, provided that the minimum amount of solvent necessary is used for extraction; (iii) fermentation

A.4.2 Animal preparations and oils (A.3.1.6)

e.g. fish extracts

A.4.3 Beeswax (D.1.12)

A.4.4 Dairy products

e.g. milk, casein

A.4.5 Ethylene (D.1.29)

Conditions for use:

For degreening of citrus for fruit fly prevention and as a flowering agent for pineapples; As sprouting inhibitor for potatoes and onions; Must be used in a manner that minimizes exposure to operators and workers for ripening of kiwifruit, bananas, and other tropical fruit

A.4.6 Extract from mushroom (Shiitake fungus)

A.4.7 Gelatine

CONCINITA C. BROSAS
Administrative Officer V
Records Division

Certified True Copy

A.4.8 Lecithin (C.1.15, D.1.42)

A.4.9 Potassium hydrogen carbonate (A.3.2.9, C.2.27)

Other name(s): potassium bicarbonate, potassium acid carbonate, carbonic acid, potassium ion bicarbonate

A.4.10 Propolis

A.4.11 Seaweed, and seaweed products (A.2.1.16)

Condition for use:

As far as obtained by: (i) physical processes including dehydration, freezing and grinding; (ii) extraction with water or potassium hydroxide solutions, provided that the minimum amount of solvent necessary is used for extraction; (iii) fermentation







B. Organic Animal Production

B.1 Livestock Feed Ingredients

Substances and materials listed herein are permitted to be used as feed ingredients or as feedstuffs for organic animal production.

B.1.1 Plant Origin (from non-organic sources)

B.1.1.1 Cereals, grains, their products and by-products

Oats as grains, flakes, middling, hulls and bran; barley as grains, protein and middling; rice as grains, rice broken, bran, and germ expeller; millet as grains; rye as grains, middling, feed and bran; sorghum as grains; wheat as grains, middling, bran, gluten feed, gluten and germ; spelt as grains; triticale as grains; maize as grains, bran, middling, bran, germ expeller and gluten; malt culms; brewers' grains.

B.1.1.2 Forages and roughages

Lucerne, lucerne meal, clover, clover meal, grass (obtained from forage plants), grass meal, hay, silage, straw of cereals, and root vegetables for foraging.

B.1.1.3 Legume seeds, their product and by-products

Chick peas as seeds; ervil as seeds; chickling vetch as seeds submitted to an appropriate heat treatment; peas as seeds, middling, and bran; broad beans as seeds, middling and bran; horse beans as seeds, vetches as seeds and lupin as seeds (mungbean, peanut, and other native legumes).

B.1.1.4 Oil seeds, oil fruits, their products and by-products

Rapeseed, expeller, and hulls; soya bean as bean, toasted, expeller and hulls; sunflower seed as seed and expeller; cotton as seed and seed expeller; linseed as seed and expeller; sesame seed as seed and expeller; palm kernels as expeller; turnip rape seed as expeller and hulls; pumpkin seed as expeller; olive pulp (from physical extraction of olives).

B.1.1.5 Other plants, their products and by-products

Molasses as a binding agent in compound feeding stuffs, seaweed meal (obtained by drying and crushing seaweed and washed to reduce iodine content), powders and extracts of plants, plant protein extracts (solely provided to young animals), spices and herbs.

B.1.1.6 Other seeds and fruits, their products and by-products

Carob pods, citrus pulp, apple pomace, tomato pulp, and grape pulp.

B.1.1.7 Tuber roots, their products and by-products

Sugar beet pulp, dried beet, potato, sweet potato as tuber, manioc as roots, potato pulp (by-product of the extraction of potato starch), potato starch, potato protein and tapioca.

CONCLUTA C. BROSAS
Administrative Officer V
Records Division

Certified True Copy





B.1.2 Mineral origin, trace elements, vitamins, provitamins

B.1.2.1 Calcium

Lithotamnion and maerl; Shells of aquatic animals (including cuttlefish bones); Calcium carbonate; Calcium lactate; Calcium gluconate

B.1.2.2 Cobalt

cobaltous sulfate monohydrate and/or heptahydrate; cobaltous carbonate basic monohydrate

B.1.2.3 Copper

cuprous oxide; cuprous carbonate basic monohydrate; cuprous sulfate pentahydrate

B.1.2.4 Iodine (C.2.16)

anhydrous calcium iodate; calcium iodate hexahydrate; potassium iodide

B.1.2.5 Iron

ferrous carbonate; ferrous sulfate monohydrate; ferric oxide

B.1.2.6 Magnesium

anhydrous magnesia; magnesium sulfate; magnesium chloride; magnesium carbonate

B.1.2.7 Manganese

manganous carbonate; manganic oxide; manganous sulfate monohydrate and/or tetrahydrate

B.1.2.8 Molybdenum

ammonium molybdate; sodium molybdate

B.1.2.9 Phosphorus

bone dicalcium phosphate precipitate; defluorinated dicalcium phosphate; defluorinated monocalcium; phosphate

B.1.2.10 Selenium (C.1.26)

sodium selenite; sodium selenite

B.1.2.11 Sodium (A.2.2.14, C.1.23, C.2.34, D.1.72)

Unrefined sea salt; Coarse rock salt; Sodium sulfate; Sodium carbonate; Sodium bicarbonate; Sodium chloride

B.1.2.12 Sulfur

Sodium sulfate

B.1.2.13 Vitamins, provitamins and chemically well-defined substances having a similar effect (C.1.29)

Condition for use:

In case of shortage of these substances, or in exceptional circumstances, chemically welldefined analogic substances may be used

B.1.2.14 Zinc (C.1.30)

zinc carbonate; zinc oxide; zinc sulfate monohydrate and/or heptahydrate

B.1.3 Animal origin

B.1.3.1 Fish, other marine animals, their products and byproducts

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

B.1.3.2 Milk and milk products

raw milks; milk powder; skimmed milk; skimmed-milk powder; buttermilk; buttermilk powder; whey; whey powder; whey powder low in sugar; whey protein powder (extracted by physical treatment); casein powder; lactose powder

CONCLUTA C. BROTAS
Administrative Officer V
Records Division







B.1.4 Others

B.1.4.1	Antioxidants (C.1.2)	B.1.4.5	Probiotics, enzymes and
			micro-organisms
B.1.4.2	Binders, anti-caking agents,		
	emulsifiers, stabilizers,	B.1.4.6	Silage additives and
	thickeners, surfactants,		processing aids
SAME TO SAME THE SAME	coagulants (C.1.3)	Sea salt; C	oarse rock salt; Yeast; Enzymes;
E 551b Colloidal silica; E 551c Kieselgur; E		Whey; Sugar or sugar products such as	
553 Sepiolite; E 558 Bentonite; E 559		molasses; Honey; Lactic, acetic, formic and	
Kaolinitic clays; E 561 Vermiculite; E 599		propionic bacteria, or their natural acid	
Perlite		product w	hen the weather conditions do not
		allow for a	adequate fermentation
B.1.4.3	Coloring agents (including	Conditions	
	pigments), flavors and		s, coccidiostats, medicinal
	appetite stimulants		s, growth promoters or any other
24.0			intended to stimulate growth or
B.1.4.4	Preservatives	productio feeding.	n shall not be used in animal

B.2 Cleansers and Disinfectants for Animal Housing Facilities, Equipment, and Others Substances and materials listed herein are permitted to be used as cleansers and disinfectants to animal housing facilities, equipment, and others such as tools.

B.2.1	Acetic acid (D.2.1, C.1.27, C.2.22)	B.2.8	Isopropanol (D.2.3)	
	Alkali carbonates	B.2.9	Lactic acid (C.1.27, C.2.22, D.1.41, D.2.13)	
B.2.3	Calcium oxide (A.3.2.2, C.2.5, D.2.5)	B.2.10	Lime (C.2.19)	
Other name: Quicklime				
		B.2.11	Milk of lime	
B.2.4	Citric acid (C.1.27, C.2.22, D.1.25, D.2.8)	B.2.12	Natural essences of plants (C.2.21, D.2.14)	
B.2.5	Cleaning and disinfection agents for teats and milking facilities	B.2.13	Nitric acid	
B.2.6	Ethanol (A.14, D.2.2)	B.2.14	Oxalic acid (C.2.23, D.2.16)	
B.2.7	Hydrogen peroxide (C.2.14, D.2.12)	B.2.15	Peracetic acid (C.2.24, D.2.18)	











B.2.16 Potassium hydroxide (C.2.28,

D.1.65)

Other name: Caustic potash

B.2.17 Potassium soap (A.3.2.11, C.2.31, D.2.21)

Other name(s): potassium salt of fatty acid, soft soap

B.2.18 Sodium carbonate (C.2.33, D.1.76, D.2.22)

B.2.19 Sodium hydroxide (C.2.35,

D.1.78, D.2.23)

Other name: Caustic soda

B.2.20 Sodium hypochlorite (C.2.36, D.2.24)

Other name (s): household bleach, liquid bleach

B.2.21 Sodium soap (C.2.38, D.2.25)

B.2.22 Water and steam

B.3 Veterinary Medicines

Substances and materials listed herein are permitted to be used as to treat sick and injured animals under organic animal production.

B.3.1 Restricted medicines

Conditions for use:

Restricted veterinary medicines are defined as those whose use involves a withholding period which is double of the medical insert or 24 hours, whichever is longer and of which record keeping is required.

B.3.2 Unrestricted medicines

B.3.2.1 Herbs

B.3.2.2 Homeopathic and anthroposophic medication (acupuncture)

B.3.2.3 Salves, tinctures and colored antiseptics

B.3.2.4 Mineral Preparations: Calcium borogluconate; Calcium gluconate; Calcium chloride; Calcium phosphate; Ca/ Mg mixes; Natural iron preparation, such as nettle

B.3.2.5 Purgatives: Herbs such as mustard leaves; Castor oil

B.3.2.6 Forage additives: Linseed

B.3.2.7 Vitamins

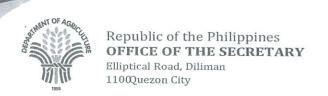
B.3.2.8 Anti-diarrhea medications: Medical charcoal; Oak bark and/or chalk

B.3.2.9 Electrolytes: All, such as Ringer's solution, physiological NaCl (0.9% saline solution), etc.

CONCENTA C. BROSAS
Administrative Officer V
Records Division







C. Organic Aquaculture Production

C.1 Feed Additives and Processing Aids

Substances and materials listed herein are permitted to be used as additives and processing aids for the production of organic aquaculture feeds.

C.1.1 Anhydrous dicalcium phosphate

C.1.2 Antioxidants (B.1.4.1)

Conditions for use:

Synthetic sources of antioxidants are permitted when legally required or when non-synthetic substances are not commercially available.

C.1.3 Binders (B.1.4.2)

Colloidal silica; Kieselgur (purified diatomaceous earth); Bentonitemontmorillonite; Kaolonitic clays, asbestosfree; Natural mixtures of stearite and chlorite; Vermiculite; Sepiolite; Perlite

C.1.4 Bone meal (A.2.1.4)

C.1.5 Calcium carbonate (D.1.14)

C.1.6 Calcium sulfate (A.2.2.7, D.1.19)

- C.1.7 Cobalt chloride, pentahydrate Cobalt chloride, hexahydrate
- C.1.8 Copper sulfate
 Copper sulfate, pentahydrate
 Copper chloride

C.1.9 Dicalcium phosphate

C.1.10 Dihydrate tricalcium phosphate

C.1.11 Enzymes and microorganisms

Conditions for use:
As zootechnical additives

C.1.12 Ferrous sulfate, heptahydrate (D.1.30)

C.1.13 Flavoring compounds

Conditions for use:
Flavor additives of agriculture origin only

C.1.14 Ground limestone

C.1.15 Lecithin (A.4.8, D.1.42)

Conditions for use: As emulsifying agent

C.1.16 Magnesium (Mg) Magnesium carbonate Magnesium sulfate Magnesium sulfate, heptahydrate

C.1.17 Manganese dioxide Manganese carbonate Manganese chloride, tetrahydrate Manganese sulfate Manganese sulfate, hydrate Manganese sulfate, tetrahydrate

C.1.18 Oyster shell

C.1.19 Potassium chloride (D.1.63)

C.1.20 Potassium carbonate Potassium bicarbonate Potassium acetate Potassium orthophosphate Potassium sulfate









Republic of the Philippines OFFICE OF THE SECRETARY

Elliptical Road, Diliman 110Quezon City

C.1.21 Potassium iodide Potassium iodate Calcium iodate Sodium iodide Ethylenediamine dihydriodide

C.1.22 Potassium orthophosphate Potassium dihydrogen orthophosphate Sodium dihydrogen orthophosphate Sodium dihydrogen orthophosphate, hydrate Sodium dihydrogen orthophosphate, dihydrate Rock phosphate

C.1.23 Sodium chloride (A.2.2.14, B.1.2.11, C.2.34, D.1.72)

C.1.24 Sodium bicarbonate (A.3.2.12) **Sodium sulfate**

C.1.25 Sodium molybdate, dihydrate Sodium molybdate, pentahydrate

C.1.26 Sodium selenite (B.1.2.10)

C.1.27 Sorbic acid Formic acid Acetic acid (B.2.1, C.2.22, D.2.1) Lactic acid (C.2.22, D.1.41, D.2.13) Propionic acid Citric acid (B.24, C.2.22, D.1.25, D.2.8) Fumaric acid Sodium formate

Conditions for use: As preservative

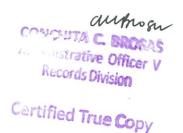
C.1.28 Trace Minerals

Ferric oxide Ferrous carbonate Ferrous sulfate, monohydrate Basic cobaltous carbonate, monohydrate Cobaltous sulfate monohydrate and/or heptahydrate Basic cupric carbonate, monohydrate Cupric oxide Cupric sulfate, pentahydrate Manganous carbonate Manganous oxide Manganous sulfate, monohydrate Conditions for use: These substances are only allowed since their use is legally required in the food products to which they are incorporated

C.1.29 Vitamins and provitamins (B.1.2.13)

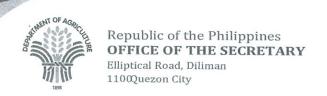
Conditions for use:
Synthetic vitamins, minerals and supplements may be used when natural sources are not available in sufficient quantity and quality

C.1.30 Zinc carbonate (B.1.2.14) Zinc chloride Zinc oxide Zinc sulfate Zinc sulfate, hydrate Zinc sulfate, heptahydrate









C.2 Cleansers and Disinfectants

Substances and materials listed herein are permitted to be used as cleansers and disinfectants of organic aquaculture equipment, facilities and tools.

C.2.1 Alkaline water

C.2.2 Biodegradable detergents

C.2.3 Calcium hydroxide (A.3.2.1, D.1.17, D.2.4)

Other name(s): hydrated lime, slaked lime Conditions for use:

Use in the absence of aquaculture animals

C.2.4 Calcium hypochlorite (A.2.2.5, A.3.2.3 D.2.6)

Other name(s): chloride of lime, calcium oxychloride, hypochlorous acid calcium salt Conditions for use:

Use in the absence of aquaculture animals

C.2.5 Calcium oxide (A.3.2.2, B.2.3, D.2.5)

Other name: Quicklime Conditions for use:

Use in the absence of aquaculture animals

C.2.6 Chlorine

C.2.7 Chlorine dioxide (D.2.7)

C.2.8 Chlorhexidine

C.2.9 Chlorox (10%)

C.2.10 Copper sulfate

C.2.11 Dolomite for pH correction

Conditions for use:

Only for shrimp production; Can be used in the presence as well as in the absence of aquatic culture animals

C.2.12 Fermented fruits/plants

C.2.13 Formic acid (D.2.11)

C.2.14 Hydrogen peroxide (B.2.7, D.2.12)

Conditions for use:

Can be used in the presence as well as in the absence of aquatic culture animals

C.2.15 Humic acid

Conditions for use:

Can be used in the presence as well as in the absence of aquatic culture animals

C.2.16 Iodine (B.1.2.4)

C.2.17 Iodophores

Conditions for use:

Only in the presence of eggs; Can be used in the presence as well as in the absence of aquatic culture animals

C.2.18 Isopropyl alcohol (D.2.3)

C.2.19 Lime (B.2.10)

C.2.20 Limestone (calcium carbonate) for pH control

Conditions for use:

Can be used in the presence as well as in the absence of aquatic culture animals

C.2.21 Natural essences of plants (B.2.12, D.2.14)

C.2.22 Organic acids (Acetic acid, lactic acid, citric acid)

Conditions for use:

Can be used in the presence as well as in the absence of aquatic culture animals

C.2.23 Oxalic acid (B.2.14, D.2.16)

CONCRETA C. BROSAS
Administrative Officer V
Records Division





C.2.24 Peracetic (peroxyacetic) and peroctanoic acids (B.2.15, D.2.18)

Conditions for use:

Can be used in the presence as well as in the absence of aquatic culture animals

C.2.25 Phosphoric acid (D.2.19)

C.2.26 Plant extracts (D.2.20)

C.2.27 Potassium bicarbonate (A.3.2.9, A.4.9)

Other name(s): potassium hydrogen carbonate, potassium acid carbonate, carbonic acid, potassium ion bicarbonate

C.2.28 Potassium hydroxide (B.2.16, D.1.65)

Other name: Caustic potash

C.2.29 Potassium permanganate (A.3.2.10)

Other name(s): Chameleon mineral, Condy's crystals, argucide Conditions for use:
Use in the absence of aquaculture animals

C.2.30 Potassium peroxymonosulfate

C.2.31 Potassium soap (A.3.2.11, B.2.17, D.2.21)

Other name(s): potassium salt of fatty acid, soft soap

C.2.32 Soap-based algicide (demossers)

C.2.33 Sodium carbonate, (bicarbonate) (B.2.18, D.1.76, D.2.22)

C.2.34 Sodium chloride (A.2.2.14, B.1.2.11, C.1.23, D.1.72)

Conditions for use:

Can be used in the presence as well as in the absence of aquatic culture animals

C.2.35 Sodium hydroxide (B.2.19, D.1.78, D.2.23)

Other name: Caustic soda Condition of use:

Use in the absence of aquaculture animals

C.2.36 Sodium hypochlorite (B.2.20, D.2.24)

Other name(s): household bleach, liquid bleach Conditions for use:
Use in the absence of aquaculture animals

C.2.37 Sodium percarbonate

Conditions for use:

Can be used in the presence as well as in the absence of aquatic culture animals

C.2.38 Sodium soap (B.2.21, D.2.25)

C.2.39 Surfactants

C.2.40 Tea seed cake of natural camellia seed

Conditions for use:

Only for shrimp production; Can be used in the absence of aquaculture animals

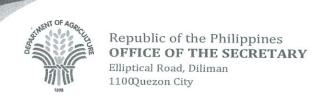
C.2.41 Thiosulfate

C.2.42 Ultraviolet

CONCHITA C. BROSAS
Administrative Officer V
Records Division







D. Organic Food Production

D.1 Additives and Processing Aids (Food-Grade)

Substances and materials listed herein are permitted to be used as additives and processing aids for the production of organic food. Several substances and materials are purpose-specific or commodity-specific as indicated in the condition for use.

D.1.1 Activated carbon, charcoal

Conditions for use:

Only from vegetative sources. For use only as filtering aid.

D.1.2 Agar

D.1.3 Alginic acid

D.1.4 Ammonium carbonates

Conditions for use:

For Cereal, Cake, Biscuit, Confectionery. Used as leavening agent.

D.1.5 Ammonium phosphate

Conditions for use:

For wine, Restricted to 0.3 gm/L

D.1.6 Ammonium sulfate

Conditions for use:

For Wine, restricted to 0.3 mg/L

D.1.7 Arabic gum

Conditions for use:

For confectionary

D.1.8 Argon

D.1.9 Asbestos-free filter materials

D.1.10 Ascorbic acid

Conditions for use:

For Fruit/Vegetable

D.1.11 Attapulgite

Conditions for use:

Processing aid for plant and animal oils

CONCHITA C. BROSAS
Administrative Officer V
Records Division

Certified True Copy



D.1.12 Beeswax (A.4.3)

For Fruit, Vegetable

D.1.14 Calcium carbonate (C.1.5)

D.1.15 Calcium chloride (A.2.2.4)

Conditions for use:

For Soybean, Fruit, Vegetable

D.1.16 Calcium citrates

D.1.17 Calcium hydroxide (A.3.2.1,

C.2.3, D.2.4)

Other name(s): hydrated lime, slaked lime

D.1.18 Calcium phosphate (monobasic; dibasic; tribasic)

Conditions for use:

For cereal, for raising flour only

D.1.19 Calcium sulfate (A.2.2.7, C.1.6)

Conditions for use:

From mined source, coagulating agent For soybean products, confectionery and in bakers' yeast

D.1.20 Carbon dioxide (A.1.2)

D.1.21 Carnauba wax

D.1.22 Carrageenan

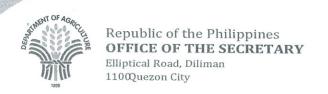
D.1.23 Casein

Conditions for use:

For Wine







D.1.24 Cellulose

Conditions for use:

Use in regenerative casings, as anti-caking agent (non-chlorine bleached) and filtering aid

D.1.25 Citric acid (B.2.4, C.1.27, C.2.22, D.2.8)

Conditions for use:

Not more than 1 gram/liter. Produced by microbial fermentation of carbohydrate substances

D.1.26 Diatomaceous earth (A.3.25)

Conditions for use:

For Sweetener, Wine. Food filtering aid only

D.1.27 Egg white lysozyme/albumin

D.1.28 Ethanol (A.2.2, B.2.6, D.2.2)

Conditions for use: Use as Solvent

D.1.29 Ethylene (A.4.5)

Conditions for use:

For fruit, Used as ripening agent. Only nonsynthetic source is allowed.

D.1.30 Ferrous sulfate (C.1.12)

Conditions for use:

For iron enrichment or fortification of foods when required by regulation.

D.1.31 Food coloring (Natural sources)

E.g. green from pandan leaf, red from hibiscus, yellow from turmeric

D.1.32 Gelatin

D.1.33 Gellan gum

D.1.34 Glucono delta-lactone

Conditions for use:

Production by oxidation of D-glucose with bromine water is prohibited.

CONCHITA C. BROSAS Administrative Officer V Records Division

Certified True Copy

D.1.35 Glycerides (mono and di)

Conditions for use:

For use only in drum frying of food

D.1.36 Glycerol

Conditions for use:

Obtained from plant origin; used as a carrier for plant extracts

D.1.37 Guar gum

D.1.38 Isinglass

Conditions for use: For wine

D.1.39 Kaolin

D.1.40 Karaya gum

D.1.41 Lactic acid (B.2.9, C.1.27, C.2.22, D.2.13)

Conditions for use:

For fruit, vegetable, concentrated fruit, vegetable juice, and fermented vegetable products

D.1.42 Lecithin (A.4.8, C.1.15)

Conditions for use:

Obtained without use of bleaches and organic solvents

D.1.43 L-malic acid

D.1.44 Locust bean gum

D.1.45 Magnesium carbonates

Conditions for use:

For Cereal, Cake, Biscuit, Confectionery.

D.1.46 Magnesium chloride

Conditions for use:

Derived from sea water, for soybean products

D.1.47 Magnesium stearate

D.1.48 Magnesium sulfate







D.1.49 Malic Acid (DL-)

D.1.50 Micro-organisms

D.1.51 Minerals (including trace elements), vitamins, essential fatty and amino acids, and other nitrogen compounds

D.1.52 Monocalcium phosphate

Conditions for use: Only for "raising flour"

D.1.53 Natural flavor

D.1.54 Nitrogen (A.1.2)

D.1.55 Nutrients vitamins and minerals

D.1.56 Nut shells

D.1.57 Oxygen

D.1.58 Pectin

Conditions for use:
For jam production (non-amidated) /
unmodified

D.1.59 Perlite

Conditions for use:
Only as filter aid in food processing

D.1.60 pH adjusters

e.g. sodium bicarbonate, or vinegar

D.1.61 Potassium alginate

D.1.62 Potassium carbonates

Conditions for use: For Cereal, Cake, Biscuit, Confectionery; Fruit, Vegetable, Wine

D.1.63 Potassium chloride (C.1.19)

Conditions for use: Only for frozen and canned fruit and vegetable, ketchup and mustard

D.1.64 Potassium citrates

D.1.65 Potassium hydroxide (B.2.16, C.2.28)

Other name: Caustic potash Conditions for use: For pH adjustment

D.1.66 Potassium iodide

Conditions for use:
For iodine supplementation according to regulatory requirements

D.1.67 Potassium metabisulfite

Conditions for use: For wine

D.1.68 Potassium sodium tartrate

D.1.69 Potassium tartrate

Conditions for use:
For cereal, cake, biscuit, confectionery

D.1.70 Preparations of bark

Conditions for use:
Only for sugar

D.1.71 Preparations of Enzyme

Conditions for use:

Must be from natural sources (edible, nontoxic plants, nonpathogenic fungi or nonpathogenic bacteria) or animal derived and not produced from GMOs.

D.1.72 Salt (A.2.2.14, B.1.2.11, C.1.23, C.2.34)

D.1.73 Silicon dioxide (silica)

Conditions for use:
For Fruit/ Vegetable/ Wine

D.1.74 Sodium acid pyrophosphate

Conditions for use:

From clean sources without contamination

D.1.75 Sodium alginate

CONCAUTA C. BROSAS
Administrative Officer V
Records Division







D.1.76 Sodium carbonates (B.2.18,

C.2.33, D.2.22)

Conditions for use:

For Cake, Biscuit, Confectionery

D.1.77 Sodium citrates

D.1.78 Sodium hydroxide (B.2.19,

C.2.35, D.2.23)

Other name: Caustic soda

Conditions for use:

For sugar processing and for the surface

treatment

D.1.79 Sodium tartrate

Conditions for use:

For cake, biscuit, confectionery

D.1.80 Sulfur dioxide (A.3.2.14)

Conditions for use:

For wine

D.1.81 Sulfuric acid

Conditions for use:

For Sugar, pH adjustment of water

D.1.82 Talc

D.1.83 Tannin

Conditions for use:

For wine

D.1.84 Tannic acid

Conditions for use:

Filtration acids

D.1.85 Tartaric acid

Conditions for use:

For wine

D.1.86 Tocopherols

Conditions for use:

Mixed natural concentrates

D.1.87 Tragacanth gum

D.1.88 Vegetable oils

Conditions for use:

Only as leavening agent

D.1.89 Xanthan gum

Conditions for use:

For Fruit/Vegetable/Cake/Biscuit

D.1.90 Yeast

Conditions for use:

documented.

Must be organic for human consumption.

Non-organic may be used if organic is
unavailable. Growth on petrochemical
substrate and sulfate waste liquor is
prohibited. For smoked yeast, nonsynthetic
smoke flavoring process must be

D.1.91 Wood resin

D.2 Equipment Cleansers and Disinfectants that may Come into Direct Contact with Food for the Production of Organic Food

Substances and materials listed herein are permitted to be used as cleansers and disinfectants to surfaces that may come into direct contact with the food for the production of organic food.

D.2.1 Acetic acid (B.2.1, C.1.27, C.2.22)

Conditions for use:

Cleaning agent

D.2.2 Alcohol, ethyl (ethanol) (A.1.4,

B.2.6, D.1.28)

Conditions for use:

For disinfection

D.2.3 Alcohol, isopropyl (isopropanol) (C.2.18)

Conditions for use: For disinfection

D.2.4 Calcium hydroxide (A.3.2.1,

C.2.3, D.1.17)

Other name(s): hydrated lime, slaked lime

CONCHITA C. BROSAS
Administrative Officer V
Records Division

A food-secure Philippines

Masaganang ANI Mataas na KITA

Certified True Copy

with prosperous farmers and fisherfolk



Republic of the Philippines OFFICE OF THE SECRETARY

Elliptical Road, Diliman 110Quezon City

D.2.5 Calcium oxide (A.3.2.2, B.2.3, C.2.5)

Other name: Quicklime Conditions for use: Cleaning agent

D.2.6 Chloride of lime (A.2.2.5, A.3.2.3, C.2.4)

Other name(s): Calcium hypochlorite, calcium oxychloride, hypochlorous acid calcium salt Condition for use:

According to regulatory requirements

D.2.7 Chlorine dioxide (C.2.7)

Conditions for use:
According to regulatory requirements

D.2.8 Citric acid (B.2.4, C.1.27, C.2.22, D.1.25)

D.2.9 Cyclohexylamine (BWA)

Conditions for use:

Use only as boiler water additive for packing sterilization

D.2.10 Diethylaminoethanol (BWA)

Conditions for use:

Use only as boiler water additive for packing sterilization

D.2.11 Formic acid (C.2.13)

Conditions for use: For disinfection

D.2.12 Hydrogen peroxide (B.2.7, C.2.14)

Conditions for use: For disinfection

D.2.13 Lactic acid (B.2.9, C.1.27, C.2.22, D.1.41)

D.2.14 Natural essences of plants (B.2.12, C.2.21)

D.2.15 Octadecylamine (BWA)

Conditions for use:

Use only as boiler water additive for packing sterilization

D.2.16 Oxalic acid (B.2.14, C.2.23)

D.2.17 Ozone

D.2.18 Peracetic acid (B.2.15, C.2.24)

Conditions for use:

Use only as boiler water additive for packing sterilization; Use as sanitizer on food contact surfaces. Use according to FDA limitations.

D.2.19 Phosphoric acid (C.2.25)

Conditions for use:

For dairy production equipment only

D.2.20 Plant extracts (C.2.26)

D.2.21 Potassium soap (A.3.2.11, B.2.17, C.2.31)

Other name(s): potassium salt of fatty acid, soft soap

D.2.22 Sodium carbonate (B.2.18, C.2.33, D.1.76)

D.2.23 Sodium hydroxide (B.2.19,

C.2.35, D.1.78)

Other name: Caustic soda
Conditions for use:
According to regulatory requirements

D 2 24 Coding house delicate (D 2 2

D.2.24 Sodium hypochlorite (B.2.20, C.2.36)

Other name(s): household bleach, liquid bleach Conditions for use:
According to regulatory requirements

D.2.25 Sodium soap (B.2.21, C.2.38)

Conditions for use:

According to regulatory requirements

CONCHITA C. BROSAS
Administrative Officer V
Records Division







Section 2. Details for each substance shall be interpreted and explained as follows:

ID/Identifier B.1.4.6 Silage additives and Substance or material processing aids name Sea salt; Coarse rock salt; Yeast; Enzymes; Whey; Sugar or sugar products such as molasses; Honey; Lactic, acetic, Derivatives or enumeration of formic and propionic bacteria, or their examples including other natural acid product when the weather names of the substance; Subconditions do not allow for adequate fermentation identifier/s may also be found Condition for use: here (e.g. G.2.1 Herbs) Antibiotics, coccidiostats, medicinal substances, growth promoters or any Condition/s for use other substance intended to stimulate growth or production shall not be used in animal feeding.

- 2.1 The use of substance or material is relative to its group/category (e.g. Peracetic acid as cleaning and disinfectants only).
- 2.2 Similar substances or materials but belonging to different group or category are referenced right after the substance name (see example below).

B.2.19 Sodium hydroxide (C.2.35, Similar/related substance or material is indicated in parenthesis

2.3 There are substances or materials that have no conditions for use indicated.

Section 3. References

All references used in the establishment of this National List is listed in Annex A.

Section 4. Separability Clause

If, for any reason, any provision of this Circular is declared unconstitutional or contrary to law, the other parts or provisions hereof which are not affected thereby shall continue to be in full force and effect.

CONCHITA C. BROSAS
Administrative Officer V
Records Division







Section 5. Repealing Clause

All prior issuances, rules, regulations, or part thereof which are inconsistent with this Circular are hereby revoked, amended, or modified accordingly. All annexes pertaining to the permitted substances of the existing PNS for Organic Agriculture, PNS for Organic Soil Amendments, PNS for Organic Aquaculture, and PNS for Organic Aquaculture Feeds are likewise repealed and replaced by the National List."

Section 6. Amendments

Any amendments to the provision/s of this Circular must conform to the procedures under the Department Circular No. 07, Series of 2020 and its amendments, if any.

Section 7. Effectivity

This Circular shall become effective fifteen (15) days following the completion of its publication in the Official Gazette or in a newspaper of general circulation, whichever comes earlier.

Done this 1st day of July 2020.

Approved by:

WILLIAM D. DAR, Ph.D.

Secretary

DEPARTMENT OF AGRICULTURE

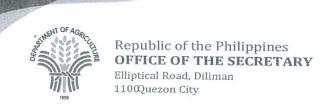
in replying pls cite this code: For Signature: S-06-20-0594 Received: 06/30/2020 08:43 AM CONCETTA C. BROSAS
Administrative Officer V
Records Division

Certified True Copy

A food-secure Philippines

with prosperous farmers and fisherfolk





ANNEX A References

- ASEAN. (2014). ASEAN Standard for Organic Agriculture (ASOA).
- Bureau of Agriculture and Fisheries Standards (DA-BAFS). (2016). PNS/BAFS 07:2016—Organic agriculture.
- Bureau of Agriculture and Fisheries Standards (DA-BAFS). (2016). PNS/BAFS 112:2016—Organic aquaculture.
- Bureau of Agriculture and Fisheries Standards (DA-BAFS). (2016). PNS/BAFS 183:2016—Organic soil amendments.
- Bureau of Agriculture and Fisheries Standards (DA-BAFS). (2016). PNS/BAFS 187:2016—Organic aquaculture feeds.
- Canadian General Standards Board (CGSB). (2012). *CAN/CGSB-32.312-2012—Organic aquaculture standards*. Retrieved from https://www.soilassociation.org/media/15726/soil-association-aquaculture-standards-v1-3-may-2017.pdf
- Codex Alimentarius Commission. *Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods.* CAC/GL 32—1999 Rev. 1—2001.
- IFOAM Organics International. (2018). IFOAM Norms for Organic Production and Processing Version 2014.
- INFOFISH. (2019). Handbook on Organic Aquaculture. In *Organic Aquaculture*. https://doi.org/10.1007/978-3-030-05603-2
- Food Standards Office, Food Manufacture Affairs Division, Food Industry Affairs Bureau, Ministry of Agriculture, Forestry and Fisheries. (2017). *Japanese Agricultural Standard for Organic Plants*, https://www.maff.go.jp/e/policies/standard/jas/specific/attach/pdf/criteria_o-1.pdf
- Food Standards Office, Food Manufacture Affairs Division, Food Industry Affairs Bureau, Ministry of Agriculture, Forestry and Fisheries. (2018). *Japanese Agricultural Standard for Organic Processed*, https://www.maff.go.jp/e/policies/standard/jas/specific/attach/pdf/criteria_o-12.pdf
- Food Standards Office, Food Manufacture Affairs Division, Food Industry Affairs Bureau, Ministry of Agriculture, Forestry and Fisheries. (2018). *Japanese Agricultural Standard for Organic Feeds*, https://www.maff.go.jp/e/policies/standard/jas/specific/attach/pdf/criteria_o-8.pdf
- Food Standards Office, Food Manufacture Affairs Division, Food Industry Affairs Bureau, Ministry of Agriculture, Forestry and Fisheries. (2018). *Japanese Agricultural Standard for Organic Livestock etc.*, https://www.maff.go.jp/e/policies/standard/jas/specific/attach/pdf/criteria_o-13.pdf
- National Bureau of Agricultural Commodity and Food Standards-Ministry of Agriculture and Cooperatives. 2003. Thai Agricultural Standard, TAS 9000-2003. *Organic Agriculture* (Unofficial Translation), https://www.acfs.go.th/standard/download/eng/TAS-9000.pdf
- Naturland. (2019). Naturland Standards for Organic Aquaculture Version 05/2019.
- Regulation (EU) 2018/848 of the European Parliament and of the Council on organic production and labelling of organic products and repealing Council Regulation (EC) No 834/2007 (2018) Official Journal L150, p. 1
- Secretariat of the Pacific Community. 2008. *Pacific Organic Standard*. New Caledonia: International Fund for Agricultural Development and the Secretariat of the Pacific Community
- Soil Association. (2017). Organic aquaculture standards version 1.3. In *Journal of Chemical Information and Modeling* (Vol. 53). https://doi.org/10.1017/CBO9781107415324.004
- USDA Organic Regulations (National Organic Program), 7 C.F.R § 205 (2002).

CONCHITA C. BROSAS
Administrative Officer V
Records Division

A food-secure Philippines

with prosperous farmers and fisherfolk

