- (2) Boric acid—structural pest control, no direct contact with organic food or crops.
- (3) Copper sulfate—for use as tadpole shrimp control in aquatic rice production, is limited to one application per field during any 24-month period. Application rates are limited to levels which do not increase baseline soil test values for copper over a timeframe agreed upon by the producer and accredited certifying agent.
 - (4) Elemental sulfur.
- (5) Lime sulfur—including calcium polysulfide.
- (6) Oils, horticultural—narrow range oils as dormant, suffocating, and summer oils.
 - (7) Soaps, insecticidal.
 - (8) Sticky traps/barriers.
- (f) As insect management. Pheromones.
 - (g) As rodenticides.
- (1) Sulfur dioxide—underground rodent control only (smoke bombs).
 - (2) Vitamin D₃.
 - (h) As slug or snail bait—None.
 - (i) As plant disease control.
- (1) Coppers, fixed—copper hydroxide, copper oxide, copper oxychloride, includes products exempted from EPA tolerance, *Provided*, That, copper-based materials must be used in a manner that minimizes accumulation in the soil and shall not be used as herbicides.
- (2) Copper sulfate—Substance must be used in a manner that minimizes accumulation of copper in the soil.
 - (3) Hydrated lime.
 - (4) Hydrogen peroxide.
 - (5) Lime sulfur.
- (6) Oils, horticultural, narrow range oils as dormant, suffocating, and summer oils.
- (7) Peracetic acid—for use to control fire blight bacteria.
 - (8) Potassium bicarbonate.
 - (9) Elemental sulfur.
- (10) Streptomycin, for fire blight control in apples and pears only.
- (11) Tetracycline (oxytetracycline calcium complex), for fire blight control only.
 - (j) As plant or soil amendments.
- (1) Aquatic plant extracts (other than hydrolyzed)—Extraction process is limited to the use of potassium hydroxide or sodium hydroxide; solvent amount

- used is limited to that amount necessary for extraction.
 - (2) Elemental sulfur.
- (3) Humic acids—naturally occurring deposits, water and alkali extracts only.
- (4) Lignin sulfonate—chelating agent, dust suppressant, floatation agent.
- (5) Magnesium sulfate—allowed with a documented soil deficiency.
- (6) Micronutrients—not to be used as a defoliant, herbicide, or desiccant. Those made from nitrates or chlorides are not allowed. Soil deficiency must be documented by testing.
 - (i) Soluble boron products.
- (ii) Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt
- (7) Liquid fish products—can be pH adjusted with sulfuric, citric or phosphoric acid. The amount of acid used shall not exceed the minimum needed to lower the pH to 3.5.
 - (8) Vitamins, B₁, C, and E.
- (k) As plant growth regulators. Ethylene gas—for regulation of pineapple flowering.
- (l) As floating agents in postharvest handling.
 - (1) Lignin sulfonate.
- (2) Sodium silicate—for tree fruit and fiber processing.
- (m) As synthetic inert ingredients as classified by the Environmental Protection Agency (EPA), for use with nonsynthetic substances or synthetic substances listed in this section and used as an active pesticide ingredient in accordance with any limitations on the use of such substances.
- (1) EPA List 4—Inerts of Minimal Concern.
- (2) EPA List 3—Inerts of unknown toxicity—for use only in passive pheromone dispensers.
 - (n)-(z) [Reserved]
- [65 FR 80637, Dec. 21, 2001, as amended at 68 FR 61992, Oct. 31, 2003]

§ 205.602 Nonsynthetic substances prohibited for use in organic crop production.

The following nonsynthetic substances may not be used in organic crop production:

- (a) Ash from manure burning.
- (b) Arsenic.

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- (c) Calcium chloride, brine process is natural and prohibited for use except as a foliar spray to treat a physiological disorder associated with calcium uptake.
 - (d) Lead salts.
- (e) Potassium chloride—unless derived from a mined source and applied in a manner that minimizes chloride accumulation in the soil.
 - (f) Sodium fluoaluminate (mined).
- (g) Sodium nitrate—unless use is restricted to no more than 20% of the crop's total nitrogen requirement; use in spirulina production is unrestricted until October 21, 2005.
 - (h) Strychnine.
 - (i) Tobacco dust (nicotine sulfate).
 - (j)-(z) [Reserved]

[68 FR 61992, Oct. 31, 2003]

§ 205.603 Synthetic substances allowed for use in organic livestock production.

In accordance with restrictions specified in this section the following synthetic substances may be used in organic livestock production:

- (a) As disinfectants, sanitizer, and medical treatments as applicable.
 - (1) Alcohols.
- (i) Ethanol—disinfectant and sanitizer only, prohibited as a feed additive.
 - (ii) Isopropanol—disinfectant only.
- (2) Aspirin—approved for health care use to reduce inflammation.
 - (3) Biologics—Vaccines.
- (4) Chlorhexidine—Allowed for surgical procedures conducted by a veterinarian. Allowed for use as a teat dip when alternative germicidal agents and/or physical barriers have lost their effectiveness.
- (5) Chlorine materials—disinfecting and sanitizing facilities and equipment. Residual chlorine levels in the water shall not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act.
 - (i) Calcium hypochlorite.
 - (ii) Chlorine dioxide.
 - (iii) Sodium hypochlorite.
 - (6) Electrolytes—without antibiotics.
 - (7) Glucose.
- (8) Glycerine—Allowed as a livestock teat dip, must be produced through the hydrolysis of fats or oils.
 - (9) Hydrogen peroxide.

- (10) Iodine.
- (11) Magnesium sulfate.
- (12) Oxytocin—use in postparturition therapeutic applications.
- (13) Parasiticides. Ivermectin—prohibited in slaughter stock, allowed in emergency treatment for dairy and breeder stock when organic system plan-approved preventive management does not prevent infestation. Milk or milk products from a treated animal cannot be labeled as provided for in subpart D of this part for 90 days following treatment. In breeder stock, treatment cannot occur during the last third of gestation if the progeny will be sold as organic and must not be used during the lactation period of breeding stock.
- (14) Phosphoric acid—allowed as an equipment cleaner, *Provided*, That, no direct contact with organically managed livestock or land occurs.
- (b) As topical treatment, external parasiticide or local anesthetic as applicable.
 - (1) Copper sulfate.
 - (2) Iodine.
- (3) Lidocaine—as a local anesthetic. Use requires a withdrawal period of 90 days after administering to livestock intended for slaughter and 7 days after administering to dairy animals.
- (4) Lime, hydrated—as external pest control, not permitted to cauterize physical alterations or deodorize animal wastes.
- (5) Mineral oil—for topical use and as a lubricant.
- (6) Procaine—as a local anesthetic, use requires a withdrawal period of 90 days after administering to livestock intended for slaughter and 7 days after administering to dairy animals.
- (c) As feed supplements—Milk replacers without antibiotics, as emergency use only, no nonmilk products or products from BST treated animals.
 - (d) As feed additives.
- (1) DL-Methionine, DL-Methionine—hydroxy analog, and DL-Methionine—hydroxy analog calcium—for use only in organic poultry production until October 21, 2005.
- (2) Trace minerals, used for enrichment or fortification when FDA approved.
- (3) Vitamins, used for enrichment or fortification when FDA approved.