



# Organic Standards for Crop Production

Highlights of the USDA's National Organic Program Regulations

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This collection of excerpts from the U.S. Department of Agriculture's National Organic Program provides the reader with key standards relevant to organic crop production. This publication should be used together with excerpts for all certified organic operations, as well as with those for organic livestock production and handling of organic agricultural products, as applicable.

Highlights of the USDA's National Organic Program Regulations include key standards for:

- 1) All certified organic operations
- 2) Crop production
- 3) Livestock production
- 4) Handling (including processing)

Please use this publication in combination with the ATTRA publication *Organic Standards for All Organic Operations*, and others, if relevant to your organic operations.

## Introduction

This publication provides easy reference to the standards relevant to organic crop production. This set of excerpts from the USDA's National Organic Program Final Rule contains the general requirements for land, soil fertility and crop nutrient management, seeds and planting stock, crop rotation, pest, weed and disease management, wild crops, lists of allowed and prohibited substances and definition of terms most applicable to crop production. While this publication includes the key standards that directly address organic crop production, it is not a complete collection of all the standards with which organic crop producers must comply. It must be used in conjunction with standards for all organic operations, organic livestock production, or handling of organic agricultural products, as applicable.

This set of excerpts is not a substitute for reading the entire set of standards. The regulatory texts of the National Organic Program standards are available on USDA's National Organic Program Web site, [www.ams.usda.gov/nop/](http://www.ams.usda.gov/nop/). To view the production and handling standards, click on "Regulations" under General Information. Under Regulatory Text, click on "Electronic Code of Federal Regulations."

This set of excerpts should also not be used as a substitute for verifying points of compliance for organic production and handling activities with an accredited organic certifier. For a list of certifiers, click on Certifiers under "I Want Information On" in the NOP Web site index (above).

### Using this guide:

This is a collection of verbatim excerpts from key parts of the National Organic Program's Final Rule. Organic regulations are found under the USDA's Agricultural Marketing Service 7 CFR Part 205. CFR stands for Code of Federal Regulations. Part 205, the National Organic Program is found under Title 7: Agriculture, one of 50 broad subject areas that are subject to federal regulation.

The Organic Foods Production Act was enacted under the 1990 Farm Bill. The Act, as it is referred to in the text, authorized creation of the USDA National Organic Program to set national standards for the production, handling and processing of organically grown agricultural products. The NOP oversees mandatory certification of organic production. Producers who meet NOP standards may label their products as "USDA Certified Organic." The subparts reference organization levels in each excerpt.



The following sections of Part 205 of the National Organic Program are excerpted below:

- § 205.200 General
- § 205.202 Land requirements
- § 205.203 Soil fertility and crop nutrient management practice standard
- § 205.204 Seeds and planting stock practice standard
- § 205.205 Crop rotation practice standard
- § 205.206 Crop pest, weed and disease management practice standard
- § 205.207 Wild-crop harvesting practice standard

### ***The National List of Allowed and Prohibited Substances***

- § 205.601 Synthetic substances allowed for use in organic crop production
- § 205.602 Non-synthetic substances prohibited for use in organic crop production.
- § 205.2 Terms defined [selected for relevance to crop production].

Note: e-CFR Data used in this publication is current as of July 23, 2008.

Amendment dates are noted at the end of certain sections, such as Defined terms, the National List and also in some aspects of livestock production. Changes may be the result of legal actions, petitions to add or remove materials or technical corrections. Most other sections of the Rule have not changed since their original version. To find the most current version available, please go the electronic code of federal regulations. See instructions in paragraph two of the Introduction.

## **Excerpts**

### **§ 205.200 General**

The producer or handler of a production or handling operation intending to sell, label or represent agricultural products as

“100-percent organic,” “organic” or “made with organic specified ingredients or food groups” must comply with the applicable provisions of this subpart. Production practices implemented in accordance with this subpart must maintain or improve the natural resources of the operation, including soil and water quality.

### **§ 205.202 Land requirements**

Any field or farm parcel from which harvested crops are intended to be sold, labeled or represented as “organic” must:

- (a) Have been managed in accordance with the provisions of §§205.203 through 205.206;
- (b) Have had no prohibited substances, as listed in §205.105, applied to it for a period of three years immediately preceding harvest of the crop; and
- (c) Have distinct, defined boundaries and buffer zones such as runoff diversions to prevent the unintended application of a prohibited substance to the crop or contact with a prohibited substance applied to adjoining land that is not under organic management.

### **§ 205.203 Soil fertility and crop nutrient management practice standard**

- (a) The producer must select and implement tillage and cultivation practices that maintain or improve the physical, chemical and biological condition of soil and minimize soil erosion.
- (b) The producer must manage crop nutrients and soil fertility through rotations, cover crops and the application of plant and animal materials.
- (c) The producer must manage plant and animal materials to maintain or improve soil organic matter content in a manner that does not contribute to contamination of crops, soil or water by plant nutrients, pathogenic organisms, heavy metals or residues of prohibited substances. Animal and plant materials include:

- (1) Raw animal manure, which must be composted unless it is:
  - (i) Applied to land used for a crop not intended for human consumption;
  - (ii) Incorporated into the soil not less than 120 days prior to the harvest of a product whose edible portion has direct contact with the soil surface or soil particles; or
  - (iii) Incorporated into the soil not less than 90 days prior to the harvest of a product whose edible portion does not have direct contact with the soil surface or soil particles.
- (2) Composted plant and animal materials produced through a process that:
  - (i) Established an initial C:N ratio of between 25:1 and 40:1; and
  - (ii) Maintained a temperature of between 131 degrees Fahrenheit and 170 degrees Fahrenheit for three days using an in-vessel or static aerated pile system; or
  - (iii) Maintained a temperature of between 131 and 170 degrees for 15 days using a windrow composting system, during which period the materials must be turned a minimum of five times.
- (3) Uncomposted plant materials.
- (d) A producer may manage crop nutrients and soil fertility to maintain or improve soil organic matter content in a manner that does not contribute to contamination of crops, soil or water by plant nutrients, pathogenic organisms, heavy metals or residues of prohibited substances by applying:
  - (1) A crop nutrient or soil amendment included on the National List of synthetic substances allowed for use in organic crop production;
  - (2) A mined substance of low solubility;
  - (3) A mined substance of high solubility, provided that the substance is used in compliance with the conditions established on the National List of non-synthetic materials prohibited for crop production;
  - (4) Ash obtained from the burning of a plant or animal material, except as prohibited in paragraph (e) of this section, provided that the material burned has not been treated or combined with a prohibited substance or the ash is not included on the National List of non-synthetic substances prohibited for use in organic crop production; and
  - (5) A plant or animal material that has been chemically altered by a manufacturing process, provided that the material is included on the National List of synthetic substances allowed for use in organic crop production established in §205.601.
- (e) The producer must not use:
  - (1) Any fertilizer or composted plant and animal material that contains a synthetic substance not included on the National List of synthetic substances allowed for use in organic crop production;
  - (2) Sewage sludge (biosolids) as defined in 40 CFR Part 503; and
  - (3) Burning as a means of disposal for crop residues produced on the operation except that burning may be used to suppress the spread of disease or to stimulate seed germination.

**§ 205.204 Seeds and planting stock practice standard**

- (a) The producer must use organically grown seeds, annual seedlings and planting stock, except that:
  - (1) Non-organically produced, untreated seeds and planting stock may be used to produce an organic crop when an equivalent organically produced variety is not commercially available, except that organically produced seed must be used for the production of edible sprouts;
  - (2) Non-organically produced seeds and planting stock that have been treated with a substance included on the National List of synthetic substances allowed for use in organic crop production may be used to produce an organic crop when an equivalent organically produced or untreated variety is not commercially available;
  - (3) Non-organically produced annual seedlings may be used to produce an organic crop when a temporary variance has been granted in accordance with §205.290(a)(2);
  - (4) Non-organically produced planting stock to be used to produce a perennial crop may be sold, labeled or represented as organically produced only after the planting stock has been maintained under a system of organic management for a period of no less than one year; and
  - (5) 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 federal or state phytosanitary regulations.
- (b) [Reserved]

**§ 205.205 Crop rotation practice standard**

The producer must implement a crop rotation including but not limited to sod, cover crops, green manure crops and catch crops that provide the following functions that are applicable to the operation:

- (a) Maintain or improve soil organic matter content;
- (b) Provide for pest management in annual and perennial crops;
- (c) Manage deficient or excess plant nutrients; and
- (d) Provide erosion control.

**§ 205.206 Crop pest, weed and disease management practice standard**

- (a) The producer must use management practices to prevent crop pests, weeds and diseases including but not limited to:
  - (1) Crop rotation and soil and crop nutrient management practices, as provided for in §§205.203 and 205.205;
  - (2) Sanitation measures to remove disease vectors, weed seeds and habitat for pest organisms; and
  - (3) Cultural practices that enhance crop health, including selection of plant species and varieties with regard to suitability to site-specific conditions and resistance to prevalent pests, weeds and diseases.
- (b) Pest problems may be controlled through mechanical or physical methods including but not limited to:
  - (1) Augmentation or introduction of predators or parasites of the pest species;
  - (2) Development of habitat for natural enemies of pests;
  - (3) Non-synthetic controls such as lures, traps and repellents.

- (c) Weed problems may be controlled through:
  - (1) Mulching with fully biodegradable materials;
  - (2) Mowing;
  - (3) Livestock grazing;
  - (4) Hand weeding and mechanical cultivation;
  - (5) Flame, heat or electrical means; or
  - (6) Plastic or other synthetic mulches, provided that they are removed from the field at the end of the growing or harvest season.
- (d) Disease problems may be controlled through:
  - (1) Management practices which suppress the spread of disease organisms; or
  - (2) Application of non-synthetic biological, botanical or mineral inputs.
- (e) When the practices provided for in paragraphs (a) through (d) of this section are insufficient to prevent or control crop pests, weeds and diseases, a biological or botanical substance or a substance included on the National List of synthetic substances allowed for use in organic crop production may be applied to prevent, suppress or control pests, weeds or diseases, provided that the conditions for using the substance are documented in the organic system plan.
- (f) The producer must not use lumber treated with arsenate or other prohibited materials for new installations or replacement purposes in contact with soil or livestock.

**§ 205.207 Wild-crop harvesting practice standard**

- (a) A wild crop that is intended to be sold, labeled or represented as

organic must be harvested from a designated area that has had no prohibited substance, as set forth in §205.105, applied to it for a period of three years immediately preceding the harvest of the wild crop.

- (b) A wild crop must be harvested in a manner that ensures that such harvesting or gathering will not be destructive to the environment and will sustain the growth and production of the wild crop.

*The National List of Allowed and Prohibited Substances*

**§ 205.601 Synthetic substances allowed for use in organic crop production**

In accordance with restrictions specified in this section, the following synthetic substances may be used in organic crop production, provided that use of such substances do not contribute to contamination of crops, soil, or water. Substances allowed by this section, except disinfectants and sanitizers in paragraph (a) and those substances in paragraphs (c), (j), (k), and (l) of this section, may only be used when the provisions set forth in §205.206(a) through (d) prove insufficient to prevent or control the target pest.

- (a) As algicide, disinfectants, and sanitizer, including irrigation system cleaning systems.
  - (1) Alcohols.
    - (i) Ethanol.
    - (ii) Isopropanol.
  - (2) Chlorine materials— Except, That, 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.
- (3) Copper sulfate—for use as an algicide in aquatic rice systems, is limited to one application per field during any 24-month period. Application rates are limited to those which do not increase baseline soil test values for copper over a timeframe agreed upon by the producer and accredited certifying agent.
- (4) Hydrogen peroxide.
- (5) Ozone gas—for use as an irrigation system cleaner only.
- (6) Peracetic acid—for use in disinfecting equipment, seed, and asexually propagated planting material.
- (7) Soap-based algicide/demosers.
- (b) As herbicides, weed barriers, as applicable.
  - (1) Herbicides, soap-based—for use in farmstead maintenance (roadways, ditches, right of ways, building perimeters) and ornamental crops.
  - (2) Mulches.
    - (i) Newspaper or other recycled paper, without glossy or colored inks.
    - (ii) Plastic mulch and covers (petroleum-based other than polyvinyl chloride (PVC)).
  - (c) As compost feedstocks—Newspapers or other recycled paper, without glossy or colored inks.
  - (d) As animal repellents—Soaps, ammonium—for use as a large animal repellent only, no contact with soil or edible portion of crop.
  - (e) As insecticides (including acaricides or mite control).
    - (1) Ammonium carbonate—for use as bait in insect traps only, no direct contact with crop or soil.
  - (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.
  - (9) Sucrose octanoate esters (CAS #s—42922-74-7; 58064-47-4)—in accordance with approved labeling.
  - (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. Ferric phosphate (CAS # 10045-86-0).
  - (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 non-synthetic 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 allowed:
    - (i) Glycerine Oleate (Glycerol monooleate) (CAS #s 37220-82-9)—for use only until December 31, 2006.
    - (ii) Inerts used in passive pheromone dispensers.
- (n) Seed preparations. Hydrogen chloride (CAS # 7647-01-0)—for delinting cotton seed for planting.
- (o)–(z) [Reserved]

[65 FR 80637, Dec. 21, 2000, as amended at 68 FR 61992, Oct. 31, 2003; 71 FR 53302 Sept. 11, 2006; 72 FR 69572, Dec. 10, 2007]

**§ 205.602 Non-synthetic substances prohibited for use in organic crop production**

The following non-synthetic substances may not be used in organic crop production:

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

**§ 205.2 Terms defined [selected for relevance to crop production]**

**Agricultural inputs.** All substances or materials used in the production or handling of organic agricultural products.

**Agricultural product.** Any agricultural commodity or product, whether raw or processed, including any commodity or product derived from livestock, that is marketed in the United States for human or livestock consumption.

**Allowed synthetic.** A substance that is included on the National List of synthetic substances allowed for use in organic production or handling.

**Annual seedling.** A plant grown from seed that will complete its life cycle or produce a harvestable yield within the same crop year or season in which it was planted.

**Audit trail.** Documentation that is sufficient to determine the source, transfer of ownership and transportation of any agricultural product labeled as “100 percent organic,” the organic ingredients of any agricultural product labeled as “organic” or “made with organic (specified ingredients)” or the organic ingredients of any agricultural product containing less than 70 percent organic ingredients identified as organic in an ingredients statement.

**Biodegradable.** Subject to biological decomposition into simpler biochemical or chemical components.

**Buffer zone.** An area located between a certified production operation or portion of a production operation and an adjacent land area that is not maintained under organic management. A buffer zone must be sufficient in size or other features (such as windbreaks or a diversion ditch) to prevent the possibility of unintended contact by prohibited substances applied to adjacent land areas with an area that is part of a certified operation.

**Claims.** Oral, written, implied or symbolic representations, statements or advertising or other forms of communication presented to the public or buyers of agricultural products that relate to the organic certification process or the terms “100 percent organic,” “organic” or “made with organic (specified ingredients or food groups),” or, in the case of agricultural products containing less than 70 percent organic ingredients, the term “organic” on the ingredients panel.

**Commingling.** Physical contact between unpackaged organically produced and non-organically produced agricultural products during production, processing, transportation, storage or handling, other than during the manufacture of a multi-ingredient product containing both types of ingredients.



**Compost.** The product of a managed process through which microorganisms break down plant and animal materials into more available forms suitable for application to the soil. Compost must be produced through a process that combines plant and animal materials with an initial C:N ratio of between 25:1 and 40:1. Producers using an in-vessel or static aerated pile system must maintain the composting materials at a temperature between 131 and 170 degrees Fahrenheit for three days. Producers using a windrow system must maintain the composting materials at a temperature between 131 and 170 degrees for 15 days, during which time the materials must be turned a minimum of five times.

**Control.** Any method that reduces or limits damage by populations of pests, weeds or diseases to levels that do not significantly reduce productivity.

**Crop.** A plant or part of a plant intended to be marketed as an agricultural product or fed to livestock.

**Crop residues.** The plant parts remaining in a field after the harvest of a crop, which include stalks, stems, leaves, roots and weeds.

**Crop rotation.** The practice of alternating the annual crops grown on a specific field in a planned pattern or sequence in successive crop years so that crops of the same species or family are not grown repeatedly without interruption on the same field. Perennial cropping systems employ means such as alley cropping, intercropping and hedgerows to introduce biological diversity in lieu of crop rotation.

**Crop year.** The normal growing season for a crop as determined by the Secretary of Agriculture.

**Cultivation.** Digging up or cutting the soil to prepare a seed bed, control weeds, aerate the soil or work organic matter, crop residues or fertilizers into the soil.

**Cultural methods.** Methods used to enhance crop health and prevent weed, pest or disease problems without the use of substances. Examples include the selection

of appropriate varieties and planting sites, proper timing and density of plantings, irrigation and extending a growing season by manipulating the microclimate with green houses, cold frames or wind breaks.

**Detectable residue.** The amount or presence of chemical residue or sample component that can be reliably observed or found in the sample matrix by current approved analytical methodology.

**Disease vectors.** Plants or animals that harbor or transmit disease organisms or pathogens that may attack crops or livestock.

**Drift.** The physical movement of prohibited substances from the intended target site onto an organic operation or portion thereof.

**Emergency pest or disease treatment program.** A mandatory program authorized by a federal, state or local agency for the purpose of controlling or eradicating a pest or disease.

**Employee.** Any person providing paid or volunteer services for a certifying agent.

**Excluded methods.** A variety of methods used to genetically modify organisms or influence their growth and development by means that are not possible under natural conditions or processes and are not considered compatible with organic production. Such methods include cell fusion, microencapsulation and macroencapsulation and recombinant DNA technology including gene deletion, gene doubling, introducing a foreign gene and changing the positions of genes when achieved by recombinant DNA technology. Such methods do not include the use of traditional breeding, conjugation, fermentation, hybridization, in vitro fertilization or tissue culture.

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

**Field.** An area of land identified as a discrete unit within a production operation.

**Handle.** To sell, process or package agricultural products, except such term shall not include the sale, transportation or delivery of crops or livestock by the producer thereof to a handler.

**Inert ingredient.** Any substance or group of substances with similar chemical structures if designated by the Environmental Protection Agency other than an active ingredient which is intentionally included in any pesticide product (40 CFR 152.3(m)).

**Label.** A display of written, printed or graphic material on the immediate container of an agricultural product or any such material affixed to any agricultural product or affixed to a bulk container containing an agricultural product, except for package liners or a display of written, printed or graphic material that contains only information about the weight of the product.

**Labeling.** All written, printed or graphic material accompanying an agricultural product at any time or written, printed or graphic material about the agricultural product displayed at retail stores.

**Lot.** Any number of containers which contain an agricultural product of the same kind located in the same conveyance, warehouse or packing house and which are available for inspection at the same time.

**Manure.** Feces, urine, other excrement and bedding produced by livestock that has not been composted.

**Market information.** Any written, printed, audiovisual or graphic information, including advertising, pamphlets, flyers, catalogues, posters and signs, that is distributed, broadcast or made available outside of retail outlets and are used to assist in the sale or promotion of a product.

**Mulch.** Any non-synthetic material, such as wood chips, leaves or straw, or any synthetic material included on the National List for such use, such as newspaper or plastic, that serves to suppress weed

growth, moderate soil temperature or conserve soil moisture.

**Narrow range oils.** Petroleum derivatives, predominately of paraffinic and naphthenic fractions with 50 percent boiling point (10 mm Hg) between 415 and 440 degrees.

**National List.** A list of allowed and prohibited substances as provided for in the Act.

**Natural resources of the operation.** The physical, hydrological and biological features of a production operation, including soil, water, wetlands, woodlands and wildlife.

**Non-synthetic (natural).** A substance that is derived from mineral, plant or animal matter and does not undergo a synthetic process as defined in section 6502(21) of the Act (7 U.S.C. 6502(21)). For the purposes of this part, non-synthetic is used as a synonym for natural as the term is used in the Act.

**Organic.** A labeling term that refers to an agricultural product produced in accordance with the Act and the regulations in this part.

**Organic matter.** The remains, residues or waste products of any organism.

**Organic production.** A production system that is managed in accordance with the Act and regulations in this part to respond to site-specific conditions by integrating cultural, biological and mechanical practices that foster cycling of resources, promote ecological balance and conserve biodiversity.

**Organic system plan.** A plan of management of an organic production or handling operation that has been agreed to by the producer or handler and the certifying agent and that includes written plans concerning all aspects of agricultural production or handling described in the Act and the regulations in subpart C of this part.

**Pasture.** Land used for livestock grazing that is managed to provide feed value and maintain or improve soil, water and vegetative resources.

**Pesticide.** Any substance which alone, in chemical combination or in any formulation with one or more substances is defined as a pesticide in section 2(u) of the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. 136(u) et seq.).

**Planting stock.** Any plant or plant tissue other than annual seedlings but including rhizomes, shoots, leaf or stem cuttings, roots or tubers used in plant production or propagation.

**Practice standard.** The guidelines and requirements through which a production or handling operation implements a required component of its production or handling organic system plan. A practice standard includes a series of allowed and prohibited actions, materials and conditions to establish a minimum level performance for planning, conducting and maintaining a function, such as livestock health care or facility pest management, essential to an organic operation.

**Producer.** A person who engages in the business of growing or producing food, fiber, feed and other agricultural-based consumer products.

**Production lot number/identifier.** Identification of a product used for quality control purposes and based on the production sequence of the product showing the date, time and place of production.

**Prohibited substance.** A substance that the use of in any aspect of organic production or handling is prohibited or not provided for in the Act or the regulations of this part.

**Records.** Any information in written, visual or electronic format that documents the activities undertaken by a producer, handler or certifying agent to comply with the Act and regulations in this part.

**Residue testing.** An official or validated analytical procedure that detects, identifies and measures the presence of chemical substances, their metabolites or degradations products in or on raw or processed agricultural products.

**Sewage sludge.** A solid, semisolid or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes but is not limited to domestic septage, scum or solids removed in primary, secondary or advanced wastewater treatment processes and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

**Soil and water quality.** Observable indicators of the physical, chemical or biological condition of soil and water, including the presence of environmental contaminants.

**Split operation.** An operation that produces or handles both organic and non-organic agricultural products.

**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 that such term shall not apply to substances created by naturally occurring biological processes.

**Tolerance.** The maximum legal level of a pesticide chemical residue in or on a raw or processed agricultural commodity or processed food.

**Transplant.** A seedling which has been removed from its original place of production, transported and replanted.

**Unavoidable residual environmental contamination.** Background levels of naturally occurring or synthetic chemicals that are present in the soil or present in organically produced agricultural products that are below established tolerances.

**Wild crop.** Any plant or portion of a plant that is collected or harvested from a site that is not maintained under cultivation or other agricultural management.

[65 FR 80637, Dec. 21, 2000, as amended at 72 FR 70484, Dec. 12, 2007]

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