NATIONAL ORGANIC STANDARDS BOARD
FINAL RECOMMENDATION ADDENDUM NUMBER 25

DEFINITIONS AND INTERPRETATIONS

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Statutory Review, Section 2114(a)(2). Organic Plan (Manuring): "Inclusion in Organic Plan. An organic plan shall contain terms and conditions that regulate the application of manure to crops.

Application of Manure. - Such organic plan may provide for the application of raw manure only to - (i) any green manure crop; (ii) any perennial crop; (iii) any crop not for human consumption; and (iv) any crop for human consumption, if such crop is harvested after a reasonable period of time determined by the certifying agent to ensure the safety of such crop, after the most recent application of raw manure, but in no event shall such period be less than 60 days after such application.

Contamination by Manure. - Such organic plan shall prohibit raw manure from being applied to any crop in a way that significantly contributes to water contamination by nitrates or bacteria."

DEFINITIONS & INTERPRETATIONS

These definitions and interpretations apply to every entry on the National List of materials.

Combustion. Reaction of a substance with heat and oxygen.
Composts. Compost refers to the carefully managed process in which carbon based materials are digested aerobically or anaerobically by microbial action. Farm compost made from crop residues, crop waste from food processing operations, animal manures, and other vegetative by-products are allowed. Green or yard waste compost from municipalities or private sources are allowed. Municipal solid waste compost and sewage sludge compost are prohibited. No prohibited materials may be added in composting (including no synthetically "fortified" compost starters) and all ingredients must be documented . [Plant/soil input.] Certifiers may evaluate the risk of prohibited materials residues remaining after composting.
Distillation. Evaporation of a substance, and its collection by condensation

Extraction. The concentration, separation or removal of a substance from a plant, animal, microbiological or mineral source. Materials used in plant crop and animal production may be extracted in any way that does not result in a synthetic reaction as defined by 2103(21).
The products of any other methods of extraction shall be considered on a case by case basis and reviewed for compatibility under OFPA Sec. 2119 (m)(1-7).
Fermentation. Digestion of complex molecules by micro-organisms.
Genetically Engineered. (after Food Processing ′s Biotechnology Glossary, January 1993) 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 and RNA techniques, 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.
Heat. To transfer energy between bodies by means of a temperature difference.
Hydrolysis. Reaction of a substance with water.
Inert Ingredient. Any ingredient that is not an active ingredient. See Section 2118 (c)(B)(ii) - “is used in production and contains synthetic inert ingredients that are not classified by the Administrator of the E.P.A. as inerts of toxicological concern.”
Killed Microbial Pesticide. A nonviable microbial pesticide that is incapable of multiplication or propagation in the environment. If altered by genetic engineering, the resulting DNA shall not be contained within a viable organism and must contain only dead organisms.
Manures, Raw. Raw manure is defined as any animal excrement which is characterized as fresh and has not undergone substantial decomposition. (See Composts) As cited in OFPA Section 2114 (b)(2)(B), raw manure is restricted to applications approved by a USDA-accredited certifying agent and made at least 60 days prior to harvest of crops produced for human consumption; raw manure may be applied to any green manure crop, any perennial crop, or any other crop not for human consumption without time restriction, subject to the approval of a USDA-accredited certifying agent.
Manures, Aged. Any animal excrement which has undergone substantial decomposition and humification. It is characterized by: 1) reduction in moisture 2) reduction of foul odors 3) change of color, towards darker brown and 4) not in heating phase. Properly aged manure may be used under the compost guidelines.

Microbial Pesticide. Microbial pesticides are microorganisms and include but are not limited to bacteria, algae, fungi, viruses, and protozoa used as pest control agents.

Micro Propagation. The development of new plants in an artificial medium under aseptic conditions from very small pieces of plants. It is the opinion of the Crop Standards Committee that plants and propagules treated with prohibited materials during micro propagation may not be directly planted on an organic farm. Any plants or propagules of later generations of these processes are acceptable for use on organic farms. They have been reviewed for compatibility under OFPA Section 2119 (m)(1-7).

Mined Mineral. Any naturally-occurring non-living substance derived from the earth or water. A mined mineral cannot have undergone molecular change through heating, acidulation, basification or fortification with synthetic materials.

Recombinant RNA and DNA Techniques. Techniques that artificially break apart and recombine DNA and RNA molecules with the intent or altering genetic instructions.

Synthetic.

(OFPA Definition) The term “synthetic” means 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, animals, or mineral sources, except that such term shall not apply to substances created by naturally occurring biological processes.

(Crops Standards Committee ′s Interpretation) The term “synthetic” is defined as a substance or organism that is formulated, [or] manufactured or genetically manipulated by a chemical process or by a process that chemically changes a substance extracted from naturally occurring plant, animals, or mineral sources, except that such term shall not apply to substances created by naturally occurring biological processes.

Heating and combustion of plants, animals, and microorganisms shall not be considered synthetic unless expressly prohibited in the National list.

The combustion of minerals shall be considered synthetic and reviewed for compatibility under the OFPA Sec. 2119 (m)(1-7).

Synthetic Analogue:

A synthetic analogue (or chemical copy) of a non-synthetic material is acceptable when the non-synthetic form is commercially unavailable or information specifying the source of the material is not available to the organic producer (i.e., not indicated on the product label), provided that the synthetic material is on the National List. Use must be limited to applications appropriate for the non-synthetic version of the material, and any restrictions on these applications noted in the

Standards must be followed. Examples: pheromones, magnesium sulfate, potassium sulfate, livestock vitamins.

Synthetic analogues can be further identified as to whether the compound is chemically organic or inorganic, in the sense of containing carbon atoms.

a) Inorganic compounds (e.g. magnesium sulfate) are universally indistinguishable as to source, and therefore may be permitted for organic production in any situation which calls for the non-synthetic version. Their use would still require appearance on the National List, and be governed by protocols set in the Standards and Organic Plan requirements.

b) Organic compounds (e.g. pheromones) can often be distinguished from their non-synthetic forms by looking at molecular structure (isomers), which may vary depending on whether the compound was synthesized or extracted from a biological source. Since variations in isomers can have subtle and unanticipated biological effects, organic synthetic analogues should be screened against the criteria for compatibility with systems of sustainable agriculture.