ORGANIC WATCH

Comparative analysis of NOSB recommendations and OTA’s American Organic Standards

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INTRODUCTION

This analysis has been developed by Organic Watch to help highlight and contrast important differences between the Organic Trade Association’s (OTA) American Organic Standards (AOS) and the National Organic Standards Board’s (NOSB) standards. While we applaud those places where the OTA/AOS is higher than the NOSB, our focus is especially on areas where the AOS seem to be weaker than the NOSB in its standard setting. This paper is intended to help create a constructive forum and opportunity for these issues to be further discussed, clarified and resolved by the organic community. It will also serve as formal comment to the third draft of the Organic Trade Association’s American Organic Standards and to help illuminate the AOS revision process.

It is Organic Watch’s position that the successful implementation of the Organic Foods Production Act (OFPA) and national organic standards is best served at this time by supporting and maintaining the statutory authority and independent integrity of the NOSB. Organic Watch supports the NOSB standards because of the Board’s key role in the private-public partnership embodied in the OFPA.

The NOSB is a federal advisory committee created by the Secretary of Agriculture, the Organic Foods Production Act of 1990 and the Federal Advisory Committee Act (FACA). The NOSB is, therefore, under statutory mandates that require specific levels of transparency and public involvement.

Generally speaking, the NOSB is designed to provide a wide range of public representation and allow for public input to help the Secretary of Agriculture shape the policies and regulations that will govern the national organic certification program. NOSB meetings are required to be open to the public and its decision making should be fully transparent. The NOSB also has statutory authority over the National List.

Thus, the NOSB should serve as the unifying voice of organic farmers, environmental organizations, organic marketers, scientific experts and consumers.

Therefore, we strongly encourage, at a minimum, that any industry or private organic standard must use all the historic NOSB recommendations as the basic minimum standard and in areas where the NOSB has not spoken international norms should prevail. The development of private industry standard setting should not for any reason undermine or devalue all of the public efforts to ensure organic community consensus supporting the NOSB. It was our understanding that the American Organic Standards were designed to “meet or exceed” the standards recommended by the NOSB. To the extent that this was not done, we have prepared the following analysis.
Organic Watch will continue to work with the OTA and other private standard-setting bodies to encourage their processes to be as participatory as possible. To that end, on those issues where private US standards are lower standards than the NOSB, Organic Watch respectfully requests that they be revised to prevent undermining the public process underway.

Again we hope this analysis will help stimulate further constructive dialogue and result in building strong national support for all US standards to fully support the NOSB as the minimum base for US organic standard requirements.

Sincerely,

Michael Sligh
For Organic Watch
COMPARATIVE ANALYSIS OF NOSB RECOMMENDATIONS AND OTA’s AMERICAN ORGANIC STANDARDS

Prepared by Organic Watch

March 1, 2000
EXECUTIVE SUMMARY

In most areas, the American Organic Standards (AOS), as ratified by the Organic Trade Association’s (OTA) Board of Directors on October 20, 1999, meet or exceed the standards recommended by the National Organic Standards Board (NOSB). This document, however, is intended to discuss areas where the AOS may not be as strict as the NOSB recommendations. The Executive Summary highlights some of our key concerns and the Section by Section analysis provides a more detailed comparison of the two standards.

The source documents used include the AOS, Drafts 1-3; Sligh Greenbook, 1st ed.; and the NOSB website, found at www.ams.usda.gov/nop/nosbinfo.htm.

This is a working document, and comments are welcome. We do not profess to having drafted a conclusive comparison, especially since the subject matter is complex, standards are often subject to various interpretations and provisions regarding the same topic are sometimes found in several locations.

AOS AIMS/PRINCIPLES

- **Organic Agriculture**. NOSB appears to place more emphasis on a whole farm approach to organic agriculture than the AOS. The NOSB definition states in part that a principal guideline for organic production is to “integrate the parts of the farming system into an ecological whole” (Orlando 1995, Sligh p. 1999). Furthermore, the NOSB description of the goal of nutrient recycling implies that farmers should aim at developing self-contained farms or groups of farms. The AOS speaks of “holistic production management systems” that “emphasize the use of management practices in preference to use of off-farm inputs” and are designed to “recycle materials of plant and animal origin in order to return nutrients to the land.” (See Section 4.105 for details.)

CROPS

- **Compost**. The AOS allows more types of byproducts to be used in compost than the NOSB recommends. AOS Sec. 5.5.4 allows byproducts such as meat, blood, bone or fish meal to be used as compost ingredients with the approval of the organic certifier; the NOSB allows only animal manures, crop residues, crop waste from food processing operations, and other vegetative by-products to be used. (Austin 1995, Sligh pp. 200-201). Furthermore, AOS Sec. 5.5.3.5.F) would permit non-agricultural industrial by-products as compost feedstock (as an exception to the general prohibition) if “explicitly allowed;” this exception is not mentioned by NOSB. Also, AOS Sec. 5.5.3.5.C) allows by implication non-glossy newsprint as compost feedstock (by prohibiting glossy paper and colored ink); it is questionable whether this would be considered a “vegetative product” under the NOSB definition of compost.
Pesticide Drift, Residue Testing. The AOS provision on pesticide drift (AOS Sec. 5.1.7.3.) is less stringent but more comprehensive than the NOSB recommendations. The NOSB does not allow agricultural products, including livestock feed crops and pasturage, that are exposed to drift or misapplication with a prohibited pesticide or fertilizer to be sold or labeled as organically produced or fed to certified organic livestock (Santa Fe 1994, Sligh p. 125). However, the AOS allows crops growing in areas affected by pesticide drift to be certified organic if the test results show that the pesticide residue level on the crop is less than 5% of the EPA tolerance or the actual FDA action level. It is not clear whether this AOS provision applies to pasture or feed contaminated by pesticide drift (AOS Sec. 5.1.7.3.B)). However, the AOS definition of drift (Sec. 4.55) encompasses not only pesticides, but also fertilizers, GEOs, and other prohibited materials. Other sections, such as the language on buffer zones (AOS Sec. 5.1.6) refer to drifting of “a prohibited substance,” an effort to include pesticides as well as other prohibited substances. AOS Sec. 5.1.6.2.A) specifically addresses required notification procedures in the case of GMO drift.

In addition, the NOSB recommends that, as a preventative measure, an organic producer be required to notify adjacent property owners and public officials of farm boundaries and possible financial responsibility if drift occurs (Santa Fe 1994, Sligh p. 125-26).

Emergency Pest Eradication and Disease Treatment, Residue Testing. Crops receiving direct exposure to a prohibited substance (including pesticides), due to a government-mandated pest/disease treatment program, may not be sold as organic or fed to organic livestock (AOS Sec. 5.1.7.4.A)). If, however, the crops received indirect exposure, they may be sold as organic or fed to organic livestock as long as the pesticide residue level is less than 5% of the EPA tolerance or the actual FDA action level (AOS Sec. 5.1.7.4.B)).

GEO/GMO's. Both AOS and NOSB generally prohibit the use of genetically engineered organisms in organic agriculture. (AOS Sec. 3.10.) (Sligh p. 207). While the NOSB prohibition on GEO's/GMO's in organic production and handling is unconditional, the AOS qualifies its ban via footnotes. Footnote 7 to AOS Sec. 5.5.3.3. provides that the “allowance of animal manures, plant materials, and food processing by-products from GMO sources or containing GMO derivatives for use as compost feedstocks is an issue for further research and development.” Also, other footnotes explain that the OTA is collecting data regarding unintentional contamination of organic crops by GMO’s to determine target action and rejection levels. (Footnote 2 to AOS Sec. 5.1.6.2.A) and Footnote 3 to AOS Sec. 7.3.5.8.). These footnotes leave room for the AOS prohibition on GMO’s to be relaxed in the future.

Plastic Mulches. Both NOSB and AOS allow for plastic mulch and covers to be used, with restrictions, but the NOSB National List excludes the use of materials made of PVC (National List, Sligh p. 186). AOS does not exclude PVC and also does not mention PVC in the National List restrictions (AOS Sec. 5.7.2.1.B)).

Treated Lumber. AOS Sec. 5.7.4.1. states that lumber treated with arsenate or other prohibited materials is “prohibited for new installations and replacement purposes in contact with soil used to produce organic crops.” NOSB adds that “in no case” shall treated lumber...
be allowed “in installations in contact with the soil and used to grow vegetables (soil beds).” (Austin 1995, Sligh p. 177). This additional requirement is also included in the NOSB and AOS National Lists (although it is not reflected in AOS 5.7.4.1.).

AOS prohibits the “use of treated lumber in new installations where toxic substances may contaminate livestock.” (AOS Sec. 6.2.3.4.) NOSB prohibits, in general, the use of treated lumber for replacement purposes (Austin 1995, Sligh p. 177).

- **Horticultural Oils/Petroleum Distillates.** In the AOS National List, horticultural oils are classified as synthetics allowed for use on perennial plants as insect pest smothering or suffocating agents. (AOS Sec. 8.2.3.1.B.1.b). NOSB restricts the use of the oils (referred to as petroleum distillates and not horticultural oils), stating that they may be applied to dormant perennials, that direct application to harvested crop is prohibited, and that it may not be used as either weed or carrot oils in organic production (National List, Sligh p. 186).

**LIVESTOCK**

- **Antibiotics.** The AOS sets out a general prohibition against use of antibiotics in slaughter stock, dairy stock or other stock producing edible or non-edible products, but until January 1, 2003, makes an exception allowing antibiotics in dairy stock more than one year prior to lactation. As for breeder stock, AOS prohibits the use of antibiotics in these animals during the last third of gestation (nursing was not mentioned) (AOS Sec. 6.7.5.2). As this AOS provision is currently drafted, breeder stock does not appear to be characterized as stock producing edible or non-edible products.

The NOSB clarified its position on antibiotics in Ontario 1998 and recommended that no animal product or animal by-product be labeled organic once an antibiotic has been given to an animal with an apparent exception for conventional animals who were given antibiotics before they were brought into an organic farm. No exceptions were made for breeder stock.

- **Pasture Requirements for Ruminants.** Although both AOS and NOSB require that ruminant animals have access to pasture, with some temporary exceptions allowed, NOSB emphasizes that ruminant organic livestock systems must “be pasture based” (Washington DC, Feb. 1999). AOS also regulates pasture access under the section on feed instead of living conditions, and thus may not appear to place the same importance on pasture (AOS Sec. 6.5.3.3).

- **Comprehensive Nutrient Cycling.** AOS does not follow the NOSB recommendation that “[p]roducers of certified organic livestock shall be required to detail nutrient recycling plans in their overall farm plan . . . While the NOSB recognizes that comprehensive nutrient cycling may not be practical given today’s structure of agriculture, it is an essential goal of organic agriculture and every producer must demonstrate progress toward that goal in his/her farm plan” (Final Recommendations of the NOSB on Livestock Issue Papers # 1 and # 2, 1998). The AOS incorporated the concept of nutrient cycling in a general way in Principle
3.6.7.: “Recycle materials of plant and animal origin in order to return nutrients to the land, thus minimizing the use of non-renewable resources.”

- **Feed Additives and Supplements.** AOS Sec. 6.5.7. allows feed supplements to be made of any non-synthetic substance (unless prohibited on the National List) or any synthetic substance allowed on the National List. NOSB requires feed supplements to be certified as organically produced (Santa Fe 1994, Sligh p. 93).

As part of the NOSB Livestock Committee “working vocabulary” (not formally accepted for recommendation), “feed additive” is defined as a substance added to feed in micro quantities to fulfill a specific need, such as nutrients (Santa Fe 1994, Sligh p. 89). AOS Sec. 4.60. expands that definition to include “substances added in small amounts to livestock feed to enhance, stabilize, preserve, or otherwise alter it” and the term “nutrient” is not mentioned in the AOS definition.

- **New Herd Conversion.** AOS provides in Sec. 6.4.1.2.B) that, for one-time new herd conversion of dairy stock, 80% of the feed must be organic the first nine months of the 12 month conversion, and 100% of the feed must be organic the final three months prior to the production of milk or milk products to be sold as organic. On the other hand, the NOSB, in its response to the USDA proposed rule, reaffirmed that “replacement dairy stock and whole herd conversion of dairy stock must be fed organic feed for a 12-month period immediately prior to the sale of organic milk. Animals that are part of a whole farm conversion shall undergo the same 36 month transition as the farm.” (Ontario 1998).

- **Origin of Livestock.** AOS does not specifically require that dairy stock, replacement dairy stock, or breeder stock be raised in accordance with organic standards from the time they are brought onto an organic farm (AOS Sec. 6.4.1.)(Santa Fe 1994, Sligh pp. 91-92). Also, effective January 1, 2003, AOS Sec. 6.4.1.2.C) provides that transitional feed grown on a dairy farm converted to organic production may be fed to young dairy stock up to 12 months prior to milk production. As so worded, this implies that transitional feed can be used after a farm has been certified organic.

NOSB states that breeder stock, day-old poultry stock, and replacement dairy stock shall be obtained from organic sources unless the producer can document to the certifier that organically raised stock of acceptable quality and genetic potential is not commercially available. (Santa Fe 1994, Sligh p. 91). AOS does not include this preference.

With regards to organic poultry, AOS provides that they must be managed organically from the second day of life (AOS Sec. 6.4.1.3.). The NOSB states: “All poultry from which meat or eggs will be sold as organically produced shall be raised under organic production methods from one day old.” (Santa Fe 1994, Sligh p. 92).

- **Weaning.** In AOS Sec. 6.5.4.1., breeding stock, but not slaughter stock, may receive synthetic colostrum. NOSB states in general that milk replacers based on non-milk products are not allowed and has not otherwise specifically allowed synthetic colostrum (National List, Sligh p. 188).
**Synthetic Parasiticides.** AOS prohibits synthetic parasiticides for all livestock for slaughter effective January 1, 2003; until this date a minimum 90-day withdrawal requirement applies following use of synthetic parasiticide (AOS Sec. 6.7.4.2.C & D)). NOSB recommended the prohibition of the use of synthetic parasiticides in slaughter stock in 1994 (Sligh, p. 101).

**HANDLING**

**Organic Handling Plan.** The NOSB recommendation would require a description of efforts to reduce solid waste, liquid waste, and airborne emissions, a description of recycling efforts, the use of recycled materials and efforts to reduce packaging in the Organic Handling Plan (Santa Fe 1994, Sligh p. 61). The AOS requires that the Organic Handling Plan include a “description of waste management and resource conservation plans or policies” (AOS Sec. 9.3.5.6.), which comply with the standards set out in AOS Sec. 7.4.3.8.: “Wastes shall be managed so as to prevent environmental degradation, including contamination of ground and surface water. Wastes shall be contained so as not to attract pests or present a contamination potential to organic products. If waste products are to be sold as “organic”, then they shall be listed in the Organic Handling Plan and shall be subject to all applicable requirements of the organic standards.”

**Synthetic handling materials.** The AOS sets a lower standard than the NOSB regarding environmental effects. The AOS only requires that the synthetic not have “significant” adverse effects on the environment, but the NOSB synthetics having any adverse effects on the environment.

**CERTIFICATION/ACCREDITATION**

**Peer Review Panel.** AOS and NOSB [and the Organic Foods Production Act (OFPA), as well] recommend peer review panels for assessing applications of certifiers. AOS does not include a consumer/public interest group representative on this panel, although NOSB recommends two members from this group. AOS requires at least five members with at least three having sufficient expertise in the areas of accreditation delineated in the certifier’s application, (AOS Sec. 10.3.3.1.A), NOSB requires nine peer review panel members representing five sectors of the organic community plus a USDA representative and an ex-officio NOSB representative (Santa Fe 1994, Sligh p. 26).

**Records available to certificant.** AOS does not include the NOSB recommendation that the certificant be allowed to request the following information from the certifier: inspector contract, inspection report, names and affiliations of all decision makers, results of laboratory analyses (Santa Fe 1994, Sligh p. 16).

**Additional inspections.** AOS provides that, in addition to the annual on-site inspection, a certification agent may conduct an unannounced inspection on a random or “as needed”
basis. NOSB recommends that on “at least an annual basis, certifying agencies or their inspectors must conduct at least one random product commodity tracking that demonstrates the steps of production or manufacturing prior to the shipment of that product from the premises of that farm or manufacturer.” (Santa Fe 1994, Sligh p. 13.)
SECTION BY SECTION ANALYSIS

All of the Section numbers below refer to AOS provisions, unless otherwise stated.

AIMS (SEC. 2)

_AOS Sec. 2.7._ One AOS aim is to provide “a baseline standard for certification . . . and guidelines for accreditation . . . without precluding certification agencies or governments from implementing additional requirements.” Although never expressly stated, the NOSB appears to approve of this aim. In particular, the NOSB states: “It is recognized that some private certifying agents have established programs to address specific philosophies and/or regional considerations, and may wish to include requirements for the awarding of the certifying agent’s seal that are supplemental to the standards promulgated in OFPA. Such requirements shall not be in conflict with the National Organic Standards. Supplemental requirements shall not preclude the certification to OFPA standards of producers and handlers who do not seek to utilize the private agent’s seal” (Santa Fe 1994, Sligh p. 5).

PRINCIPLES OF ORGANIC PRODUCTION AND HANDLING (SEC. 3)

The NOSB has used organic principles as the foundation for its recommendations but has not compiled a list of principles per se. We do however recommend that the NOSB specifically develop such principles as well.

_AOS Sec. 3.1._ The NOSB definition of “organic” can be considered to set out the basic principles that are the foundation of the NOSB recommendations. The AOS principles are an expansion of the NOSB definition, with additional provisions taken from the Codex Alimentarius (Guidelines for the Production, Processing, Labeling, and Marketing of Organically Produced Foods), for example. For a fuller discussion, see AOS Sec. 4.105 below.

_AOS Sec. 3.4._ AOS states that organic production systems “strive to achieve agro-ecosystems that are ecologically, socially, and economically sustainable.” NOSB doesn’t explicitly address the issue of social sustainability and has not yet made specific recommendations in that area. Again we do urge them to do so.

_AOS Sec. 3.11._ The NOSB recommends that GEO’s/GMO’s be prohibited in organic production and handling systems. The AOS adds that organic standards cannot ensure that organic products are completely free of genetically engineered organisms (as well as synthetic fertilizers and pesticides), due to background levels of environmental pollutants.

DEFINITIONS (SEC. 4)

AOS defines more terms than the NOSB; however, some terms defined by NOSB are not included in the AOS definitions, such as “breeder stock,” “drylot,” “manure refeeding,” “ration,”

**AOS Sec. 4.42. Compost.** NOSB states, in part, that farm compost “made from crop residues, crop waste from food processing operations, animal manures, and other vegetative by-products are allowed.” AOS refers to materials permitted by its standards, which allow other by-products. (Also, the AOS describes composting as an aerobic process, and the NOSB describes it as an aerobic or anaerobic process) (Austin 1995, Sligh p. 200).

**AOS Sec. 4.55. Drift.** AOS expands the definition of “drift” to include “genetically engineered organisms, or other prohibited materials” as well as pesticides and fertilizers. Under the NOSB definition, “drift” is the “physical movement of prohibited pesticide or fertilizer . . . from an intended target site onto a certified organic farm . . . “ The AOS definition doesn’t mention intent and speaks only of the “physical movement” of the prohibited material. AOS doesn’t include a definition of “misapplication,” which NOSB defines in part as the “accidental direct application of a prohibited pesticide or fertilizer . . . by a person who is not the certified organic producer . . . “ (Santa Fe 1994, Sligh p. 123).

**AOS Sec. 4.59. Feed.** AOS excludes, “for these purposes,” mineral and vitamin supplements and feed additives in its definition of feed (Santa Fe, Sligh p. 89).

**AOS Sec. 4.60. Feed additive.** AOS states that these are “usually used in micro quantities” and the NOSB Livestock Committee, in its “working vocabulary” not adopted by the NOSB, states that it is a substance “added to feed in micro quantities.” The NOSB Livestock Committee defines it as “substances added to fulfill a specific need, i.e. nutrients in the form of amino acids, minerals, and vitamins” (Santa Fe 1994, Sligh p. 89). AOS does not mention nutrients, but states that it “includes substances added in small amounts to livestock feed to enhance, stabilize, preserve, or otherwise alter it.”

**AOS Sec. 4.62. Feed supplement.** AOS categorizes vitamins and minerals as a “feed supplement,” whereas the NOSB Livestock Committee, in its “working vocabulary” that has not been formally adopted by the NOSB, includes it as a “feed additive” (Santa Fe 1994, Sligh p. 89).

**AOS Sec. 4.71. Forage.** NOSB adds that forage can be in a fresh, dried or ensiled state (Santa Fe 1994, Sligh).

**AOS Sec. 4.95. Livestock.** The OFPA definition of “livestock,” which is also part of the “working vocabulary of the NOSB Livestock Committee, includes certain “animals used for food or in the production of food,” “fish used for food, wild or domesticated game, or other nonplant life.” The AOS definition does not specifically mention wild game or fish, but does add bees and includes “fiber” as a use as follows: “or other cultivated animals raised for food, fiber, or the production of food or fiber.”
**AOS Sec. 4.98. Manure, raw.** NOSB defines it as “any animal excrement which . . . has not undergone substantial decomposition.” AOS includes not only feces and urine, but also “bedding and other waste incidental to an animal” which has not been composted or processed to reduce pathogens.

**AOS Sec. 4.105. Organic agriculture.** The AOS definition seems to be based on the NOSB definition. It is not clear whether the AOS places enough emphasis on giving preference to a whole farm system. The NOSB definition states in part that a principal guideline for organic production is to “integrate the parts of the farming system into an ecological whole” (NOSB Definition of Organic, Orlando 1995, Sligh p. 1999). In other recommendations, the NOSB emphasizes that comprehensive nutrient cycling “is an essential goal of organic agriculture” (if not always practicable) and “central to the concept of organic agriculture,” and “every producer must demonstrate progress towards that goal in his/her farm plan” (Final Recommendations of the NOSB on Livestock Issue Papers # 1 and # 2, 1998). The recommendations further state: “This doesn’t necessarily mean that every organic farm has to have a well-balanced, mixed crop/livestock system, although such systems clearly make nutrient cycling easier. . . . While the reinstatement of nutrient cycling may not require that every farm have both crops and livestock, it does mean that every organic farm has to have a farm plan that describes how nutrient cycling is achieved on that farm. Such a farm plan may be designed by several farms cooperating to achieve nutrient cycling in the watershed in which the farms exist . . . “

AOS does speak of “holistic production management systems” which “emphasize the use of management practices in preference to use of off-farm inputs” and which are designed to “recycle materials of plant and animal origin in order to return nutrients to the land.” (AOS Sec. 3.10 and 4.105). AOS also addresses the interactions of the farm system with natural ecological systems in Section 5.4 on biological diversity and natural resource conservation.

**AOS Sec. 4.126. Processing aid (food).** The AOS definition conforms to the FDA definition in 21 CFR §100.100 (a)(3)(ii), which is also described in the Introduction to the NOSB Recommendation on Incidental Food Additives in Organic Foods (Austin 1995, Sligh p. 174). Although it did not expressly do so, the NOSB may have adopted this definition by implication. The original NOSB definition of “processing aid” included only part of the FDA definition: “a ‘processing aid’ means a substance that is added to food during the processing of such food but is removed from the food before it is packaged in its finished form, that meets the definition of 21 CFR 101.100(a)(3)(ii)(a)” (Santa Fe 1994, Sligh p. 50). The AOS definition and NOSB 1995 description also includes the CFR provisions in (b) and (c) relating to substances that are converted into constituents normally present in the food and those which are present in the finished food at insignificant levels and do not have any technical or functional effect in that food.

**AOS Sec. 4.139. Routine use.** AOS adds to the NOSB Livestock Committee definition (not adopted by the NOSB) that this term means regularly scheduled or periodic administration of substances or management practices “without documentation of specific need” (Santa Fe 1994, Sligh p. 90).
CROP PRODUCTION STANDARDS (SEC. 5)

AOS Sec. 5.1.1. Last application of Prohibited materials. AOS adds the requirement that GMO’s may not be applied to crop or soil 36 months prior to organic harvest, and states in Footnote 1: “AOS adopts this precautionary position while more data and research is collected regarding the specific contamination impact of different GMO crops.”

AOS Sec. 5.1.3. Transition to organic status. NOSB does not address the issue of when crops may be labeled as “transitional.” AOS allows a “transitional” label on harvests after 12 months of production using organic methods.

AOS Sec. 5.1.4.3. Parallel production. AOS allows simultaneous production of visually indistinguishable conventional and organic crops only when the certification agent has approved the Organic Farm Plan and found that the producer has demonstrated adequate record keeping ability and met other criteria. NOSB debated this issue at great length but in the end recommended that both split and parallel production could be allowed but that it would require more costly certification rigor and inspections.

AOS Sec. 5.1.6. Buffer zones. AOS provides that when organically managed land adjoins any area that represents a potential for contamination with a prohibited material, the producer must implement practices to prevent contamination. These practices may include establishment of physical barriers, diversion of runoff, notification of neighbors, posting of borders, buffer zones of no less than 25 feet or other means approved by the certification agent. AOS Sec. 5.1.6.2. further provides: “The buffer zone should be adjusted upward in areas of higher risk: i.e. neighboring pesticide application by use of air-blast sprayers, and aerial spraying.” NOSB did not set a recommended size for buffer zones, but instead empowered local certifiers to determine this based on local conditions.

NOSB did recommend that, as a drift preventive measure, an organic producer be required to give notice (preferably written) to adjacent property owners and public officials of farm boundaries and possible financial responsibility if drift or misapplication occurs (Santa Fe 1994, Sligh pp. 125-6).

AOS has expanded the definition of drift to include GMO’s. Regarding GMO contamination, footnote 2 to AOS Sec. 5.1.6.2 states: “At this time, the OTA is collecting data regarding incidence of possible contamination of organic crops and products by GMO’s. This information will be used to determine appropriate buffer zones, and target action and rejection levels for organic crops. It is the OTA’s position that while producers and handlers must make every effort required according to these standards to protect crops and products from contamination by GMO’s, the total burden of this responsibility cannot be placed on the organic industry alone.”

The NOSB has generally prohibited the use of GMOs in organic agriculture and, therefore, has not had in-depth discussions about the rejection of organic crops contaminated by GMOs nor the creation of acceptable tolerance levels of such contamination. The Board also has not
taken a position on whether the burdens of GMO contamination prevention via buffer zones should be placed upon farmers, processors and handlers not using genetically engineered products. We strongly recommend that the NOSB make specific recommendations in these important areas.

AOS Sec. 5.1.7.1. Residue testing. Under this AOS section, the certification agent may require periodic residue testing of “agricultural products to be sold as organic if . . . information indicates possible contamination by prohibited materials.” NOSB Recommendations refer to pesticide residue levels (instead of prohibited materials) in “agricultural products sold or labeled as organic” (Santa Fe 1994, Sligh pp. 132-4).

AOS lists as a condition that may warrant testing: “concern or evidence that irrigation water contains contaminants.” NOSB includes rainwater as well as irrigation water (Santa Fe 1994, Sligh p. 134).

AOS Sec. 5.1.7.2. Residue levels. AOS provides that “[c]rops sold as organic may not contain residues of pesticides at levels above 5% of EPA tolerance level, or the actual FDA level for pesticides and other contaminants.” NOSB does not refer to “other contaminants” (Santa Fe 1994, Sligh p. 132).

This AOS section, and the section on residue testing above, do not include contamination of pasture or feed which is not sold; NOSB recommendations also may not specifically cover such contamination.

AOS Sec. 5.1.7.3. Contamination by pesticide drift. AOS says that “[c]rops growing in affected areas [where there is pesticide drift] must either be sold or used as non-organic or tested for suspected contaminants prior to harvest.” NOSB Recommendations cover pesticide and fertilizer drift, specify that it is applicable to feed crops and pasturage, and address misapplications as well as drifts, as follows: “Agricultural products, including livestock feed crops and pasturage, that are exposed to drift or misapplication with a prohibited pesticide or fertilizer shall not be sold or labeled as organically produced or fed to certified organic livestock” (Santa Fe 1994, Sligh, p. 125).

AOS defines drift (AOS Sec. 4.55) as “the physical movement of pesticides, fertilizers, genetically engineered organisms, or other prohibited materials onto a certified organic field, farm, or facility” (although only pesticide drift is addressed in AOS Sec. 5.7.3). While this is broader than the NOSB definition of “drift,” the term does not appear to cover an “accidental direct application of a prohibited pesticide” as included in the NOSB definition of “misapplication” (Sligh, p. 125) (or a non-accidental direct application).

AOS requires that any incident of pesticide drift be “immediately” reported to the certification agent; NOSB recommends that the producer “notify the certifying agent and the appropriate public officials within 48 hours of discovery.”

AOS states: “If test results show that the pesticide residue level on the crop is less than 5% of the EPA tolerance or the actual FDA action level, the crop can be certified organic,” and if the
result “exceeds 5% of the EPA tolerance or the actual FDA action level, the crop cannot be certified organic.” This wording is confusing since it fails to cover the situation where the residue level is exactly 5% of the EPA level or is exactly 100% of the actual FDA action level. Also, the way the sentence is drafted, it is not clear whether the 5% also refers to the FDA action level. The same problem arises in other sections such as 5.1.7.4 and 7.3.5.3. The NOSB speaks of residues “in excess of the FDA action level or 5% of the EPA tolerance level.”

This (NOSB language) may also be a problematic wording because residues at the exact FDA action level should probably also be covered. One possible wording could be that residues at or above the FDA action level or in excess of 5% of the EPA tolerance level would be prohibited. Again, we recommend that the NOSB clarify its position on this matter.

**AOS Sec. 5.1.7.4. Emergency pest or disease treatment.** This section regarding treatment mandated by the government basically corresponds to the NOSB recommendations and covers products fed to livestock as well as products sold (Santa Fe 1994, Sligh p. 147 - 149; Austin 1995, Sligh p. 154). AOS Sec. 5.1.7.3. (above) on pesticide drift probably intends to apply to products fed to livestock as well as products sold, but it would be helpful if the language were the same in both sections and clarified that the standards also apply to pasture. Both NOSB and AOS provide that agricultural products that receive a direct exposure to emergency pest or disease treatment cannot be classified as organic (Santa Fe 1994, Sligh p. 149).

**AOS Sec. 5.2.1. Reporting major changes.** NOSB does not address whether the operator must notify the certifier of all proposed major changes to the Organic Farm Plan outside of the annual update.

**AOS Sec. 5.3. Record keeping requirements.** The AOS requirements are more detailed than the NOSB Recommendations (Santa Fe 1994, Sligh p. 12 -13). AOS requires “receipts” regarding applied substances and that “[a]ll materials listed with conditions for use must be noted with a description of use,” etc.

**AOS Sec. 5.4. Biological diversity and natural resource conservation.** These topics are not specifically described by NOSB, although many of the areas addressed here are to be reported in the NOSB recommended Organic Farm Plan: crop rotation, soil and resource management (tillage program, soil erosion control, soil fertility). This AOS section provides, in part, that biological diversity shall be promoted through various means, for example, the establishment or preservation of non-agricultural areas, such as hedgerows, native prairies, wetlands and woodlands, adjacent to or adjoining the farm.

**AOS Sec. 5.5. Soil fertility and crop nutrient management.** In general, the AOS recommendation regarding compost is more detailed than the NOSB recommendations.

**AOS Sec. 5.5.2. Use of animal manure.** NOSB Crops Committee is reconsidering its recommendation for raw manure (applied to crops for human consumption a minimum of 60 days prior to harvest, echoing OFPA) (Austin 1995, Sligh p. 200-201). AOS requires applications no less than 90 days (for crops whose edible portion do not contact soil) or 120 days (crops...
exposed to soil, eaten raw or nitrate accumulators) prior to harvest. (June 1999).

**AOS Sec. 5.5.3.3. Permitted sources of compost ingredients.** Both AOS and NOSB generally prohibit the use of GMO in organic agriculture. AOS Sec. 3.10. However, the AOS states that the “allowance of animal manures, plant materials, and food processing by-products from GMO sources or containing GMO derivatives for use as compost feedstocks is an issue for further research and development,” leaving room for the AOS prohibition on GEO’s/GMO’s to be relaxed in the future (AOS Sec. 5.5.3.3., footnote 7). NOSB has not specifically addressed this issue (Sligh p. 207).

AOS allows some prohibited materials, even if detectable in the raw plant or animal waste feedstocks, so long as those prohibited materials are not detectable in the composted product (AOS Sec. 5.5.3.3.E)). Section 5.5.3.3.E. does note that some feedstocks are specifically prohibited from this allowance.

NOSB recommends in general that certifiers “may evaluate the risk of prohibited materials residues remaining after composting” (Austin 1995, Sligh p. 200-201).

**AOS Sec. 5.5.3.5. Prohibited compost feedstock.** AOS prohibits glossy paper and colored ink in compost feedstock (AOS Sec. 5.5.3.5.C)), which implies that non-glossy paper and black ink would be permitted. It is questionable whether this would be considered a “vegetative by-product” that would be allowed by NOSB. Specifically, the NOSB recommended, in part, that “compost made from crop residues, crop waste from food processing operations, animal manures, and other vegetative by-products are allowed” (Austin 1995, Sligh p. 200).

AOS also prohibits non-agricultural industrial by-products as compost feedstock, “unless explicitly allowed” (AOS Sec. 5.5.3.5.F)). The AOS does not specify who has authority to waive the prohibition—the certifier, Organic Materials Review Institute, or others. The NOSB doesn’t mention this exception.

**AOS Sec. 5.5.3.6. Requirements for compost production.** AOS sets out basic requirements for commercially produced compost that is marketed for off-farm use (compost must reach temperature of at least 130 F°. for several days, be thoroughly mixed, and achieve that temperature again for a period of approximately six weeks). These standards are applicable to all off-farm sources of compost (AOS Sec. 5.5.3.2.). In Footnote 6 to AOS Sec. 5.5.3.6., “AOS suggests the use of Organic Materials Review Institute (OMRI) for product evaluation according to these standards.”

On-farm produced compost can be managed under various techniques “as long as it is adequately aged and used in accordance with the Farm Plan in a manner that prevents contamination of soil, water or crops with pathogens, nitrates, bacteria, heavy metals and residues of prohibited substances” (AOS Sec. 5.5.3.6.B)). These methods are not further described by AOS (or NOSB).
**AOS Sec. 5.5.4. Permitted compost ingredients.** AOS allows by-products such as meat, blood, bone or fish meal as compost ingredients with the approval of the certification agent. The NOSB does not list these by-products as allowable compost feedstock (Austin 1995, Sligh p. 200-201).

**AOS Sec. 5.5.7. Prohibited methods/substances for use in soil fertility and crop nutrient management.** AOS adds that the burning of manure as a means of disposal or use of such ash is prohibited. (AOS Sec. 5.5.7.2.)

AOS prohibits potassium chloride due to high solubility and potential for chloride accumulation and, effective January 1, 2003, prohibits sodium nitrate (Chilean nitrate) (AOS Sec. 5.5.7.4.) AOS points out that these standards are different from the NOSB recommendations. (AOS Sec. 5.5.7.4., footnote 8).

**AOS Sec. 5.6.1. Organically produced seeds and planting stock.** AOS does not set any conditions for using non-organically produced untreated seeds and planting stock, except for seeds used for sprouts, which must be organic, and annual seedlings and transplants, which must be organically produced unless there is a natural disaster or other unanticipated circumstance (AOS Sec. 5.6.3.). This is similar to the NOSB recommendations. Footnote 9 to AOS Sec. 5.6.1. states: “Many comments were received that indicated a requirement for organic seed is premature at this time, and that treated seed should be eliminated before a requirement for organic seed can be implemented. This requirement should be considered under development.”

**AOS Sec. 5.6.2. Treated seeds and planting stock.** NOSB recommends that seed treated with prohibited substances be prohibited, with the exception of seed treated with synthetic fungicides appearing on the National List if untreated seeds are commercially unavailable (Santa Fe 1994, Sligh p. 140-141). AOS 5.6.2. also allows seed treated for fungicide if untreated seed or other organically produced planting stock of the same variety is commercially unavailable, or if use of treated seed is required by phytosanitary regulations necessary to prevent endemic diseases, or if unanticipated or emergency circumstances make it unfeasible to obtain untreated seeds or other planting stock.

With regard to commercial availability, NOSB states that it shall be determined “at the discretion of the certifying agent and entail the following good faith efforts documented in writing by the producer: (a) the good faith efforts made to locate or develop a source of organic transplants or untreated seed; and (b) progress made over the previous year to eliminate non-organic transplants or [treated] seed” (Santa Fe 1994, Sligh p. 137). The AOS definition of commercially unavailable is “the documented inability to obtain a production input or ingredient in an appropriate form, quality, quantity, or variety to be feasibly and economically used to fulfill an essential function in a system of organic farming, processing, and/or handling.” (AOS Sec. 4.38). AOS doesn’t mention good faith or progress made over the previous year.

**AOS Sec. 5.6.5. Prohibited sources of planting stock.** AOS prohibits all genetically engineered seeds, seedlings and planting stock. The NOSB prohibits, in general, GEO’s/GMO’s and their derivatives in organic production and handling systems (Sligh p. 207).
NOSB lists specific transplant standards for 7 vegetable and fruit categories, and states, for example, that strawberry crowns or transplants be organically produced unless commercially unavailable; strawberries are perennial plants and perennial transplants usually do not have to be organically produced under NOSB or AOS provisions. (Santa Fe 1994, Sligh pp. 137, 139-140) (AOS Sec. 5.6.4). NOSB further recommends that pelletized seed be allowed unless it contains prohibited substances and plastic polymer pelletization of seed be prohibited (Santa Fe 1994, Sligh p. 141).

NOSB defines micro propagation as 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).” (Austin 1995, p. 202). AOS does not mention micro propagation.

_AOS Sec. 5.7. Prevention and management of crop pests, weeds, and diseases._ NOSB has not addressed all issues in this section, such as types of management practices (i.e., steam sterilization or solarization of growing media for disease control).

_AOS Sec. 5.7.2. Regulated measures for the prevention and control of crop pests, weeds and diseases._ NOSB allows petroleum-based plastics other than PVC for plastic mulch and covers (National List, Sligh p. 186). AOS does not exclude PVC and also does not include this in the National List restrictions (AOS Sec. 5.7.2.1.B)).

_AOS Sec. 5.7.4. Prohibited production aids._ AOS states that lumber treated with arsenate or other prohibited materials is “prohibited for new installations and replacement purposes in contact with soil used to produce organic crops.” (AOS Sec. 5.7.4.1.) NOSB adds that “in no case” shall treated lumber be allowed “in installations in contact with the soil and used to grow vegetables (soil beds).” (Austin 1995, Sligh p. 177) This is also listed as a condition in the NOSB and AOS National List/materials list.

_AOS Sec. 5.8.2. Water used in post-harvest handling._ AOS adds that water used to wash crops must meet drinking water standards as established by the Safe Drinking Water Act (OFPA requires this for certifying handling operations). Also, water that contacts conventionally produced raw agricultural products may not come into contact with organically produced products, unless conservation laws require it, in which case procedures are described.

_AOS Sec. 5.9. Wild crop harvesting._ This topic is being reviewed again by NOSB. NOSB listed a few basic requirements in the 1994 Organic Farm Plan Questionnaire (Santa Fe 1994, Sligh p. 146). The AOS provisions are very general.

_AOS Sec. 5.10.1. Greenhouse production._ NOSB allows both organic and non-organic production to co-exist in a greenhouse operation under certain circumstances (Orlando 1995, Sligh p. 150); AOS requires organic and conventional greenhouses on the same site be operated as distinct units.
**AOS Sec. 5.10.2. Hydroponic production.** NOSB permits if the system can meet organic standards and certification requirements (Orlando 1995, Sligh p. 152). The AOS provisions are general.

**AOS Sec. 5.10.3.1.A) Mushrooms cultivated indoors.** AOS requires that the “operations shall be managed organically throughout the entire growing period of the fungus,” whereas the NOSB requires this only for “log-grown mushrooms” (not indoor mushrooms) (Orlando 1995, Sligh pp. 150-151).

AOS requires that organic mushroom houses shall be operated as distinct units from conventional mushrooms on the same site. (AOS Sec. 5.10.3.1.A)3)). NOSB recommends that both organic and non-organic sites be allowed to co-exist in a mushroom house operation under certain conditions.

NOSB requires that uncomposted substrate shall be organically produced, whereas AOS states that uncomposted substrate from agricultural sources shall be organically produced and sawdust or wood products used for substrate may not be treated with prohibited materials (AOS Sec. 5.10.3.1.A)4)a)).

AOS states that, when commercially available, organically produced spawn must be used on mushrooms cultivated indoors, (AOS Sec. 5.10.3.1.A)4)c)), whereas NOSB does not require the spawn to be organically produced.

**AOS Sec. 5.10.3.1.B) Mushrooms cultivated outdoors.** AOS states that, when commercially available, organically produced spawn must be used on mushrooms cultivated outdoors, (AOS Sec. 5.10.3.1.B)2)b)), whereas NOSB does not require the spawn to be organically produced.

**AOS Sec. 5.10.4. Sprouts.** NOSB merely states that seed utilized for the production of sprouts shall be organically produced (Santa Fe 1994, Sligh p. 141). The NOSB recommendations do not address any other issues such as treating seeds to prevent food-borne pathogens.

**AOS Sec. 5.10.5. Maple Syrup Production.** The NOSB decided that maple syrup production did not need specific additional standards.
LIVESTOCK PRODUCTION STANDARDS (SEC. 6)

AOS Sec. 6.1. Organic Livestock Plan. NOSB does not mention that operators must notify certifiers of major changes outside of the annual update.

AOS Sec. 6.2.1. Living conditions. AOS basically copied NOSB recommendations from Ontario, March 1998 regarding living conditions and stated that livestock must have “access to shade, shelter, fresh air, outdoors, and direct sunlight suitable to the species, the stage of production, the climate and the environment.” (Originally addressed in Santa Fe 1994, Sligh pp. 95-96, 116).

Both AOS and NOSB require managed pasture for ruminants and allow temporary exceptions under certain conditions. AOS places the pasture rules under the section on Feed Requirement but not under the “Living Conditions” section. (AOS 6.5.3.3 provides: “Access to managed pasture shall be provided for ruminant animals.”) The NOSB emphasizes that ruminant organic livestock systems must “be pasture based” (Confinement of Livestock Recommendation, Washington DC, Feb. 1999). With regard to the living condition requirements, NOSB stated in Ontario, 1998 that no exceptions would be granted for large livestock concentrations. AOS added this statement in Footnote 1 to AOS Sec. 6.2.1.

AOS Sec. 6.2.1.3.E. Housing design. AOS requires that livestock shall have access to an outdoor exercise area with a surface that is predominantly grass, wood shavings, soil or other non-artificial bedding. NOSB requires that livestock have access to the outdoors and a housing design that provides for opportunity to exercise (Santa Fe 1994, Sligh pp. 95-96, 116) plus free access to a floor that is predominantly grass, shavings, dirt or other non-artificial bedding (Ontario 1998).

AOS Sec. 6.2.2. Temporary indoor housing. AOS lists the conditions under which temporary indoor housing may be justified without the following NOSB qualifications: “The management practices must make clear that these additional exemptions in no way change the intent that ruminant organic livestock systems be pasture based” (Confinement of Livestock Recommendation, Washington DC, Feb. 1999).

AOS includes as a justification for temporary indoor housing the “stage of implementation of an operation’s Organic Livestock Plan”; NOSB refers to it as “stage of transition of the farm to organic” (Washington DC, Feb. 1999).

AOS Sec. 6.2.3. Prohibited living conditions. NOSB doesn’t specifically prohibit white veal production or cages for poultry or state that continuous confinement is prohibited; however, these prohibitions may be implied in the NOSB general provisions regarding organic living conditions. AOS prohibits use of treated lumber in new installations where toxic substances may contaminate livestock. NOSB recommends in general that treated lumber be prohibited for new construction and for replacement purposes (Austin 1995, Sligh p. 177).
**AOS Sec. 6.4.1. Origin of Livestock.** AOS does not include NOSB’s recommendation that “non-organic stock shall be permitted to be purchased if the producer can document to the satisfaction of a USDA accredited certifying agent that organically raised stock of acceptable quality and genetic potential is not commercially available.” (Santa Fe 1994, Sligh p. 91.)

AOS requires that livestock on a certified organic farm that is represented as organically produced shall have been under organic management from birth or hatching, with exceptions described below.

**AOS Sec. 6.4.1.1. Breeder stock.** Both NOSB and AOS provide that female breeder stock must be managed in accordance with organic standards during at least the last third of gestation in order for their offspring to qualify as organic slaughter stock. NOSB adds that purchased breeder stock shall be under organic production methods from the time such stock is brought onto a certified organic farm, and breeder stock born on the organic farm shall be under organic production methods from birth. (Santa Fe 1994, Sligh p. 91 - 92.)

**AOS Sec. 6.4.1.2. Dairy livestock.** Both NOSB and AOS state that replacement dairy stock must be managed organically 12 months prior to milk production, and NOSB further recommends that the replacement cows must be raised under organic management practices from the time such they are brought onto an organic farm (Santa Fe 1994; Sligh p. 92). AOS adds that dairy species other than cows must be managed organically from birth if there is less than a 12-month period before milk production.

NOSB does not set a limit on the number of replacement dairy animals from conventional sources allowed annually; AOS sets a general 10% limit. (AOS Sec. 6.4.1.2.A))

For dairy herds, AOS provides that the certification agent may allow the herd to be fed up to 20% non-organic feed for the first nine months of a 12 month conversion period, provided that the animals are fed 100% organic feed for the last three months prior to the production of milk products to be sold or labeled as organic (AOS Sec. 6.4.1.2.B)).

In responding to the proposed USDA rules on converting an entire herd of dairy livestock, the NOSB stated that “replacement dairy stock and whole herd conversions must be fed organic feed for a 12-month period immediately prior to the sale of organic milk. Animals that are part of a whole farm conversion shall undergo the same 36-month transition as the farm” (NOSB Livestock Production Statement, Ontario 1998). The NOSB requires in general that replacement dairy stock be raised under organic management for not less than 12 months immediately prior to the sale of milk (Santa Fe 1994, Sligh p. 92).

AOS states that effective Jan. 1, 2003, once a dairy operation has been converted to organic production, all dairy animals shall be under organic management from the last third of gestation, except that transitional feed grown on a farm converted to organic production may be fed to young stock up to 12 months prior to milk production. As so worded, it implies that transitional feed can be used even after a farm is certified organic. (AOS Sec. 6.4.1.2.C)).
**AOS Sec. 6.4.1.3. Poultry.** AOS states that poultry must be brought into an organic livestock operation and managed organically no later than the second day of life. The NOSB states: “All poultry from which meat or eggs will be sold as organically produced shall be raised under organic production methods from one day old” (Santa Fe 1994, Sligh p. 92).

**AOS Sec. 6.4.1.4. Livestock used for the production of non-edible livestock products.** This issue currently is not addressed by NOSB. The AOS provides that, for one time new herd or flock conversion of livestock producing non-edible products, the certification agent may allow the herd or flock to be fed 100% organic feed and be managed organically for one year prior to collection or harvest of non-edible organic products. (This requirement is stricter than the AOS requirement for whole herd conversion of dairy cattle found at AOS Sec. 6.4.1.2.B)). Once an operation has been converted to organic production, AOS provides that the animals are to be under organic management from last third of gestation for mammals or from second day of life for other species.

**AOS Sec. 6.4.1.5. Other livestock.** AOS provides that livestock other than breeder stock, slaughter stock, dairy stock and poultry may be designated as organic, provided that they have been managed in accordance with organic standards no later than the second day of life. The NOSB does not specifically address this matter.

**AOS Sec. 6.4.2. Prohibited sources of livestock.** AOS specifically prohibits embryo transfer and cloning techniques, and states that organically produced animals that have been diverted to conventional production shall not be transferred back to organic production. The NOSB does not specifically address these topics.

**AOS Sec. 6.5. Feed Requirements.** AOS defined “feed” to exclude mineral and vitamin supplements and feed additives for the purpose of calculating 100% certified livestock feed. (AOS Sec. 4.59.) The NOSB includes vitamins, minerals and amino acids in the “feed additives” category. Natural feed additives can be from any source, provided the additive is not classified as a Prohibited Natural on the National List. Synthetic feed additives shall be materials which are classified as Allowed Synthetics on the National List.” (Santa Fe, 1994. Sligh, p. 93).

AOS provides that “[a]ll certified organic livestock shall be fed certified organically produced and handled feeds,” with exceptions (AOS Sec. 6.5.1.).

NOSB recommends that “[a]ll certified organically produced livestock shall be fed certified organically produced feeds and feed supplements,” with exceptions, and that feed additives be from natural substances which are not prohibited or from allowed synthetics” (Santa Fe 1994, Sligh p. 93).

**AOS Sec. 6.5.4. Weaning.** AOS provides that slaughter stock that receive synthetic colostrum must be sold as non-organic or used as breeding stock. Neither the NOSB nor AOS National Lists specifically allow synthetic colostrum, but both state that synthetic milk replacers are for emergency use only when fresh milk is not available and that milk replacers based on non-milk products or from products from animals treated with recombinant bovine somatotropin (rBST)
are not permitted. Colostrum whey was determined to be non-synthetic and not within the scope of the National List (Sligh p. 188-189) (AOS Sec. 8.3.3.1.A & B)11).

AOS states that temporary use of non-medicated milk replacer must be documented in an operation’s Organic Livestock Plan, and must be approved by the certification agent. It is unclear whether this is also applicable to the synthetic colostrum used for breeding stock or whether the documentation must show an emergency (AOS Sec. 6.5.4.2).

\textit{AOS Sec. 6.5.5. Feed Emergency.} AOS adds that, in case of a feed emergency, transitional or conventional feed should be fed first to animals furthest away in time from production of products intended to be sold as organic.

NOSB requires that the certifying agent establish a maximum time period during which the non-organic feed may be used (Santa Fe 1994, Sligh p. 93).

\textit{AOS Sec. 6.5.6. Feed additives.} The NOSB Livestock Committee and AOS have different definitions of “feed additive.” The AOS definition of feed additive is as follows: “a substance or combination of substances added to the basic livestock feed mix or parts thereof to fulfill a specific need. Usually used in micro quantities and requires careful handling and mixing. Includes substances added in small amounts to livestock feed to enhance, stabilize, preserve, or otherwise alter it” (AOS Sec. 4.60).

The NOSB and AOS also disagree on the use of synthetic feed additives. The NOSB prohibits the use of any synthetic that was not designated as an “allowed synthetic” on the National List (Santa Fe 1994, Sligh p. 93). The AOS would allow the use of synthetic feed additives prior to Jan. 1, 2003, (AOS Sec. 6.5.6.2.), except that certain synthetic substances are completely prohibited (with no phase in period), such as synthetic colostrum replacement for slaughter stock. (See AOS Sec. 6.5.9.).

The AOS also indicates that prior to Jan. 1, 2003, certification agents are to work with OMRI concerning the eligibility of synthetic feed additives and submit “[m]aterials needing review” to the NOSB for consideration. (AOS Sec. 6.5.6.2., footnote 5).

\textit{AOS Sec. 6.5.7. Feed supplements.} The NOSB states that organic livestock may only be fed certified organic feed supplements and may only graze and pasture on certified pasture land. Furthermore, the Organic Livestock Plan must contain “management measures designed to maximize soil fertility and rangeland health as determined by the certifying agent” (Santa Fe 1994, Sligh p. 93). The AOS does not require feed supplements to be organically produced; instead, they are subject to the same requirements as feed additives (may be non-synthetic unless prohibited on the National List, may be synthetic if allowed on the National List). AOS suggests a phase-in period for adequate review of synthetic additives and supplements, until 2003, since many of these materials have not yet been reviewed by the National List process and OMRI.

Both AOS and the NOSB Livestock Committee define feed supplements as improving the nutrient balance or performance of the total ration (Santa Fe 1994, Sligh p. 89)(AOS Sec. 4.62.).
AOS categorizes vitamins and minerals as a “feed supplement,” whereas the NOSB Livestock Committee, in its “working vocabulary” that has not been formally adopted by the NOSB, includes it as a “feed additive” (Santa Fe 1994, Sligh p. 89). The NOSB Livestock Committee does not mention substances to enhance, stabilize or preserve feed.

**AOS Sec. 6.5.9. Prohibited feeds, concentrates, additives and supplements.** AOS prohibits:

+ Synthetic amino acids (pending current National List review), vitamins, or trace elements fed above levels needed for adequate nutrition (AOS Sec. 6.5.9.2.C).

Any feed made from meal that has been extracted by the use of synthetic solvents, e.g., hexane. The NOSB has not made recommendations specifically concerning the issue of extraction of meals for animal feed with solvents. (AOS Sec. 6.5.9.6.) However, the NOSB Final recommendation Addendum No. 12, has recommended that oil must be extracted by non-chemical means in all products labeled as “organic” or “made with organic materials” (Austin 1995, Sligh p. 159).

The use of GEO’s/GMO’s, and their derivatives, in feeds and feed concentrates (AOS Sec. 6.5.9.11.). The NOSB prohibits the use of GEO’s/GMO’s, including their derivatives, in organic feed supplements and feed additives through its ban on GMO’s in organic production (Sligh p. 207). With regard to the implementation period for feed supplements and additives, Footnote 6 to AOS Sec. 6.5.9.12. mentions that “[d]ue to the fact that conventional grains which may contain GMO’s are used in micro quantities as carriers for feed supplements and additives, the implementation period of 18 months from ratification is included in order for producers and feed suppliers to come into full compliance with this requirement.” (The AOS Introduction provides in general for an 18-month implementation period for OTA members for all of the standards, unless a longer phase-in period is specifically set out.) The NOSB does not phase in its ban on GEO’s/GMO’s.

**AOS Sec. 6.6. Water.** NOSB does not detail clean drinking water requirements for livestock.

**AOS Sec. 6.7.4.2.A)1) Parasiticides not reviewed.** AOS provides that, if necessary, producer may use a parasiticide that has not been reviewed by the National List process if approved by the certifier, until 2003. Although the NOSB has made decisions on parasiticides since 1995, individual parasiticides have only begun to be reviewed recently.

**AOS Sec. 6.7.4.2.B) Synthetic parasiticides.** Both AOS and NOSB have similar, although not identical, provisions for the use of synthetic parasiticides for breeder stock. Both basically allow synthetic parasiticides if the breeder stock is ill despite certain organic management practices having been used, except during the last third of gestation and during lactation if the progeny is to be sold as organic. (AOS Sec. 6.7.4.; AOS Sec. 6.7.4.C)2)) For dairy stock, AOS allows synthetic parasiticides more than one year prior to lactation until Jan. 1, 2003. NOSB allows use until 90 days before organic milk is produced (Santa Fe 1994, Sligh p. 101-102; Addendum p. 103; Austin 1995, p. 114).
AOS Sec. 6.7.4.2.C) prohibits synthetic parasiticides for all livestock for slaughter as of Jan. 1, 2003 and for lactating animals if the milk or progeny is sold as organic. NOSB prohibits synthetic parasiticides for slaughter stock without a phase-in period.

AOS Sec. 6.7.4.2.D) The AOS requires a minimum 90-day withdrawal requirement is required following any use of a synthetic parasiticide, until January 1, 2003. AOS doesn’t specifically mention laying hens, but apparently laying hens would be covered by this section, at least until 2003. The NOSB recommended that eggs not be sold as organically produced for 90 days after the application of a synthetic parasiticide (Santa Fe 1994, Sligh p. 119).

AOS Sec. 6.7.5.2. Antibiotics. Under AOS Sec. 6.7.5.2.A), the AOS sets out a general prohibition against use of antibiotics in slaughter stock, dairy stock, or other stock producing edible or non-edible products, and made an exception for dairy stock more than one year prior to lactation until Jan. 1, 2003. As this provision is currently drafted, breeder stock is not considered to be stock producing edible or non-edible products; in AOS Sec. 6.7.5.2B), the AOS set out a separate rule for breeder stock, prohibiting the use of antibiotics in breeder stock during the last third of gestation only.

The NOSB stated in Ontario 1998 that “antibiotics are not an acceptable synthetic material and that the products from animals treated with antibiotics may not be labeled organic” (NOSB Livestock Production Statement, Ontario, March 1998). The NOSB Livestock Committee specified that it had “refined its recommendation on antibiotic use to encompass the following: 1. No animal product or animal by-product may be labeled organic once an antibiotic has been given to the animal, except as provided for production stock under the Origin of Livestock (Section 205.12 [of the USDA Proposed Rule])” (Livestock Committee Report and Adopted Recommendations to the Secretary, Ontario, March 1998). This reference to the USDA Proposed Rule apparently means that conventional animals that were given antibiotics before they were brought into an organic farm can still be certified as organic.

An NOSB Board member has explained that the current NOSB recommendation imposes an absolute prohibition against the use of antibiotics, including use in breeder cattle (except for use in conventional animals before they were transitioned to organic). There is no phase in period for dairy stock or others. However, the language of the recommendation leaves it open to other interpretations.

The original NOSB recommendation did allow antibiotic use in organic breeder stock except for the last third of gestation or while nursing (Santa Fe 1994, Sligh p. 98). The AOS does not mention lactation.

AOS Sec. 6.7.6. Physical alterations. NOSB does not specifically address beak trimming and other physical alterations. AOS sets out conditions for beak trimming until Jan. 1, 2003, when it is prohibited; it allows dehorning, castration, freeze branding, and removal of extra teats only if the animal is young and the most humane methods are used. Other physical alterations prohibited by AOS are tail cutting (except lambs), wing burning, teeth cutting (with the
exception of pigs), toe clipping of poultry and despurring of poultry, unless performed for the protection of other birds in the flock.

AOS Sec. 6.8. Audit Trail. These provisions are somewhat more detailed than the NOSB recommendations and include regulations about methods for individually identifying animals.

AOS Sec. 6.9. Slaughter. NOSB doesn’t address the slaughter of animals.

AOS Sec. 6.10. Milk Handling. NOSB doesn’t address standards for somatic cell and bacteria count.

AOS Sec. 6.11. Apiculture. NOSB hasn’t adopted a recommendation on this topic.

HANDLING AND LABELING STANDARDS (SEC. 7)

AOS Sec. 7.1. Applicability. The general principles set up by the NOSB for handling are included in the AOS rules, but the AOS has addressed many areas not included in the NOSB recommendations, such as:

AOS Sec. 7.1.5. Multi-ingredient products which contain less than 50% organic ingredients, represent the organic nature of ingredients in the ingredient statement only, and are not subject to certification. AOS provides that operations which produce, process or handle such products must comply with applicable provisions of the organic standards for prevention of commingling and contact of organic products by prohibited substances, with respect to maintaining the integrity of ingredients identified as “organic” in the ingredients statement.

AOS Sec. 7.1.6. Handlers who are not subject to certification should follow applicable Organic Good Manufacturing and Handling Practices set out by AOS to maintain the integrity of ingredients identified as “organic” in the ingredients statement.

AOS Sec. 7.1.6.1. Non-certified retailers are responsible for maintaining documentation of certification from suppliers, and distributors not required to be certified must maintain audit trail records.

AOS Sec. 7.1.7.1. Examples of types of retail activities that require certification (i.e., salad bars) and do not require it (bulk or bin sale, re-packaging for weight) are listed in AOS.

AOS Sec. 7.1.8.1A) Seed Treatment in Split Handling Operations. AOS provides: “The storage, use or application of a prohibited seed treatment substance or the storage and/or handling of any seed treated with such substances is prohibited in a facility which handles organic seeds, grains or their products.”
**AOS Sec. 7.3. Product Composition.** These provisions are similar to NOSB recommendations, i.e., a processed product labeled as organic on the principal display panel must contain a minimum of 95% organic materials; products labeled with “made with organic ingredients” must contain at least 50% organic ingredients. For these products falling within both of these categories, the non-organic ingredients may not appear on the National List of prohibited non-synthetic substances.

None of the non-organic ingredients may appear on the National List of prohibited non-synthetic substances. (AOS Sec. 7.3.2.3.; Sec. 7.3.3.2.). And, in order for the product to be labeled “organic,” the handler must “document to the certification agent that the non-organic ingredient is commercially unavailable in an organic form and that good faith efforts have been made to obtain the ingredient in organic form” (AOS Sec. 7.3.2.2.).

**AOS Sec. 7.3.4.** Organic and non-organic forms of the same agricultural ingredient shall not be combined in a product labeled as “organic” or “made with organic ingredients” if the ingredient is represented as organic in the ingredient statement.

**AOS Sec. 7.3.5.** Prohibited for foods labeled as “organic” or “made with organic ingredients”:

“Any ingredient known to contain levels of nitrates, heavy metals or toxic residues in excess of 5% of EPA tolerance levels or action levels established by FDA” (AOS Sec. 7.3.5.3.). NOSB prohibits the use of a synthetic in processing if it contains “residues of heavy metals or other contaminants in excess of FDA tolerance.” (Washington DC, Feb. 1999, USDA/NOP website).

Any ingredients produced using synthetic volatile solvents or propylene glycol. (AOS Sec. 7.3.5.5.) NOSB prohibits this for natural flavors (Austin 1995, Sligh p. 163) and prohibits solvent extraction of oil (Austin 1995, Sligh p. 159-60).

Genetically engineered organisms and their derivatives and products (AOS Sec. 7.3.5.8.). Although the AOS generally prohibits GEO’s/GMO’s, through footnote 3 the AOS leaves room to relax its ban on GMO’s.

**AOS Sec. 7.3.6. Implementation of Rules for Product Composition.** These are interim rules for bringing products into compliance before all synthetic substances are reviewed by OMRI or NOSB (Jan. 1, 2002).

**AOS Sec. 7.4.** Organic good manufacturing and handling practices. This AOS section is more detailed that NOSB recommendations, in particular with regard to pest management (certified organic handling operations must implement structural pest management programs), sanitation of food contact surfaces, boiler water additives, transportation (transport units shall be food grade and shall be inspected and documented as free of odors or residue prior to loading with open or unprotected organic products) and water used in handling (regarding water that contacts conventionally produced raw agricultural products).

With regards to waste management, NOSB adds that organic handlers should establish waste reduction goals for their operations (Santa Fe 1994, Sligh pp. 58-65).
AOS Sec. 7.5. Prevention and management of facility pests. This section is much more comprehensive than the brief NOSB recommendations.

AOS Sec. 7.6. Prevention of commingling and contact with prohibited substances. NOSB did not specifically state that handling operations that are exempt from certification are also required to prevent commingling of organic and non-organic products and assure that organic products are protected from contact with prohibited substances.

AOS Sec. 7.7. Audit trail. This rewords the NOSB/OFPA requirements for handler records and audit trails and adds some more details.

AOS Sec. 7.8 Labels, labeling, and market information. This section is basically the same as NOSB recommendations, except for the following:

AOS Sec. 7.8.5.2. Optional label statements for “made with organic ingredients” claims. AOS states that the type size is restricted such that any “made with organic ingredient” claims cannot be larger than three quarters of the size of the name of the product. NOSB in its commentary to the USDA Proposed Rule (Ontario 1998) recommended that the statement “made with organic (ingredients) “be comprised of up to three individual ingredients used in the food product and that the statement font size be restricted to no more than the size of the name of the product used on the principal display panel.”

AOS Sec. 7.8.8. The terms “organic,” “biologic” and “ecologic.” AOS states that these terms and their abbreviated forms are used synonymously in international trade and must be used in compliance with organic standards.

One additional difference is that the NOSB, by straw vote and not formal recommendation, urged the USDA to explore the use of a “transitional label.” The label would be applied to products meeting all components of organic production standards except for the three-year rule for no prohibited substances having been applied to the land (Sligh, Transitional Labeling Addenda 7). The AOS does not include a provision for transitional labeling.

EVALUATION CRITERIA FOR MATERIALS & NOSB RECOMMENDED NATIONAL LIST (SEC. 8)

AOS Sec. 8.1. Introduction. AOS states that it includes a compilation of NOSB National List recommendations in AOS Sec. 8.2, 8.3 and 8.4, and that a list of the differences between the AOS, NOSB recommended National List and the OMRI list is provided in AOS Sec. 8.5. and is noted in the text and footnotes. Additionally AOS recommends that the OMRI Generic Materials List be referenced as a comprehensive materials list prior to full implementation of the NOSB National List.
**AOS Sec. 8.2. Crop production materials.** The AOS lists most of the same criteria included in OFPA and NOSB for evaluating materials used in crop production, such as the effect of the substance on the environment and human health, and alternatives available; however, it doesn’t specifically state that synthetic material must be necessary to the production of the agricultural product because of the unavailability of wholly natural substitute products (OFPA).

NOSB adds that economic need should be considered: “While allowance of a material cannot be justified on economic need alone, the economic impact on producers (including farm workers), handlers and consumers of allowing or prohibiting a given material should be factored into the decision” (NOSB Addendum No. 26, NOSB Materials Review Criteria, Austin 1995, USDA/NOP website).

**AOS Sec. 8.2.3. NOSB reviewed substances for organic crop production.** This section is essentially the same as the National List, but some of the conditions or comments included with the substances are different. For example, AOS comments state that horticultural oils may be used on perennial plants as insect pest smothering or suffocating agents (AOS Sec. 8.2.3.1.b)); the NOSB adds that the material (referred to as petroleum distillates and not horticultural oils) may be applied to dormant perennials, that direct application to harvested crop is prohibited, and that it may not be used as either weed or carrot oils in organic production (National List, Sligh p. 186). AOS added to the comments that dormant oils, suffocating oils and summer oils are included as horticultural oils. This latter comment was apparently added for clarification from the TAP review. AOS also added some comments to Pheromones, Soaps, streptomycin sulfate and terramycin oxytetracycline, Vitamin D3, Ethanol and Isopropyl Alcohols, Hydrogen Peroxide, Micronutrients (listed in AOS as minerals) and Tobacco Dust.

Under the comments regarding allowable Plastic Row Covers and Mulches used as crop production aids, the AOS left out the NOSB recommendation that petroleum based plastics other than PVC are approved.

**AOS Sec. 8.3.1. Evaluation criteria for materials used in livestock production.** AOS added some evaluation criteria specific to livestock, such as whether the substance has a physiological effect on livestock and whether the substance is included in the Food Animal Residue Avoidance Database (FARAD). NOSB has not recommended specific evaluation criteria for materials used in livestock production.

**AOS Sec. 8.4.1. Handling materials.** The AOS contends that its provision on synthetics uses the criteria adopted by the NOSB in February 1999 (see p. 84, n. 9); however, there are important differences between the AOS criteria and those approved by the NOSB.

The AOS sets a lower standard than the NOSB does regarding environmental effects. The AOS only requires that the synthetic not have “significant” adverse effects on the environment (AOS Sec. 8.4.1.2.), but the NOSB prohibits any “adverse effects” on the environment and specifically requires the handler to follow OFPA §6513 requirements on the manufacture, use and disposal of the substance (Washington, DC, 1999).
The two standards also differ on the question of human health effects. The AOS would bar synthetic handling materials having “any adverse effect” on human health (AOS Sec. 8.4.1.3.), while the NOSB states that the synthetic may not have “adverse effects as defined by applicable Federal regulations” (Washington, DC, 1999). Since the AOS left out the statement about federal regulations, the question arises whether the AOS intends to use broader criteria on human health effects than those set out in federal regulations.

**AOS Sec. 8.4.1.5. Evaluation criteria for materials used in organic handling operations.** The AOS states that one criterion for a synthetic to be used in handling is that it “contains no residues of heavy metals or other contaminants in excess of 5% of the tolerances established by FDA.” This was apparently a mistake, and the drafters meant to say “in excess of FDA tolerances,” or perhaps more accurately in excess of FDA action levels as recommended by the NOSB in February 1999. (This same mistake was made in AOS Sec. 8.4.2.2.D).

**AOS Sec. 8.5. Differences between the AOS and NOSB recommended National List.** The AOS states as follows: “Based on comments received and current certification standards, AOS suggests that NOSB revisit the following topics to consider changes to the NOSB recommendations . . .

“8.5.1. Crops:

“8.5.1.1. Potassium chloride: NOSB allowed with restrictions. AOS proposes prohibition.


“8.5.2. Livestock:

“8.5.2.1. Oxytocin: NOSB allowed with restrictions. AOS proposes prohibition.”

We concur with the AOS that the NOSB should revisit these materials.

**CERTIFICATION & ORGANIC PLAN REQUIREMENTS (SEC. 9)**

This section is, in general, more detailed than the NOSB recommendations. Below are some areas of difference:

**AOS Sec. 9.3.4. Organic Livestock Plan.** AOS does not mention the NOSB Recommendation that the Organic Livestock Plan include a description of comprehensive nutrient cycling on the farm or a description of progress towards that goal. The NOSB stated in its 1998 Final Recommendations on Livestock Issue Papers # 1 and # 2 as follows:

“Producers of certified organic livestock shall be required to detail nutrient recycling plans in their overall farm plan. The plan must clearly describe how nutrient cycling is
achieved on the farm. Such plans may encompass cooperation among several organic farms to achieve nutrient cycling within a watershed. It may include nutrient cycling from other certified organic enterprises as long as such nutrients are properly composted and/or meet the other requirements of NOSB recommendations.

“While the NOSB recognizes that comprehensive nutrient cycling may not be practical given today’s structure of agriculture, it is an essential goal of organic agriculture and every producer must demonstrate progress toward that goal in his/her farm plan.”

The AOS requires that the Organic Livestock Plan include a description of manure handling, but not nutrient recycling (AOS Sec. 9.3.4.2.C). The AOS Organic Farm Plan does require a “description of the operation’s fertility program, including nutrient management, crop rotation, conservation, manure/compost management, and use of other soil amendments.” This requirement is not the same as the NOSB recommendation that each livestock producer must demonstrate progress towards comprehensive nutrient cycling.

**AOS Sec. 9.3.5.2.A)**  Product Composition. AOS requires “[f]or non-organic agricultural products, documentation of the applicant’s attempts to source organic ingredients.” NOSB recommends in the Organic Handling Plan (Santa Fe 1994, Sligh p. 59) that, if an organic food contains a non-organic ingredient, a written description be given of “(a) the good faith efforts made to locate or develop a source of the certified organic form of the ingredient and (b) the progress made over the previous years to eliminate non-organic agricultural products as ingredients . . .

Although it is not mentioned in this section, AOS also stated, with regards to products labeled “organic,” that the handler must “document to the certification agent that the non-organic ingredient is commercially unavailable in an organic form and that good faith efforts have been made to obtain the ingredient in organic form” (AOS Sec. 7.3.2.2.).

NOSB recommends as follows: “The handler must make and document a comprehensive effort to obtain organic ingredients. The certifier must verify that the level of effort has been adequate . . In this review the certifier should:

1. verify that the handler has a process for seeking out organic ingredients in the Organic Handling Plan;
2. verify that the handler has made good faith efforts to obtain the organic form of the ingredient following steps outlined in the Plan . . . (Orlando 1995, Sligh p. 75).

It is not clear whether this recommendation refers to products labeled as “made with organic ingredients” as well as those labeled “organic.”

**AOS Sec. 9.3.5.6. Waste Management.** AOS requires that the Organic Handling Plan include “a description of waste management and resource conservation plans or policies.” AOS footnote 2 states: “Note: Handlers are not being asked to submit their resource conservation and waste management plans, but only to ‘describe’ them.”
NOSB states: “While the NOSB recognizes that the OFPA does not establish waste reduction requirements for organic handlers, the Committee has included a waste management section in the “Proposed Regulations.” The Board thinks that organic handlers should establish waste reduction goals for their operations. By including a waste reduction section, the Organic Handling Plan can more thoroughly serve as a vehicle for the development of ecologically sound management practices for the handling operation.” (Sligh p. 58). The NOSB recommends that the following be included in the Organic Handling Plan under Desirable Practices, Waste Management: “(1) a description of the efforts to reduce solid waste, liquid waste, and airborne emissions produced by the handling operation (2) A description of recycling efforts, the use of recycled materials, and efforts to reduce packaging in the handling operation” (Sligh p. 61).

**AOS Sec. 9.3.6. Organic Grower Group Plan.** This is a plan for groups of individual producers who each have not more than $5,000 in gross annual income from total farm sale, who are located in close geographical proximity to each other and who are managed under one central administration. The AOS footnote explains that this “section may encourage certification of smaller growers and provide market access for cooperatives.” The NOSB has not addressed the issue of Grower Groups. We concur with the OTA/AOS and recommend that the NOSB address this issue.

**AOS Sec. 9.9. Additional inspections.** AOS provides that, in addition to the annual on-site inspection, a certification agent may conduct an unannounced inspection on a random or “as needed” basis. NOSB recommends that on “at least an annual basis, certifying agencies or their inspectors must conduct at least one random product commodity tracking that demonstrates the steps of production or manufacturing prior to the shipment of that product from the premises of that farm or manufacturer” (Santa Fe 1994, Sligh p. 13).

**AOS Sec. 9.10.7. Public Access to Information.** AOS provides that “[c]ertification agents shall publish lists of operations certified and decertified, and may post such lists on websites or in other media, provided that equal access and exposure is given to all certified operators.” These lists “shall show the names of all certified primary operators . . . [but] need not show the names of contracted operators who are certified under the certification of a primary operator.” AOS Sec. 9.14. and AOS Sec. 9.15.2 instruct the certification agent to notify the governing officials and other certification agents of a suspension or termination of certification, and also to post notice of such actions on the agent’s website or other media.

In AOS Sec. 10 on Accreditation, 10.2.8.1., the certifier is required to “provide (through publication, electronic media, or other means), updates at regular intervals, and make available on request, the following: . . . 10.2.8.1.G) A directory of certified organic operations and their products.” For clarity, AOS Sec. 9.10.7 could also include the requirement that the certifiers make public the operators’ products (or scope of certification).
Under AOS Sec. 10.3.1.2.B)2), a certification body shall submit to the accreditation body a “description of the procedures to be used for making the following information available to any member of the public upon request:

“10.3.1.2.B)2) a) A list of producers and handlers whose operations it has certified, and the effective dates of the certifications;

“10.3.1.2.B)2) b) The organic agricultural products produced and/or handled by each certified operation;

“10.3.1.2.B)2) c) The results of laboratory analyses for residues of pesticides and other prohibited substances; and

“10.3.1.2.B)2) d) Other non-confidential business information as permitted by the certified operator.”

(It would be useful if all the information regarding public access to information from certifiers were together in one location.)

AOS Sec. 10.3.1.3.A)10) provides that the certification agent will “transfer to the accreditation body and made available to the applicable governing official(s) all records or copies of records concerning the certification activities in the event that the certification agent dissolves.”

With regard to public access to production and handling information, there appear to be two versions of the NOSB recommendation, one in Sligh’s “Green Book” and one on the USDA web site. In both versions, the NOSB stated that “an additional section concerning public access will be developed by the Accreditation Committee for subsequent inclusion into the Final Board Recommendations.” The NOSB has yet to further elaborate additional recommendations on this subject. We urge the NOSB to further elaborate the below (1-4) areas. The Recommendation in Sligh, p. 14 states further as follows: “This [additional] section [on public access] will include, but not be limited to:

“1. Transparency and record keeping;

“2. Availability of producer/handler records;

“3. Availability of certification documents; and

“4. Content of producer’s records of operation that are to be available for public review.” (Santa Fe 1994, Sligh p. 14).
The Recommendation from the USDA website states as follows:

“One basic premise of transparency is that basic information about organic food and how it was produced and processed is available to the public. That is, accountability in terms of records and public scrutiny is implicit in the use of the term “organic.” At the same time, confidential business information of producers and handlers must be protected, while consumer access to information for health related issues must be ensured.

“All purchasing and sales records, relating to ingredients, substances applied, or recipes and other proprietary production information are considered to be confidential business-related information, which must be available to the certifier, but also must be protected from public disclosure under confidentiality provisions of OFPA. [Sec 2116 (g)]

“Any other information contained in records which is not required to be disclosed, including financial and business related information, shall be removed before disclosure. [AOS Sec. 2116 (g)].” (Santa Fe, 1994, USDA/NOP website, “Standards and Procedures Governing the Accreditation of Organic Certification Organizations,” II. B., Transparency, Certifiers Records, B. Public Access to Production and Handling Information, p. 14.)

Records of Certifier available to certificant. The AOS does not appear to include the following NOSB recommendation: “Records required to be routinely available upon request to certificant at reasonable cost for processing of request:

“a. Inspector contract...

“b. Inspection report.

“c. Names and affiliations of all decision makers.

“d. Results of laboratory analyses.” (Santa Fe 1994, Sligh p. 16.)
(Apparently this means records available to the certificant upon request.)

APPENDIX—GUIDELINES FOR ACCREDITATION PROGRAMS (SEC. 10)

AOS Sec. 10.1. General Provisions. The AOS states that certification agents, including those based outside of the US, shall be assessed by “an accreditation body.” The NOSB recommends that the “USDA will administer the accreditation program and make all determinations regarding approval of accreditation applications and/or revocation of a certifying agent’s accreditation status. State and private applicant for accreditation will be evaluated under the same basic accreditation criteria and procedures.” (Santa Fe 1994, Sligh p. 4.) The NOSB passed a resolution supporting accreditation of the International Federation of Organic Agriculture (IFOAM) and supporting cooperation between IFOAM and the USDA. This resolution was revisited by the NOSB in June 1999. [www.ams.usda.gov/nop/nosb699.htm].
With regard to the accreditation of agencies conducting certification services in foreign countries, the NOSB provides in part as follows: “For a product bearing the seal of a U.S.-based certifying agency to be imported into the United States, the agency indicated shall meet the following requirements: a) The agent shall be accredited to certify the production and handling of organic products within the United States. b) The agent shall be able to demonstrate that oversight of the procedures utilized to certify the production and handling of the imported product has been provided by a USDA-recognized governmental or non-governmental authority” (Santa Fe 1994, Sligh pp. 4-5).

*AOS Sec. 10.2. Evaluation Criteria for Accreditation.* A footnote explains that AOS Section 10.2 is based on ISO Guide 65, “General Requirements for Bodies Operating Product Certification Systems,” adapted to the assessment of organic certification agencies.

*AOS Sec. 10.2.1.3. Organic standards.* AOS states that the “criteria against which certification of an operation is evaluated shall be those outlined in the organic standards.” Consistent with AOS Sec. 2.7, this provision could explain that “organic standards” means the AOS and any additional requirements of a certification agency or government.

*AOS Sec. 10.2.5.4.K) Conflicts of interest.* A certifier is required to document the quality system in a quality manual which contains and refers to, among other matters, “maintenance of declarations of interest, updated annually, stating all interests in the organic industry which could be actual or perceived conflicts of interest for all certification agent personnel, including subcontractors, who are involved in the certification system.”

Furthermore, AOS Sec. 10.2.16.3. provides: “Personnel shall not be assigned [to a specific certification] if they have been involved in, employed by, or provided consultation to, the applicant or any related body involved in the applicant’s operation in a manner and within a time period which could conflict with impartiality.” A similar provision regarding persons involved in the certification decision is set out in AOS Sec. 10.2.19.2. Also, a certification agent must require its personnel involved in a certification process to sign a contract or other document by which the personnel “declares any prior and/or present association on their own part, or on the part of their business, with all applicants or operators to the inspection, evaluation, or certification of which they are to be assigned” (AOS Sec. 10.2.11.2.B)2).

With regard to accreditation, under AOS Sec. 10.3.1.2.D)1), a certification agent is to submit to the accreditation body a “description of procedures implemented or intended to be implemented to prevent the occurrence of conflicts of interest.” Furthermore, under AOS Sec. 10.3.3.1.B), “no person participating on a convened peer review panel shall be, or shall have been, associated with the certification agent being reviewed by the panel in a manner that would constitute a known or perceived conflict of interest.”

The NOSB defines conflict of interest as “the use by an individual of his or her position for personal advantage or to the detriment of the integrity of the Organic Program.” It discusses examples of conflicts and recommends that the inspector and members of the decision making body disclose financial interests and affiliations (Santa Fe 1994, Sligh p. 16-17).
AOS Sec. 10.2.8.1. Public access to information about certifiers. “The certification agent shall provide (through publications, electronic media, or other means), update at regular intervals, and make available on request, . . .” certain information about the certification agent, such as the authority under which it operates; a documented statement of its organic certification system, including its rules and procedures for granting and terminating certification; information about the inspection and certification process; a description of the means by which the organization obtains financial support and general information on the fees charged; a description of the rights and duties of applicants; and information about procedures for handling complaints.

These requirements are similar to the information which the NOSB recommended that the USDA make available to the public upon request. This list of information also included organizational structure of the certifier (articles of incorporation, by-laws and organizational chart), organizational affiliations (major funding sources, major shareholders), established standard procedures for document request response (fees for information requested and reasonable turnaround time for “standard” requests for information), and established standard procedures for sampling and laboratory analyses that pertain to certification.

AOS Sec. 10.3.2.1.A) Public comment about certifiers. AOS provides that “[p]rior to conducting a site evaluation, a published announcement shall be made by the accreditation body of the name of the certification agent to be evaluated in order to provide an opportunity for public, including operators certified by the agent and subcontractors, to submit confidential comments and concerns to the accreditation body for consideration.” We support this recommendation and urge the NOSB to include this specific language addition.

AOS Sec. 10.3.3.1.A)1) Peer review panel. NOSB and AOS (and OFPA) provide for a peer review panel to review certification applications. AOS states that the panel shall “[c]onsist of at least five persons selected from an established peer review panel pool, which has the following membership requirements:

“10.3.3.1.A)1)a) Members shall have experience and/or expertise in organic production, handling, marketing, regulation, inspection, certification and/or accreditation;

“10.3.3.1.A)2) Contain one member who shall be personnel of the accreditation body and be responsible for presiding over the convened panel.

“10.3.3.1.A)3) Contain at least four members who are not personnel of the accreditation body.

“10.3.3.1.A)4) Include no less than three members who possess sufficient expertise in the areas of accreditation delineated in the certification agent’s application.”
NOSB recommends that the nine Peer Review Panel members should represent key sectors of the organic community as follows:

1. certified organic farmer - 3
2. certified organic handler/processor - 2 total (1 each)
3. organic certification agents - 2 total (1 each from a state and a private agent)
4. a consumer/public interest group representative - 2
5. USDA representative - 1
6. NOSB representative (ex-officio) - 1.

Each of the four geographical regions (as defined under the USDA Sustainable Agriculture Research and Education program) should have at least two voting members on the Panel.

“Note: In keeping with international guidelines for standard setting organizations, no individual acting as a Peer Evaluator or member of an Accreditation Field Evaluation Team shall also participate on the Review Panel . . . .” (Santa Fe 1994, Sligh p. 26).

AOS Sec. 10.3.9.5.-6. Appeal of Termination of Accreditation. Under the AOS, a certification agent whose accreditation has been terminated must appeal the decision to the accreditation body (AOS Sec. 10.3.9.5.). The accreditation body’s decision on appeal may be further appealed to an administrative law judge pursuant to the APA.

The NOSB has developed far more detailed principles and stresses the importance of independence and objectivity by the reviewing body. The NOSB requires that affected certification agents receive timely notice of their rights to appeal. Furthermore, appeals must be heard, on an expedited basis, by independent hearing officers that are not under the authority or control of AMS. All decisions on appeal must be written and the Secretary has final decisionmaking authority (1994).