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Docket No. AMS-TM-09-0060
Ms. Valerie Frances, Executive Director
Room 4004—So. Ag Stop 0268
1400 Independence Avenue, SW
Washington, DC 20250-0268

Re: Docket No. AMS-TM-09-0060; TM-05-14—National Organic Standards Board, Livestock Committee, Animal Welfare Recommendations

Dear Ms Frances:

The AVMA appreciates the opportunity to comment on Docket No. AMS-TM-09-0060, via which the Livestock Committee indicated its intent to develop more specific standards to improve animal welfare under organic management and to develop organic aquaculture standards for bivalves. Our comments in this response address welfare needs associated with the organic management of terrestrial animals.

General Comment

A review of the proposed welfare recommendations suggests many of these recommendations are designed to address behavioral concerns. The intent of the recommendations is laudable, however, welfare is only assured when both the animals' behavioral and physiologic needs are addressed. Unfortunately, the positive attention paid to some (not all) behavioral needs by the Livestock Committee's proposed standards appears to be significantly offset by the negative physiologic and health outcomes likely to be experienced should such welfare standards actually be implemented. While we understand and appreciate that fostering behavioral opportunities is a primary focus of organic production, we believe organic producers also want to protect the physical health and welfare of the animals under their care.

When looking at how different housing systems protect the welfare of animals it is important to consider all the factors contributing to the animals' welfare, including whether animals are free to move; whether the system allows them to engage in behaviors that are normal for them; whether they are protected from disease, injury, and predators; whether food and water are available in the appropriate amounts and type, and are of high quality; and whether the animals are handled properly.

Maintaining good welfare within housing systems usually involves trade-offs. For example, housing systems that allow animals to perform natural behaviors (e.g., nest building for laying hens) may, in fact, result in more challenges for disease and injury control. Conversely, improving disease and injury control by more intensively confining animals can limit their freedom of movement and ability to engage in normal behaviors.

The chart below, which illustrates the welfare tradeoffs among housing systems for laying hens, is adapted and expanded from a chart included in the final report of the LayWel project (Welfare implications of changes in production systems for laying hens) to address strains and conditions commonly encountered in the United States. Additional information about terms and measurements included in the chart is available as footnotes/citations at the end of this letter. Please be aware there are other indicators of animal welfare that are not included in the chart below; the point of the chart is simply to provide balanced information about some common physiological and behavioral welfare measures and thereby illustrate that when multiple factors are considered (as they must be for comprehensive welfare assurance) there will be advantages and disadvantages to every housing system.

Indicators	Conventional Cage	Furnished Cage			Non-cage (Barn)		Outdoor (Free-range)
		Small	Medium	Large	Single Level	Multiple Levels	
Mortality (%)				§			
Mortality from feather pecking and cannibalism							
Bone strength and fractures	†	*	*	*	‡	‡	‡
Exposure to disease vectors (e.g., wild birds)							
Internal parasites (e.g., coccidia, roundworms)							
External parasites							
Bumblefoot							
Feather loss							
Hen hysteria and piling/smothering							
Risk of predation							
Level of egg production and cleanliness							
Use of nest boxes							
Use of perches							
Foraging behavior							
Dustbathing behavior							
Air quality (e.g., dust, ammonia)							

§ = Recent unpublished data indicate lower mortality may be achievable in large furnished cages
† = Reduced bone strength, fractures when birds are caught
* = bones stronger from perch use but increased incidence of deformation of the keel
‡ = More fractures during lay despite stronger bones
How well welfare measures are met:

Good	Medium	Poor	Insuff Data

Specific Comments on Proposed Standards

§205.238 Livestock health care practice standard.

(a)(1)—Reference to "Valid" veterinary-client-patient-relationship. Current AVMA recommendations are that this simply be referred to as a "veterinary-client-patient relationship"; a relationship either exists or it does not, "valid" adds no discrete value to the descriptor.

(a)(3)—"…appropriate housing, pasture conditions, and sanitation practices to minimize crowding and the occurrence and spread of diseases and parasites." Please see related comments regarding recommendations provided in §205.239.

(a)(5)—"…with consideration to the use of anesthetics and sedatives." We suggest that "analgesics" also be mentioned.

(a)(6)—Acknowledgment of the acceptability of "Performance of physical alterations as needed to promote the animal's welfare…" appears contrary to prohibitions in (a)(6)(i) and (a)(6)(ii) on beak trimming, toe trimming, and tail docking of swine.

By way of general comment, the current phrasing limiting treatment to the injured animal is too restrictive. Treatment via amputation may sometimes need to be applied to a group, rather than just injured animals, once an outbreak of behavior (e.g., cannibalism in hens and tail biting in piglets) places all animals in a group in harm's way such that they are likely to be seriously injured if there is no intervention—especially as group housing is mandated by the standards. Piglet teeth trimming, for example, may be required not due to damage to the piglet itself, but the damage it is doing to the sow and littermates.

Currently, there seems to be no systematic approach in the regulations to requiring, permitting or banning practices based on the welfare of the animals concerned. The current recommendation seems to identify short-length tail docking of lambs, tail docking of cattle, beak trimming of birds, and toe trimming of birds as being "cosmetic" and harmful to the animal, while tail docking of pigs is considered part of a treatment approach to a variable probability threat that should be performed when necessary, and medium or long-length tail docking, piglet teeth trimming, ear tagging, and dehorning as preventive of high-probability threats to animal welfare that should be performed preventively unless the associated risks can be shown to be effectively mitigated in some other way. The recommendations frequently mention the need to base guidelines on current science, yet the divisions embraced by the recommendations seem out of step with the available scientific literature on these topics. For example, the recommendations in the document appear to understate the necessity for beak trimming, while overstating the need for piglet teeth trimming, which a fair number of commercial facilities no longer practice preventively. Branding is addressed in total, rather than recognizing some welfare differences associated with hot-iron and freeze branding.

With respect to beak trimming, while we are well aware that acute and chronic pain are associated with this procedure, it is generally performed as part of an overall strategy to reduce peck injuries[6] and death[7] when raising groups of poultry. The UK Farm Animal Welfare Council (FAWC) acknowledged this in their November 2007 *Opinion on Beak Trimming of Laying Hens*.[8] "In laying hens with intact, untrimmed beaks, the onset of injurious pecking is unpredictable and sudden, causing significant pain, distress, suffering and death to a substantial proportion of birds in flocks kept in all systems of husbandry, including hens kept on free range where the use of controlled lighting is not possible." We agree that adjustments to how birds are selected and managed can reduce severe pecking, including genetic selection that targets both direct (the individual on its own survival) and associative (the social effect of the individual on the survival of its group members) traits and provision of appropriate environments; however, while these approaches show promise, none has been uniformly or consistently successful. In fact, because of concerns about the ability to consistently mitigate injurious feather pecking and cannibalism, the FAWC recommended that, until reliable alternative means of controlling injurious pecking in laying hens can be developed, the proposed ban (SI 1646) on beak trimming of laying hens by December 31, 2010 should not be introduced in Great Britain.[8] Welfare concerns associated with acute and chronic pain in the trimmed beak and the loss of part of a sensory organ can be minimized by performing the procedure when chicks are young (fewer than 10 days old and preferably at 1 day of age) by trained,

experienced personnel. This strategy applies to both beak trimming by hot blade and infrared treatments. Gentle et al,[9] concluded the adverse effects of beak trimming chicks at one to 10 days of age were minor and were outweighed by reductions in cannibalism. It has also been shown that beak trimming younger hens appears to avoid the long-term chronic pain that can occur in the stump of the beak when older birds are trimmed.[9-12] Less work has been done using turkeys as subjects, however, studies looking at the use of three common beak-trimming methods (e.g., Biobeaker, hot-cut, cold-cut) at one, six, and 21 days of age suggests that beak-trimming influenced behavior to a limited extent, but had beneficial effects in reducing feather damage and mortality.[13] Subjecting birds to the additional stress and mortality that can occur in non-beak-trimmed flocks appears to be contrary to efforts to promote good animal welfare. It is our recommendation that, instead of prohibiting beak trimming, organic producers be encouraged to institute the procedure only when necessary. Furthermore, the draft recommendations inappropriately consolidate all avian species into one category. In that regard, consideration might be given to discouraging beak trimming in birds intended for short-term production of meat (e.g., broilers, turkeys), while allowing it to be performed for animals intended for longer-term production (e.g., breeding purposes and egg production).

Toe trimming is similarly performed in turkeys to prevent injury to females during breeding.

A more appropriate descriptor than "less than 3 inches" for tail docking of sheep might be "at the level of the distal end of the caudal tail fold."

(b)(1) and (c)(7)—Use of phytotherapeutic and homeopathic products—A scientifically based document should recognize that therapeutics vary in both source and effectiveness. The primary basis for choosing a therapeutic, in terms of the animal's welfare, should be its ability to alleviate the suffering of the animal in a more rapid and complete way (not just to "work" on some level). Trade-offs between efficacy and chemical composition should be made explicitly and cautiously as they may run counter to good animal welfare. The recommendations appear to require that phytotherapeutics be tried and observed to "fail" prior to using allopathic approaches. The resulting delay may place animals at risk of greater suffering, especially in cases where phytotherapeutics that provide benefit for the application are not available.

If these recommendations are to be scientifically driven, the specific subcategory of homeopathic products may be considered to be beneficial to herd health overall by some organic producers, but they are not currently recognized for therapeutic use—in fact, vendors of homeopathic products are legally prevented (FDA) from making therapeutic claims due to lack of scientific support.

Furthermore, "veterinary drugs" should not be used as a synonym for allopathic, as a fair number of drugs provided by veterinarians or for veterinary purposes are phytotherapeutic.

(c)(4) and (c)(5)—Use of synthetic parasiticides. Once a pasture or other environment is contaminated with parasites, it can be quite difficult to eliminate that contamination. Therefore, restricting the use of synthetic parasiticides on a routine basis can be detrimental to the welfare of animals. For example, in the cattle feeding industry, veterinarians who work with bovids tell us that it is not unusual to see "natural" cattle brought into feedyards that are heavily parasitized and debilitated due to lack of treatment. Identifying "natural" parasiticides allowed in organic production that are also efficacious is difficult. We recognize there is an exemption provided in (c)(7) that indicates that an organic producer must not withhold medical treatment from sick animals in an

effort to preserve their organic status. We wonder, however, what the dividing line might be between animals that are "ill" and those that are "debilitated"?

(c)(10)—Forced molting. A definition is required to clarify what is considered to be "forced molting." Induced molting extends the productive life of commercial flocks and results in substantial reduction in the number of chickens needed to produce the nation's egg supply—a clear welfare benefit in terms of responsible animal use. Perhaps the intended restriction refers to approaches that may or may not be used to induce a molt? In that regard, neither water nor food should be withdrawn. Acceptable practices include reduction of photoperiod and specific nutrient restrictions that result in cessation of egg production.

§205.239
(a)(2)(i)—Keeping of poultry in cages and on wire flooring. Alternative housing for organic production includes aviary systems with wire flooring and perches above manure belts. These hens have access to the floor of the building and can scratch in the litter. Perches and wire flooring above the manure belts allow daily removal of manure resulting in a clean environment and fresh air with minimal ammonia present even in the dead of winter. These new aviary designs are a significant improvement in non-cage housing allowing hens to not only scratch, but use vertical space in the building. It seems counter-productive to hen welfare to prohibit the use of such systems, and we do not support this recommendation. Furthermore, raising poultry on wire floors or in cages is conducive to parasite control and fosters the maintenance of health without the use of synthetic drugs. This approach is consistent with organic production and it seems counterintuitive that it should be prohibited.

(a)(3)(ii)—Permit poultry to scratch soil, search for insects, and exhibit other natural behavior. Scratching in soil or searching for insects is a requirement for poultry to be able to exercise normal behaviors. Scratching behaviors can be accommodated via provision of litter on concrete floors. This recommendation appears to be contrary to the National Organic Program's requirement to "follow practices that minimize the occurrence and spread of diseases and parasites." Consumption and increased exposure to insects can facilitate the transfer of internal and external parasites (e.g., roundworms, northern fowl mites), as well as bacterial infections, neither of which are conducive to good animal welfare. Such access may result in necessary medication of many flocks for histomoniasis (blackhead). The only FDA-approved medication that we are aware of for this condition is Histostat, which is an organic arsenical. It is unlikely that organic arsenicals will be approved medications for organic flocks.

(a)(4)—Access to pasture for ruminants. A veterinarian who regularly works with bovids has expressed concern to us that the recommended 0.5 acre/1000-lb animal unit may be too low? Even with good management and a stocking rate of 0.5 acre/1000-lb animal unit this veterinarian has suggested that it is possible to have overgrazing and degradation of the land and increased health issues in many animals (e.g., parasitism and nutritional problems).

(a)(5) and (a)(6)—Animals must be kept clean. This provision, although desirable from our perspective, ironically seems to conflict with requirements for provision of outdoor access, particularly rooting areas. If outdoor access is to be provided, some degree of soiling is to be expected, depending on the substrate, species and environmental conditions (e.g., wallowing pigs on a hot day, "dusty" hens). Furthermore, some additional definition of "rooting" is required—it is not

clear if the standards require access to dirt, or whether straw bedding on concrete will meet this criterion.

(b)(5)—Mandatory group housing for swine. We recommend considering an allowance for individualized feeding stalls so that action can be taken, as necessary, to minimize sows' aggression toward each other in group housing. We assume that mandatory group housing for swine does not apply to animals under quarantine, recovering from injury (e.g., prolapse) and for other reasons that benefit the overall short-term welfare of individual animals.

(c)(5)—Table of space allowances. What is the scientific basis behind the establishment of these standards (i.e., no references are provided other than to indicate concurrence with the Canadian standard)? Consideration should be given to comparing these recommendations with standards set by the American Humane Association and Humane Farm Animal Care. In setting space requirements, it is important to take into account differences in animal type, breed, size and other housing and environmental effects and doing so requires more flexibility than suggested by the allowances provided.

(c)(5)(ii)(A)—Confinement of animals in cages is not permitted. We fundamentally disagree with the portrayal of confinement in a cage as being solely contrary to good animal welfare (reference our comparison chart for laying hens provided earlier in this document). Having said this, we seek clarification as to the definition of "cage." For example, does the action of some organic producers to pen their animals at night with the intent of helping to control predation of birds violate this criterion?

Minority Opinion Recommendations for §205.238
We have substantial concerns about some of the commentary included in this section. For example, concluding that the health and well being of animals on organic operations exceeds that on conventional farms, when all measures of animal welfare are considered and appropriately applied, is not correct. Similar inappropriate wording appears on page 2 of the document (i.e., "This underscores our point that it was widely understood at the time that organic livestock production would eventually include standards requiring superior welfare for animals"). The reference to "requiring superior welfare" is more appropriately described as "providing increased attention to behavioral needs." As illustrated earlier in our comments, it is not at all clear that such an emphasis contributes to better animal welfare overall, particularly when that emphasis has potential negative impacts on physical well being. With respect to the Minority Opinion, additionally, it is not correct to assume that "The healthiest humans are those who visit a doctor the least often…" In fact, lack of preventive physician (and veterinary) care is a significant contributing factor to morbidity and mortality.

We have the following specific comment on the Minority Opinion Recommendations:

(c)(11)—Must not milk dairy animals more than twice in a 24-hour period. We seek clarification as to the science on which this recommendation is based? How many milkings are appropriate for a given cow is a judgment call and regulatory criteria should be sufficiently flexible that needed variations that are in the interest of animal welfare can be accommodated.

The objective of the AVMA is to advance the science and art of veterinary medicine, and the Association has a long-term concern for, and commitment to, the welfare and humane treatment of animals. The AVMA represents more than 78,000 veterinarians and is the recognized voice for the profession in presenting its views to government, academia, agriculture, animal owners, the media, and other concerned members of the public. We appreciate the opportunity to offer comments.

Sincerely,

Gail C Golab

Gail C. Golab, PhD, DVM, MACVSc (Animal Welfare)
Director, Animal Welfare Division

Feather pecking[1] = Feather pecking is an abnormal behavior in which birds damage other birds' feathers; most often it results from an inadequacy in the birds' environment. Feather pecking can include simply chewing on feathers or actually plucking them out. There are many contributors to feather pecking, including genetics, poor diet, infectious or parasitic diseases, and stress. Birds with damaged feathers have poor thermoregulation and greater energy demands than unaffected birds. If feather pecking is severe, bleeding may occur, which attracts even more pecking from other birds (cannibalistic behavior). Beak trimming is a common way to deal with excessive feather picking. Feather pecking and feather loss are greatly influenced by strain of bird, beak trimming, and epigenetic factors.

Cannibalism[2] = The act of consuming tissues of other members of the same species, whether living or dead and at any stage of the life cycle; this is an abnormal behavior in laying hens. In laying hens, cannibalism may be directed toward different tissues, ranging from feathers to eggs, but the problem of most concern is pecking and tearing of the skin and underlying tissues and organs. If excessive, such behavior can cause hens to be severely injured or die. Cannibalism is greatly influenced by strain of bird, beak trimming, and epigenetic factors.

Bumblefoot[3] = An inflammation and/or infection of the skin and connective tissues of the foot. The "bumbles" are really abscesses caused by the bacteria *Staphylococcus aureus*. Bumblefoot has been shown to be correlated to the use of wet or non-optimally designed perches or flooring.

Hen hysteria[4] = A behavioral state characterized by extensive use of defense mechanisms and by a variety of clinical signs associated with high levels of fear, anxiety, restlessness, and general irritability.

Foraging = The act of looking or searching for food. Foraging behaviors are affected by the availability and type of food, as well as the availability and type of other substrates (e.g., litter, shavings).

Dustbathing[5] = Involves tossing and rubbing dust between the feathers to maintain feather and skin condition.

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AWC/GCG