National Organic Standards Board (NOSB)
Livestock Committee
Invitation for Public Comment on Aquaculture Standards
September 8, 2006

The Livestock Committee of the NOSB is working to take the Aquaculture Working Group (http://www.ams.usda.gov/nop/TaskForces/AATFInterimFinalReport.pdf) Interim Final Report submitted to the NOSB in April 2006 and make recommendations regarding aquaculture standards for the National Organic Program. The Livestock Committee invites further public comment on the issues/questions listed below. The Livestock Committee continues to process, debate and study the issues related to the recommendations made by the Aquaculture Working Group. The questions below should not in any way be construed as the sum total of the Livestock Committee's views regarding the Aquaculture Working Group Interim Final Report. Rather, they represent some of the difficult questions that have arisen at this point in time during the review process.

Species or Production Method Specific Standards

The Livestock Committee believes that one standard for all aquaculture species and production methods (e.g., ponds, cages / net pens, raceways, recirculating systems) is appropriate for an organic regulation except when absolutely necessary due to a unique aspect of the specie or production system. Nevertheless, the major differences between the production systems used to produce the diversity of aquaculture products have caused some to ask whether species or production method specific sections may be necessary.

The Livestock Committee invites input relative to identification of and justification for the production systems or categories of species that should be considered separately.

Further, the committee invites input on the identification of the specific sections of the Aquaculture Working Group Interim Final Report that may require species or production method specific standards.

Impact on the Environment

A fundamental principle of organic agriculture as described in the NOSB Board Policy Manual (http://www.ams.usda.gov/nosb/BoardPolicyManual/BoardPolicyManual8-23-05.pdf) – (See Principles of Organic 1.1 on page 25), is that the soil and environment should be maintained or improved by organic practices. It is assumed that organic aquaculture must be held to this same standard; however, terrestrial ecosystems are fundamentally different from aquatic ecosystems.

The Livestock Committee invites input from the organic community, consumers, aquaculture professionals, environmentalists and other interested parties as to how organic aquaculture will meet the requirement of maintaining or improving the environment, including the use of integrated net pen systems as proposed in the Aquaculture Working Group Interim Final Report.

Differences between Organic and Conventional Aquaculture Standards

Consumers of organic products expect that organic agriculture practices and resulting products differ significantly from conventional methods and products.

Comments from organic consumers and other stakeholders on their expectations and explanations of the differences between organic aquaculture and conventional aquaculture methods and products are invited.

Use of Fish Meal and Fish Oil

One difficult issue discussed by the Aquaculture Working Group and Livestock Committee is how fish meal and fish oil, which are currently required in the diets of many farmed fish (such as salmon), can be provided in a way consistent with organic principles and regulations. The Livestock Committee has proposed that fish meal and fish oil from sustainable capture fisheries be allowed in the diets of fish (maximum of 12% fish oil and 12% fish meal) during the production cycle. This allowance would be effective for a period of seven years from the time the aquaculture standards are published. The Livestock Committee intends for this seven year period to be nonrenewable, meaning that organic aquaculture practitioners must develop alternative protein and energy sources or organic sources of fish meal and oil to provide a satisfactory diet for fish which currently require nutrients from fish meal and fish oil. The Livestock Committee and Aquaculture Working Group have had considerable discussion regarding the possibility that certain aquaculture species may no longer qualify as organic if acceptable alternatives, or organic sources of fish meal and oil, are not developed within the seven year time frame. The Livestock Committee invites comment on the following questions.

Will the organic consumer find the temporary 12% fish oil and fish meal allowances acceptable and what will consumer reaction be if (in a worst case scenario) certain aquaculture products no longer qualify as organic after the seven year fish oil and fish meal allowance period expires?

Will it be possible for other feed ingredients or organic sources of fish oil and fish meal to be developed within this time frame to replace fish oil and fish meal from sustainable capture fisheries?

Sources of Fish Meal and Fish Oil

Any fish meal and fish oil used in feeds for organic fish should be sourced in a verifiable manner consistent with principles of organic production. One possibility is to require that meal and oil <u>not</u> be sourced from fisheries that domestic or foreign fisheries management agencies consider to be overfished, undergoing overfishing, or similar classifications. Such fisheries do not meet the standard fisheries management objective of maintaining fish stocks at or above the level that

would support the “maximum sustainable yield” on a continuing basis. The Aquaculture Working Group and Livestock Committee are also considering options for requiring fisheries used to supply fish meal and oil to be independently verified as sustainable.

The Livestock Committee invites suggestions for appropriate criteria for sources of fish meal and fish oil and methods to verify that sources meet such criteria.

Slaughter By-products in Aquaculture Feed

Inclusion of organic slaughter by-products from mammals and poultry would aid considerably in the formulation of diets containing little or no fish meal. Slaughter by-products provide essential amino acids for naturally carnivorous or omnivorous finfish and crustacea (such as salmonids, marine finfish species, and shrimp) that may otherwise be unavailable from organic feed ingredients. Use of organic slaughter by-products would also encourage waste reduction and nutrient recycling, thus supporting an important organic principle. Moreover, the Aquaculture Working Group concluded that there is no compelling scientific rationale to prohibit organic slaughter by-products in feeds for organic aquatic animals. The transmission of prion diseases from by-products of warm blooded, terrestrial animals to cold-blooded aquatic animals is scientifically unfounded.

On the other hand, many consumers prefer that terrestrial animal by-products not be used in animal production and refuse to purchase such products. Some grocery brands and retailers prohibit their use. The existing livestock regulation prohibits the feeding of poultry and mammalian slaughter by-products to poultry and mammals. In addition, some people eat finfish and crustaceans but not terrestrial animals. These organic consumers might find unacceptable organic fish products fed terrestrial slaughter by-products.

Should by-products from processing of terrestrial organic livestock, now prohibited in feeds for organic terrestrial mammals and poultry, be allowed as ingredients in organic aquaculture feeds?

Livestock Members: Mike Lacy (Chair), Hue Karreman (Vice-Chair) Rigo Delgado, Kevin Engelbert, Dan Giacomini, Jennifer Hall, Jeff Moyer, and Nancy Ostiguy; Aquaculture Associate Members: Andrea Caroe, Bea James, and Joe Smillie

Moved: Lacy Seconded: Karreman Yes: 8 No: 0 Absent: 0 Abstain: 0