

### **205.250 Aquaculture general.**

(2) discharge wording should allow for application to fallow plots, not to exceed a certain NPK level. As written, it must be applied to targeted plants. Also, vascular plants using these nutrients from an organic aquaculture facility may be certified if in compliance with other regs....Does that mean nutrient rich fish effluent must be composted?

(3) How is welfare defined? Is this measureable. To minimize contamination of aquaculture products from environmental sources, recycle systems in completely controlled environments should be encouraged.

(4) The wording about recycling or biologically processing a significant portion of the metabolic products, may be better determined by allowing for a certain % of recycling. For instance a recirculating system uses less than 10% make up water per day, retaining most of the water and nutrients for reuse. (I like the inclusion of aquaponics as a recommendation)

(7) Does handled in accordance with organic handling requirements also include the processing of raw by-products into usable by-products such as meal, oil, silage, etc?

### **205.251 Origin of aquaculture animals**

(a) I can accept the no later than the 2<sup>nd</sup> day after the beginning of exogenous feeding, but the 5% of total market weight allowance should not be allowed. Coming from a Tilapia arena, I can produce a 500g fish from a hatched egg in 8 months. Depending on densities, I can produce a 25g fingerling (5% market weight) in about 3 months. This rule allows for non-organic management for 3 months and organic management for the final 5 months. I think the entire lifecycle should be under organic management for the final product to receive USDA organic certification. This 5% rule may be more appropriate to larger fish species with longer grow-out periods. I would still prefer to see the 5% of market weight allowance thrown out.

(b) this section should also address transport of fish from an organic production system to market. If the fish are live hauled, the hauler must conform to organic rules and transporting chemicals (ie, salt to remove stress) must be in compliance with organic standards (only organic sources of these chemicals). (I see this is somewhat addressed in 205.259)

(f) Culture of monosex stocks selected by visual or manual means is allowed. This rule should also address what is being done with the 50% discarded fish. A visual or manual selection of monosex fish will lead to disposal of undesired gender population. An organic producer should have a disposal plan for these undesired offspring. Anything from donating as fish bait, or perhaps incorporation into compost production. These discards should be treated humanly.

(h) rule (f) above allows for the culture of offspring created by crossing sex-reversed broodstock. Does this rule exclude me from keeping the sex-reversed broodstock on farm. Perhaps a genetically modified animal definition in Terms Defined.

Additional points:

(j) on-farm broodstock management is encouraged

### **205.252 Aquaculture feed.**

#### **Option a:**

(a) minimum nutrient requirement as described where?

(b) do natural foods meet the minimum nutrient requirement always? May contradict (a)

(c) seems redundant if (d) is followed

(e-g) I would not allow the use of wild fish or seafood in the production of organic aquaculture or livestock feed. Wild stocks have access to any environment they choose. Some are harvested from sustainably managed areas, but this does not ensure quality. Any open environment is susceptible to pollution. This rule may allow the introduction of contaminated fish to produce organic feeds.

(h) this is more appropriate, although I do not see a need to exclude the production of fish meal/oil from a similar genus as the one being fed. In nature, fish often consume other fish from their own genus. What is the rationale here? Surely not a mad-fish scare!

(k) I think with more research we can develop 100% plant based diets. I would prefer to see guidelines set that restrict the use of fish meal/oils. This may exclude many species from organic certification potential, but it would ensure a safer product for the consumer.

(l) are these organic sources of pigments allowed in organic crop production? These sources must be listed as allowed. If pigments added to feeds are not necessary, they should not be allowed.

(m) Composted manure application can benefit production systems other than ponds, for instance large tank based Greenwater systems. I would not include "for ponds only"

#### **Option B: Preferred!**

Addressed well in the explanations.

Considering the tradeoffs involved, I prefer to not allow the use of by-products of mammalian and poultry slaughter. Most importantly, as mentioned, many consumers

who are attracted to organic fish do not eat any other forms of meat. This would not be allowable to this group of consumers.

#### 205.253 Aquaculture health care

(a) (5) maybe density guidelines for producers (or limits), species specific

(7) no synthetic treatments allowed. Ensure best husbandry management to avoid application of vaccines, etc... So few vaccines are approved for conventional fish culture, that I would disallow any use for organic fish production.

(b) no synthetic medications should be allowed. If necessary, the crop should only be sold as a conventional produced product.

(6) I think this covers (b) above

#### 205.254 Aquaculture living conditions.

(a) wording may include ...by monitoring and maintaining water qualities AND monitoring organism health.

(2) perhaps density recommendations or limits, species specific (see a-5 above)

#### 205.255 Aquaculture facilities.

(j) I would add facility malfunction before facility damage.

(k) open water net-pens does not ensure freedom from unavoidable residual environmental contamination. Open water sites are not considered "controlled" environments and are susceptible to environmental contamination. Only controlled environmental systems should be allowed.

(l) I would prefer to see a 3 yr conversion period.