

**ORAL COMMENTS – Webinar/Teleconference November 3, 2016**  
**National Organic Standards Board**

**Board members present** (note that the chair stated not all NOSB members, because of conflicts, would be present for the entire meeting):

Carmela Beck

Ashley Swaffar

Emily Oakley

Tracy Favre

Harriet Behar

Dan Seitz

Jean Richardson

Harold Austin

Tom Chapman

Scott Rice

Lisa de Lima

Zea Sonnabend

Francis Thicke (presumably joined later)

Jesse Buie or A-dae Romero-Briones may not have been on the call. In addition, despite of the announcement that the NOSB Board members may have left due to scheduling conflicts, it was not announced when Board members left the call. It is uncertain who heard what, when, making webinar commentary an uncertain type of public input.

Jenny Tucker, Paul Lewis, and other staff were also on the call. The NOP Staff Director, Miles McEvoy, was apparently not in attendance.

*\*It should be noted that numerous industry professionals, veterinarians, academics and others were allowed to represent themselves as “private citizens” and were not required to identify their clients or employers.*

*\*\*Commenters were skipped, usually because of technical difficulties combined with time constraints, and were not given an opportunity to present later in the lineup (as in the past).*

*\*\*\*Each commenter was allotted 3 minutes of speaking time. Some commenters were cut off more abruptly than others.*

| <b>NAME</b>       | <b>AFFILIATION</b>  | <b>SUBCOMMITTEE /TOPIC</b>       | <b>NOTES</b>  |
|-------------------|---|----------------------------------|---|
| Marie Burcham     | The Cornucopia Institute  | General                          | The PDS should give a better explanation of any changes it makes to the PPM to assist stakeholders and NOSB members in appraising the proposed changes. The NOSB should focus on de-incentivizing the conversion of native lands to organic production.   |
| Steve Etko        | National Organic Coalition  | General                          | Policy Director – recently enacted GMO labeling law. Could conflict with USDA organic regulations.<br>NOC disappointed that there was no work plan regarding conversion of native ecosystems.<br>Research topics: organic no till should be expanded to include carbon restoration techniques.<br>Support proposed livestock research, especially synthetic amino acid issues.  |
| Jessica Shade     | The Organic Center (nonprofit affiliate of the Organic Trade Association) | General Comment/Other; Policy    | Dir. Of Science Programs for The Organic Center.<br>Happy about research priorities: alternatives to antibiotics to fire blight.<br>Other research they are involved in:<br>Organic solutions to avoid citrus issues.<br>They have cover-crop based production systems to enhance disease, weed and nutrient management (particularly in organic rice).<br>Alternatives to organic celery powder.<br>Would like to see more research into manure safety on the research schedule. |
| Tom Valdez        | Citizen – with Cornucopia Institute                                       | Handling (HS)                    | Disallow use of carrageenan in organic foods.<br>Has had negative reactions to eating carrageenan. Brian fog and headaches disappeared when he stopped consuming carrageenan.   |
| Doreen Regan      | Citizen – with Cornucopia Institute                                       | Handling (HS)                    | Skipped   |
| Jeremy Domby      | Citizen – with Cornucopia Institute                                       | Handling (HS)                    | Disallow use of carrageenan in organic foods.<br>His experience started 25 years ago with GI and IBS symptoms, headaches and brain fog.<br>How many are misdiagnosed or not diagnosed as having a carrageenan sensitivity?<br>We need to get this additive out of organic foods.<br>Harmful to human health.  |
| Andrea Bacle      | Citizen – with Cornucopia Institute                                       | Handling (HS)                    | Skipped   |
| Jennifer Lonergan | The Humane Society of the United States                                   | Livestock (LS), broiler genetics | Regulatory specialist with HSUS.<br>The changes being proposed for animal welfare are commendable.  |

|                    |  |   |   |
|--------------------|--|---|---|
|                    |  |   | <p>Another animal welfare concern that should get attention: genetics of broiler chickens.</p> <p>Welfare of broiler chickens that grow at a rate 300% faster than they used to grow. This has serious consequences to: gait abnormality (to cripple them), metabolic disorders.</p> <p>The genetics of the birds limits the welfare status any farmer can obtain. Require the use of more robust broiler chicken strains.</p>  |
| Katherine DiMatteo | Wolf, DiMatteo (consulting firm)           | Handling (HS), bioponics  | <p>Bio-ponics: don't combine hydro, aquaponics and areo-ponics under this umbrella. Consider them separately.</p> <p>Organic seed: yes, strengthen standards. Improvement; check that search for organic seed was done earlier enough, check 5 suppliers, etc.</p> <p>Excluded methods terminology: they support the work here. Proceed with caution. Should convene an expert group to help.</p> <p>In general: limit the work on the NOSB plate so that things can get done. Limiting the list is not automatically a goal – don't limit the "toolbox" unnecessarily.</p> |
| Brian Lehmann      | Commenting as individual citizen           | Materials (MS), new gene editing tech                             | <p>Excluded methods: 3<sup>rd</sup> discussion document notes problems with newer gene editing techniques. GMO labeling law seems to require that USDA has to look at these methods, including the newer technologies.</p> <p>We should be able to rely on the USDA to check that these new technologies can't be used.</p>   |
| Dennis Seisun      | Consultant for company regarding additives | Handling (HS), carrageenan  | <p><u>Consultant for company in carrageenan (HydroColloid)</u>. Not a scientist – reviews markets for texturizing elements like carrageenan. Other gov't agencies, even internationally, haven't moved to disallow it, which indicates to him it is probably safe.</p> <p>This market guarantees the employment of seaweed farmers in impoverished conditions.</p> <p>HydroColloid.com</p>  |
| Barbara Shpizner   |  | Handling (HS)   | Skipped   |
| Kurt Wagaman       | Superior Fresh LLC                         | CACS; Crops (CS); General Comment/Other; Policy Development (PDS) | <p>Business development manager.</p> <p>Aquaponics support – states it will provide fish and fresh food. Soil is complex, but their system invites bacteria to thrive. Feel they are demonstrating a true organic system.</p> <p>Producing all inputs on-site.</p>  |

|                   |   |   |  |
|-------------------|---|---|--|
| Barry Flam        | The Cornucopia Institute – Board member | Biodiversity and conservation, CACS               | Get rid of the incentive to convert high-value lands to organic production. The value of biodiversity is recognized in the organic rule in several places. 2012 guidance document spoke to this, but no specific recommendations were made. High conservation value lands are being destroyed for certification.   |
| Rocco DiModugno   | Lamberti USA                            | Crops (CS), relisting request                     | In charge of R&D of Lamberti. Supported the relisting of several materials for use in crops.   |
| Yonathan Tilahun  |   | Policy Development                                | Skipped  |
| Helga Tan Fellows | Citizen                                 |   | Skipped  |
| Preston Brawn     |   | Handling (HS), carrageenan                        | Formulator for organic personal care products. Continued availability of carrageenan – in personal care industry it is necessary. How the product looks and feels is very important to consumers. Carrageenan is used as stabilization, tactile and suspension properties make it an essential ingredient. This natural gum is superior to all the others.   |
| Tsungbow Gou      | Citizen                                 |   | Skipped  |
| Jim Chmura        | ABC/Harvest Hill                        | Handling (HS)                                     | Food scientist. Product developer in beverage products. Carrageenan essential for ready-to-drink for low acid drinks. Not a lot of other options available. Carrageenan both thickens and smooths out. Functional at very low levels of use. Other gums have problems. Carrageenan is from a more natural source (seaweed). Supports re-listing.   |
| Michael McFadden  | Farm Forward (general counsel)          | Livestock (LS), animal welfare & poultry genetics | General counsel. Animal advocacy organization. Health and welfare of negative welfare impacts regarding poultry bred for fast growth. This is very harmful for the animals and causes many health problems. Unless the NOP adopts growth rate requirements, consumers will have no idea if they have chosen a healthier slower-growing bird. GAP has established growth requirements and other companies are jumping on board with this issue. Organic Livestock and Poultry Practice standards. |
| Nur Ahyani        | WWF-Indonesia                           | Handling (HS), carrageenan                        | Carrageenan farming in Indonesia is extremely important.   |
| Kevin Lawrence    | CEO of Bionutrition Research Group      | Handling (HS), carrageenan                        | Essentiality of carrageenan in certain types of products. For several of their products they have tried many other products for the required mouth-feel, but carrageenan's properties cannot be reproduced. There is no alternative and he says it is essential.<br>Questions from Harold and Tom Board members:   |

|                |   |   |   |
|----------------|---|---|---|
|                |   |   | <p>Criteria of essentiality: is carrageenan listed on ingredients label on their product?<br/> Answer: yes.<br/> Tom’s question: product they are talking about here is NOT certified organic, but they are working toward that.</p>  |
| Josh Payne     | State poultry specialist of Oklahoma  | Livestock policy  | <p>Issue of manure: bedding mix is known to harbor pathogens. Acidifying amendments are added to litter to neutralize ammonia and control pathogens. Litter amendments, including sodium bisulfate.<br/> Food borne illness often associated with poultry because they have dangerous pathogens.<br/> On farm pathogen reduction – salmonella for example. Use of antibiotics in poultry is shifting away, this will create new changes. Specifically litter amendments should be used to control pathogens.</p>  |
| Jaydee Hanson  | Center for Food Safety, Senior Policy Analyst                                 | Materials (MS) – GMO terms and excluded methodology                               | <p>Support GMO principles issues put forward. Recommend adoption of all 3 sections by the NOSB.<br/> Important to spell out definition of “traditional breeding”.<br/> Re: excluded methods. Support the terminology report. There are other things that should be included as excluded methods.<br/> Animal embryo transfer could be permitted – it needs to be explored more.</p>   |
| David McCoy    | Food Science Matters / Citizen  | Handling (HS) - carrageenan   | <p>Food science, working in dairy industry. Carrageenan determined as safe. Additives are not interchangeable.</p>  |
| Tim Mann       | Friendly Aquaponics, Inc.   | CACS; Crops (CS)  | Skipped   |
| Peter Ciriello | Owner of proposed hydroponic leafy, partner in Clearwater Organic Farms in NY | CACS  | <p>Business of growing leafy veggies in hydroponic environment. Products grown in controlled environment; don’t use pesticides and use certified fertilizers. Do not use non-organic substances.<br/> Question from Tracy regarding biological activity: Ensures biological activity in the containers – does not sanitize the water, just monitors that.</p>   |
| Martin Murphy  | Citizen   | CACS; Crops (CS); General Comment/Other; Materials (MS); Policy Development (PDS) | Skipped   |
| Fred Hoerr     | Board-certified poultry veterinarian  | Livestock (LS), poultry litter amendments   | <p>With specialties in poultry medicine and pathology.<br/> Speaks in support for Sodium bisulfates use in organic farming. EPA approved poultry litter amendment to decrease ammonia and infectious disease. Not a treatment for poultry, it is just a mitigation to prevent infections within the flock.<br/> Question: what about the other litter amendments in the list? He didn’t know.<br/> Ashley question: why was there no public comment from broiler companies on these amendments/ the veterinarians are working with these companies?</p> |

|                   |  |   |  |
|-------------------|--|---|--|
|                   |  |   | Anything else that could be used to reduce clostridium in the environment? That's the one he knows of; and it's in popular use.  |
| Jeannine Delwiche | FMC Corporation, on behalf of a citizen expert                       | Handling (HS), carrageenan                | Sensory science.<br>Carrageenan imparts unique properties to food formulations. Eliminates separation, which may make consumers think food is spoiled. Very important for people on restricted diet.   |
| Steve Hearn       | Independent Organic Inspector; animal welfare auditor                | Livestock (LS), poultry litter amendments | Sodium bisulfate – support allowance of this use in organic livestock production. There is a need in organic as a litter treatment for biosecurity and ammonia reduction.<br>Question from Francis regarding Barn Fresh. Speaker says it was not as effective as sodium bisulfate.   |
| Kirin Basra       | Food scientist and product developer; working for Premier Nutrition. | Handling (HS), carrageenan                | Food scientist and product developer.<br>Supports keeping carrageenan on the national list.<br>Premier Nutrition – ready to drink bars, drinks, etc. Reacts with milk proteins to prevent clumping.  |
| Myra Weiner       | Toxicologist   | Handling (HS), carrageenan                | Carrageenan – in favor of maintaining it on the NOSB list. High molecular weight, functions as stabilizer and thickener. Food additive status.<br>Confused with poligeenan, which is not allowed in food.  |
| Robert Osburn     | Precision Laboratories   | Crops (CS)                                | Skipped  |
| Stephanie Roche   | Citizen  | Handling (HS), Carrageenan                | Asks to de-list carrageenan.<br>Intestinal distress from consuming organic milk with carrageenan. Constant digestive sickness feeling all the time. Carrageenan is used to <i>create</i> intestinal distress in lab animals. Many products that did not have it now do, and the quality has not changed.   |
| James Sbarra      | Certified aquaponics grower; citizen                                 | CACS, aquaponics                          | Certified aquaponics grower – wants aquaponics to be included in organics. Comments only address aquaponics not hydroponics.<br>Soil/plant ecology issue; there is a similar ecology in water that should not be explored. There is a diverse ecology in the water the fish live in. Both water and soil provide an organic element for microbes. Fish waste from filters can be added to improve soil as well.<br>Building bioponic over soil – he says this is ridiculous because we have always had buildings on farms.<br>Aquaponics are different because the fish waste can be used in the soil. |
| Jeff Nickerson    | General manager of Freeman Herbs                                     | Crops (CS)                                | Supports growing organic plants in containers.   |

|                     |                                      |                            |   |
|---------------------|--------------------------------------|----------------------------|---|
| Karen Archipley     | Citizen; part of hydroponic business | Crops (CS), hydroponics    | Co-founder of Archie's Acres, sustainable agriculture in association with Cal poly Pomona.<br>Hydro-organic in an area where water is very scarce.<br>Biological process are equivalent in hydro and field production. Archie's acres has never used synthetic inputs, even those allowed in hydro-organic systems.<br>Question from Emily: Low cost of entry for beginning farmers – estimate for a profitable production? With \$50k loan you can pay that off and expand. You can go large or small. |
| Colin Archipley     | Citizen; part of hydroponic business | Crops (CS)                 | Other organic farmers add things and modify their soil.<br>Biological monitoring –take samples from root structures and see protozoa, bacteria, etc. on the samples.<br>Sustainability, chemical-free are what consumers are concerned about. These systems have enhanced sustainability.<br>Question from Harold: should we provide more time for the stakeholder to talk about the documents the crops subcommittee has put forward? Answer: does not think there has been adequate time.             |
| Julio Garcia        | Black Jack Farms                     | Crops (CS)                 | Skipped   |
| James Gratzek       |                                      | Handling (HS)              | Skipped   |
| Adam Schretenthaler | Formulation Solutions                | Handling (HS), carrageenan | Independent product consultant.<br>Carrageenan is an essential additive for low-acid beverages.   |
| Cecille Madriz      | Fennel Farms; substrate manager      | Crops (CS), bioponics      | Substrate manager – grow organic blueberries in substrate organic production. She is young (25 years) and this is the best way for young people to get into organic farming commercially. Similarities between substrate and soil. No pesticide used and pest are less attracted.   |
| John Schoenecker    | Citizen; seed industry               | Materials (MS), seeds      | Works in vegetable seed industry. Employed by HM Clause.<br>Excluded methods in plant breeding innovations: current draft proposals does not capture the benefits some of these new techs would provide. Consider that plant breeding innovations will have a positive impact. This will exclude solutions for farmers.   |
| Dan Bensonoff       | NOFA/Mass (policy Director)          | Crops (CS); Materials (MS) | Bioponics can meet some criteria of sustainable production, it does not meet the NOP rule or the OFPA. Detection of fertilizer, including those that are not allowed, are very difficult to inspect.<br>Not opposed to a sub-label of bioponics.<br>Without soil ecosystems, bioponics should not be completely allowed in organic.   |
| Margaret Scoles     | International Organic Inspectors     | CACS                       | Discussion document on personal evaluation of inspectors.   |

|                    |   |   |  |
|--------------------|---|---|--|
|                    | Association<br>(executive director)           |   | Agree with instruction 2027 – inspectors cannot be evaluated just based on client feedback. Field inspection is a valuable part of inspector evaluation. There are alternatives to annual evaluation -- including field inspections. 2001 document on inspector qualifications should be looked at again.  |
| Curt Chittock      | Fodder systems                                | CACS, fodder systems                    | Involved in sprouting grain for fodder. Uses only water, so the sprouting could be considered organic when organic seeds are used. This is needed for clarity for those who are already using fodder.<br>Hydroponics is sustainable. Adding a label specifying the method could help any issues.   |
| Guillermo Martinez | Kingdom Fresh Produce                         | Crops (CS), container growing           | Containing growing is very efficient, especially in water use. All drainage is recycled.   |
| Phaedra LaRocca    | LaRocca Vineyards                             | Crops (CS), support material re-listing | Supports paracetic acid for sanitizing, tartaric acid, copper sulfate for frost protection and to prevent black rot to all remain on the national list. Also in favor of hydroponic growing practices. The label should list that it is hydroponically grown.<br>Question from Harold: paracetic acid – other disinfectants/sanitizers tried? Answer: paracetic acid eventually evaporates. This component does not affect wine product. |
| Phil LaRocca       | LaRocca Vineyards;<br>CCOF                    | Crops (CS), support material re-listing | Board of dir. Of CCOF and LaRocca Vineyards.<br>Paracetic acid is a replacement for iodine, which they used to use.<br>In favor of labeling organic hydroponic. Most certifiers have been certifying hydroponic operations for a long time.<br>California: only state that has to pay state registration fee, but the majority of farmers have to pay high fees. The NOP should look into this.  |
| Martin Gramckow    | Southland Sod Farms,<br>owner/operator        | Crops (CS)                              | Turf industry.<br>Earlier innovators of container berry production, and they also grow berries in soil. Same inputs but less water and less fertilizer.<br>Deciding to cancel container growing will put many farmers out of business.   |
| Kristen Adams      | Midwest Organic Services Association,<br>MOSA | Crops (CS), bioponics                   | MOSA supports expansion into bioponics as consistent with organic production. They could contribute to the growth of organic industry.<br>Sterile inert hydroponic systems do not align with organics, but aquaponics and bioponics does mesh. Setting clear definitions is important.   |
| Beth Jones         | Celery Powder Working Group                   | General Comment/Other; Materials (MS)   | Skipped  |
| Emily Posner       | Recirculating Farms Coalition                 | General Comment/Other                   | Organization policy and legislative director.<br>Supports adopting hydroponic-aquaponic specific organic label.  |



|                  |   |   |   |
|------------------|---|---|---|
|                  |   |   | Critical of the task force report composition having soil growers that had no intention of clarifying how biaponics could be part of OFPA; why did the topics break up the workload into these groups?  |
| Joan Norman      | Citizen                                       | Crops (CS)  | Skipped   |
| Patty Lovera     | Food & Water Watch<br>(also member of<br>NOC) | General<br>Comment/Other  | Excluded methods; urge the board to adopt everything up to be added. Also supports moving some of the suggested list into the excluded methods category. Make it more clear to consumers that GMOs is not in organics by clear definition and strict guidelines.<br>Biaponics systems are not appropriate for organics right now.<br>Emerging issues: systems approach of clean water and clean land – oil and gas extraction water inputs. Water is an input! Oil wastewater has ended up in organic sometimes.<br>Ongoing discussion needs to be happening about imported organic grains – worry about mishandling, co-mingling and outright fraud. |
| Drew Norman      | Citizen                                       | Crops (CS)  | Skipped   |
| Dennis Nuxoll    | Producer Assoc.;<br>Western Growers           | Crops (CS);<br>Materials (MS)                                     | VP of federal affairs for Western Growers.<br>Supports organic seed proposals.<br>Board should be wary of elimination of “3 sources” rule. Availability is a problem. Limiting number of seasons or forcing producers to engage with more sources does not solve the fundamental problem.<br>Closing loopholes – problematic due to regional differences and on farm issues.<br>New genetic manipulation techniques – they are not all bad. Modern genetic tech will shorten time it takes to get organic seed to market.<br>Research priorities: animal compost needs to be researched more.   |
| Charles Mulamata | Citizen                                       | CACS, General<br>Comment/Other;<br>Policy<br>Development<br>(PDS) | Skipped   |
| Gilbert Calhoun  | Citizen                                       | CACS  | Skipped   |