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Agriculture Marketing Service (AMS)
National Organic Program (NOP)

Meeting Of The National Organic Standards Board (NOSB)

December 1, 2011

Hilton Savannah DeSoto
15 East Liberty Street Savannah
Georgia 31401

The National Organic Standards Board convened at 8:00 a.m. with Tracy Miedema, Chairperson, presiding.

Members Present
Tracy Miedema, Chairperson
Colehour Bondera
Steve DeMuri
Joseph Dickson
Kristine "Tina" Ellor
Barry Flamm
John Foster
Wendy Fulwider
Katrina Heinze
Nicholas Maravell
Robert “Mac” Stone
Jennifer Taylor
C. Reuben Walker

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Tracy Miedema: Good morning, everyone, and welcome to day three of the National Organic Standards Board meeting. We are now back in session. Today is dedicated to hearing public testimony. We will, however, begin with hearing from experts in the field of nutrition, fortification, and infant formula. This is continuing our quest this meeting to invite in experts in topical areas. Yesterday we heard from Dr. Temple Grandin on animal welfare and we heard from Dr. David Granatstein on fire blight control in organic apple and pear orchards.

So this morning it's my distinct pleasure to introduce via phone Ms. Essie Yamini, Dr. Yamini, and Dr. Sue Anderson, both of FDA. A note to the board. We don't have direct back and forth communication with the technology this morning. We're going to be conveying the questions back and forth. So we will hear their voices and that will be synched with the Power Point that's on the screen.

And we will convey our questions to the NOP who will speak those questions into the phone, if we have any. Make sense? (audio difficulties)

We're going to give the IT staff another couple minutes to solve this and if we don't have it fixed we're going to go ahead and proceed into public comments so that we don't have any further delays this morning. And, if and when the technological problem is solved, we will toggle back to our FDA experts.

All right, everyone. We need to get started this morning. My apologies on the delay. It's a little bit of a disappointment. Really hope we can solve the technical difficulties. We're looking forward to hearing this expert testimony from FDA. But we will forge ahead. First up this morning is John Ashby and Jackie von Roden is on deck.

John Ashby: Reboot. Okay. Bottom – I mean, the basic point here is I lose a product line and we're going to lose a bunch of confections and other type of products that need this confection line if we lose silicon dioxide. When you're making powders, especially when you're making it in an industrial format, which is the way we're making them, you basically have two tools. You have fibers, which primarily function sort of physically.

Think of a big string going through a bunch of balls keeping the balls from squeezing together and you have silicon dioxide which has to be available to control the water. It really is not a physical thing; it's controlling the water. The rice hulls function really nicely for the fiber type applications.

They don't function for the water-control type applications. That's why you don't see it working in the defoaming.

The reason it doesn't work in the defoaming is it's really not available to the water. It's essentially encapsulated by the lignin in the hemi cellulose. It's hidden in there in the walls. That makes a great product and in products that have less carbohydrates, in products basically that will function with fibers that'll work, in products where you need its functionality, the silicon dioxide's functionality to grab the water and keep it from making things solid, it just doesn't – it just doesn't work.

There's a difference between what you've got going on in a little two ounce jar of something and what you've got going on in a 50 pound bag of carbohydrates that has some sugars in it, that has 2,000 pounds of other product on top of it that gets shipped across the country in the summer vibrating on a truck at 100 degrees. That shows up at the plant as a brick. I don't lose a sale; I owe money to the factory that I mangled.

So it's a risk that I just can't – that I just can't take. It's not a substitute for silicon dioxide. It does function really quite well in those types of applications, generally the ones that are less hydroscopic – and I've lectured on this stuff at universities, I've taught people to do this. I've made powders for decades for everyone ranging from entrepreneurs to being hired by Nestle when they needed with one. I just have got to have silicon dioxide for these carbohydrates.

They've got too many sugars in there. And, you know, I could go on for – I think I've got about 47 seconds left – about the science of why the pressure is a special problem when you've got a pallet full of ingredients. It basically pushes the water around, pushes the molecules closer together. And without the silicon – the reason silicon dioxide defoams is because the water would rather attach to it than to itself. It's in a lower energy state.

And that's what happens in the powder. The water starts to move and instead of getting between two sugars and dissolving them and gluing them together, what it does is it takes the water instead and it's there. And I just also want to add that of all of the things on the national list I'm not sure I can think of anything more benign on food.

Tracy Miedema: Thank you, Mr. Ashby. Any questions? Steve DeMuri.

Steve DeMuri: John, you heard the committee's recommendation yesterday with the commercial availability type of a clause in it. Is that workable for you?

John Ashby: I guess as a hobby. I spend huge amounts of my personal free time – a lot of people here don't know this – currently chair of the California Organic Products Advisory Committee, currently chair of the board of OMRI working for organics. I am just all for, even though it's a little bit of a difficulty for everybody, I am all for having to account for why you're doing what you're doing. So I'm more than happy to live with that. Any more?

Tracy Miedema: Any other questions? John Foster.

John Foster: What percentage of your product lines are organic that use silicon dioxide right now? Give a ballpark if – or a range. Give me a range. I mean, it is 10% or 100% or 50%?

John Ashby: It'd be like 10% because about three-quarters of what I do with syrups but there's some applications – manufacturers don't want to buy the solids because it costs more to take the rest of that money out and make a solid from it. So people use a syrup when they can but when they can't you've got to make a solid and when you got to make a solid, you got to make it not become a brick while it's sitting on the pallet.

So it's, you know, those confections and other products that need it, they'll go away if they can't get these products. Anything else? Thank you so much.

Tracy Miedema: Thank you. Next up is Jackie Von Ruden. Gary Simliness is up next.

Jackie Von Ruden: Good morning. Jackie Von Ruden for MOSA. We applaud the Livestock Committee's efforts to develop regulatory language and guidance to animal welfare and handling. Although improvements have been made since spring, we've identified some areas that could benefit from some further work.

First, the language of these documents fails to consistently delineate between what's a rule and what's guidance. Each of the guidance documents contains the word "must" which expresses a specific required action that is not always discussed in the rule. This begs the question of how certifier decisions should be made and which decisions would be upheld if appealed.

Some of the guidance language is simply directory statement of the rule which seems superfluous. Instead, we expect guidance to expound upon the rule, to provide clarity related to understanding and enforcing the rule.

Of more concern, however, we note that some of the guidance imprecisely restates the rule which is bound to lead to some confusion among producers and handlers and certifiers.

Second, the existing standards follow a process base, not outcome based, principle. The idea of organic standards being outcome based results in overly prescriptive rules that are not consistent with other organic standards and can lead to some regulations that are too specific to fit the realities of all livestock operations. Third, the Livestock Committee has clearly put a lot of hard work into assembling these documents and each of them deserves a thorough evaluation.

However, given my allotted timeframe, we were not able to assess them as thoroughly and completely as we would like, or engage our producers and handlers in the evaluation. Although we provided written comments stating our concerns and the inconsistencies that we noted, in order to provide more thorough comments we'd need a little bit more time.

Until there is clarity on what is intended to be regulatory and what is intended to be guidance, we cannot assess how these proposals would impact our farm and handling operations or our work as a certifier. The NOP program handbook points out that guidance documents are not applied as binding requirements.

If the same applies to the guidance that the NOSB puts forth, we question how the word "enforceable" can be used in conjunction with the guidance. We understand that crafting the language of these documents is a challenge and we recognize that countless hours have already been put into this work and that the program will have their work cut out for them developing the recommendations into enforceable regulatory language along with guidance that both supports and explains the regulations.

We recognize the importance and the difficulty of balancing consumer expectations with the everyday realities of livestock production. We advocate for a view that addresses overall functioning of the organic system where operators demonstrate how their management meets the criteria of the organic regulations, rather than assigning quantitative parameters in any areas where they can be done without.

In other words, we don’t want to be come so immersed in the details that we lose sight of the system as a whole. Let's not forget that the mandates of organic standards already provide a holistic approach to the welfare of land and livestock. Thank you.

Tracy Miedema: Thank you, Jackie. Any questions? Calvin.

C. Reuben Walker : Good morning. Could you briefly kind of tell me about the organization that you represent as far as membership?

Jackie Von Ruden: Membership? We represent a large portion of livestock farmers. Approximately 650 livestock farmers are certified by MOSA. Of the large majority of those livestock farmers are dairy operations. We do certify, I would say, probably well over 400 dairy farms, about 150 poultry, eh, maybe 120 poultry, and then a number of beef and hog operations too. So this definitely impacts the work we do.

Tracy Miedema: Any other questions? Jay Feldman.

Jay Feldman: Good morning. Thank you. Can you tell or maybe this is repetitious, but please simplify what you think the board should do on this right now.

Jackie Von Ruden: Boy, that's a tough one. What the board should do. I'd really like to see clarity between what the regulatory language is going to be and what the guidance is going to be. And we advocate very strongly for there to be guidance. Best management practices are an excellent resource to provide everybody with, but regarding the language used in them, we have to be really clear that certifiers enforce what is written in the rule and that the guidance supports what's written in the rule.

We can't cross those lines or skew those lines too much where it becomes unclear and not enforceable. So the language is where I think the biggest challenge is and that's going to be where the most work is needed, in crafting the language.

Tracy Miedema: Any other questions? Thank you very much.

Jackie Von Ruden: Mac raised his hand.

Tracy Miedema: Oh. Mac Stone.

Robert Stone: So as a certifier if we pass some version of what's on the table Friday knowing that there's some lag time before the program puts out proposed rule, do you take this and start telling your producers start leaning this direction? Or do you in fact wait until there's something firmer on the table to look at.

Jackie Von Ruden: We already are telling them the way the wind's blowing. We did that with the pasture rule. Education is number one with the producers. They need plenty of time to come into compliance in any area and the earlier we

certifiers can educate them and to tell them what's coming down the pike is to our advantage in assessing compliance on their farms.

Tracy Miedema: Anyone else? Thank you.

Jackie Von Ruden: Thank you very much.

Tracy Miedema: National Organic Program, is our FDA expert available via phone?

IT: She says the line is busy. So she just (inaudible). Essie, can you hear us?

Dr. Essie Yamini: Hello? Hello?

Tracy Miedema: Hi.

Dr. Essie Yamini: Yes?

Tracy Miedema: Can you hear us?

Dr. Essie Yamini: Emily?

Tracy Miedema: Yes. This is Emily and you are now via iPhone connected to the whole NOSB meeting

Dr. Essie Yamini: Oh. So we are on?

Tracy Miedema: Yes. Can you hear us all right?

Dr. Essie Yamini: Yes. We can hear you and can you hear us okay?

Tracy Miedema: How does that sound? Yes.

Dr. Essie Yamini: Okay.

Tracy Miedema: I think we're ready to go. So I'd like to welcome Dr. Essie Yamini from the Office of Nutrition, Labeling, and Dietary Supplement, and we'll just go right ahead with the Power Point, then, Essie. Thanks a lot.

Dr. Essie Yamini: Okay. Very well. And here with me is – this is Essie Yamini and here with me is Dr. Sue Anderson from the Division of Infant Formula and Medical Foods. And thank you for inviting us to talk about the fortification policy (inaudible). And what I will do, I will briefly talk about the fortification policy and then Dr. Anderson will follow with a very brief presentation on infant formula regulation.

Dr. Essie Yamini: Then if your time allows, we are happy to answer your question that is related to the fortification policy on infant formula. Next slide, please. Are you on the next slide?

Tracy Miedema: Yes.

Dr. Essie Yamini: Okay. FDA published the fortification policy guidelines in 1980 and the objective of this policy was to establish a uniform set of principles that would serve as a model for the rational addition of essential vitamins and minerals and protein to the food. Although this is a policy, it is codified in the 21 code of federal regulation, or the CFR, one of 20. Next slide, please.

Okay. Fortification policy discourages indiscriminant addition of nutrients to foods. Basically, the random fortification of foods could result in over or under fortification the customer's diet and create nutrient imbalances in the food supply and that's why we discourage that indiscriminate addition of nutrients of food.

And also, fortification policy does not consider it appropriate to fortify fresh produce, meat, poultry, or fish products, sugar, or snack foods such as candies and carbonated beverages. Next slide, please.

The nutrients that are considered under the fortification policy are really the essential nutrients and the term essential nutrient under the fortification policy refers to the vitamins and minerals that are essential for human nutrition. And these are known as Reference Daily Intakes or, for short, RDIs, and these are codified in the 21 CFR 101.9 CA. And that 101.9, as you all know, is for the nutrition labeling for food, of course.

And then as well potassium and protein and they have daily reference values or DRVs which also then is on the 21 CFR 101.9. The reference values with these nutrients, I should say that, are determined by the National Academy of Sciences, (inaudible) of Medicine and not FDA. And the same way with the essentiality. We do not – FDA does not, you know, basically determine the essentiality of these nutrients.

But we use these references to come up with these values. Next slide, please. When the FDA established a fortification policy in 1980, it anticipated that additional essential vitamins and minerals would be added to the list in 101.9 and thus would be eligible for the rational fortification of food. And actually, if you look at the list in 101.9 right now, that has

modified since 1980 and now includes six more vitamins and minerals that are listed in here.

Now, if you go to the 10420 which is our fortification policy, and you look at that table in (inaudible) you don't see the six nutrients because we haven't really amended our fortification policy – or we haven't updated it – since 1980. So – and that's one of the reasons that during our discussion with USDA meets, told them that it would actually better to look at the list of them, list 101.9, the RDIs, under that.

Because that's more up to date. So as other essential vitamins and minerals are added to 101.9, they can also be recognized for rational addition under the fortification policy. And again, I have to say that FDA currently is in the process of updating the nutrient facts label and, hence, there might be new addition to the RDIs list. And these values will be updated according to the new dietary reference intakes, or DRIs, that is published by the IOS.

Next slide, please. There must be a safe and lawful source of the nutrients or we just can't put any of these nutrients, you know, to the food. That means the nutrient must be in a food additive or GRAS under that condition of its intended use. There should no be determination by the FDA in a regulation or as a matter of policy, that fortification by that nutrient is inappropriate.

In addition, some nutrients are limited by food additives or GRAS regulation regarding the foods that may be fortified and to what level. So, two examples, here's folic acid and Vitamin D. For example, we do have food additive regulation of folic acid under 172.345 and if you go to this regulation it tells you exactly what foods the folic acid can be added and at what level.

For example, folic acid can be added to the enriched cereal grain products, like the cereal, corn grits, but not many other foods that, you know, is out there. Next slide, please. Okay. In order to add such nutrients to food under the fortification policy, addition would need to be consistent with their circumstances or principle identified in the policy.

And in the next two slides there are five principles that I'm going to talk briefly about. So a nutrient may appropriately be added to a food to correct a dietary insufficiency or for a public health purpose. And that would really need to be recognized by the scientific community that exists and that knows the results in nutritional deficiency disease.

A nutrient can be added to restore nutrient level to the representative of the food prior to storage, handling, and processing. Next slide, please. Also, nutrient can be added to maintain a balanced nutrient profile in proportion to the caloric value of the food.

And this is really to add more so of – almost all the nutrients that is in the table D3 or 101.9 could be added in proportion to the calorie and that's sort of, you know, situation is like a meal replacement, for example.

Also, nutrients can be added to improve the quality of the replacement food so as to avoid nutritional inferiority relative to the food that it replaces. The last bullet is a principle that is intended to allow the addition of essential nutrients to food or class of food when such addition is permitted or required by an FDA regulation.

These are the principles that we had some discussion with USDA and we've had to clarify that what the other regulation meant under the principle. The regulation under the principle is nothing to do with anything that was in our 21 CFR, other than just any food additive or GRAS and it was indefinitely (inaudible) without regulation. Next slide, please.

The regulations that 104.2 referred to are listed here and they are standards of identity, for example, nutritional quality guidelines, or common or usual name regulation. For example, an example of the standard of identity is (inaudible) which requires additional of specific levels of thiamine, riboflavin, niacin, iron, and folic acid. So these are the type of regulations that 104.20 (f) was referring to. Next slide, please.

A nutrient added to a food is appropriate only when the nutrient is stable under customary conditions of storage, distribution, and use. It has to be physiologically available from the food. It should be present at a level at which there is a reasonable assurance that over-consumption will not occur, considering cumulative amounts from other sources in the diet. But that if very important because we don't want an over-consumption of some of these nutrients.

And also it should be suitable for its intended purposes and meets requirements for the safety of substances in food. Next slide, please. This is my last slide on the fortification. Although this policy is primarily used as a guidance and is not in regulation, the provisions of the fortification policy have been incorporated into two labeling regulations which have the force and effect of law. And those are the two nutrient content claims.

One is nutrient content claims for more and their synonyms such as "fortified" "added" and also the other one is nutrient content claim for healthy. Consequently, FDA may issue a warning letter and take enforcement action is a manufacturer markets the food bearing one of these nutrient content claims and the food contains a nutrient addition that is inconsistent with the fortification policy.

So, really, the reality is that if the food has such a labeling as more fortified or added, then the nutrient addition has to follow in the fortification policy. So I'm done with the fortification. I'm sorry this was really a short summary of the fortification policy. If you have any questions I will answer it after Dr. Anderson finishes with the infant formula regulation.

Dr. Sue Anderson: Thank you, Essie. Good morning. We are now switching to the infant formula regulations that FDA has in place. The composition of infant formula does not come under the scope of fortification policy. Instead, there is a separate section of the federal Food, Drug, and Cosmetic Act section 412 that pertains to the required nutrients and nutrient level for infant formulas. And these are also codified in our regulations under 21 CFR 107.

There are specifically three requirements for infant formulas. This is different from any other food in that it provides the sole source of nutrition during a very vulnerable period for infants. And I am on the next slide. I apologize for not giving you a heads up on that. Infants grow more rapidly during the first few months after birth than at any other time of life and their diets must contain all the essential nutrients in adequate amounts to promote growth.

The FDA regulation from the requirements under the law specify that infant formulas must contain appropriate amounts of all the essential nutrients. There are minimum, statutory, and regulatory levels for 29 nutrients and maximum for nine of the 29 under our regulations.

An infant formula is adulterated if it does not provide the nutrients that are required under 21CFR 107 100. And it is required throughout shelf life of the product. The next slide, please. There is a pre-market notification program, which is the program that I work with here at FDA, for infant formula manufacturers.

Infant formula manufacturers must provide a 90 day notification before marketing a new infant formula or a formula in which they make a major change. And there are specific elements that they must provide to us in

those notifications. The infant formula manufacturers have to give a quantitative formulation for their product, the old product and the new product that they're making, and that is a list of the amounts of all of the ingredients that they are adding and the amounts of the ingredients.

They have to provide us with a description of the change that they've made in the formulation and they have to give us assurance that the formula won't be marketed unless it meets the nutrient requirements and the quality factors for infant formula and manufactures a good manufacturing practice and quality control procedures.

Now, all that is done before an infant formula goes on the market. FDA does not have pre-market approval authority. They can go to market over our cautions; however, that's a business decision that they would make on their own. Next slide, please.

Once an infant formula is on the market, then any actions from FDA take the form of compliance actions in which we (inaudible) client tools. FDA inspects every plant that makes infant formula every year and it checks for good manufacturing practices, that they follow quality control procedures and that they are keeping the required records and reports.

One other item that is different for infant formula than for any other food, at least until recently, is that FDA has mandatory recall authority over – for any adulterated infant formula. So that we can require infant formula manufacturers to recall products that are problematic

I'm going to stop here and invite questions for either Essie's talk or mine.

Tracy Miedema: Okay. Thank you, Dr. Anderson. I'm going to turn this over to Steve DeMuri, who is the chair of our handling committee to facilitate the questions. Let's just see if you can hear first, or else I might have to repeat them.

Dr. Sue Anderson: Okay.

Steve DeMuri: Thank you for your presentation. It was very informative. Anybody on the board have any questions for either of the two FDA representatives? Jay.

Jay Feldman: Okay. Good morning. Thank you. Could you explain how DHA fits into your regulatory model? Or fits in under your regulations, your current regulations?

Dr. Sue Anderson: You are asking – it was hard to understand you and I think what your question was you were asking how DHA fits into our regulations for infant formulas; is that correct?

Tracy Miedema: That's correct. Yes.

Dr. Sue Anderson: Okay. The DHA is not one of the 29 nutrients that are required in infant formula. Infant formula manufacturers may add other ingredients other than just the required 29 nutrients and DHA is added as an additional ingredient. It has kicked in reviews by the Office of Food Additive Safety under the GRAS notification for the infant formula.

Jay Feldman: Okay. You indicated that there were specific targeted products for which fortification inputs could be included and you, in effect, had a list. I think one of your slides identified food commodities for which fortification – I guess I'm trying to summarize this. Fortification was not appropriate, or at least FDA felt fortification was not appropriate.

I assume that if the National Organic Standards Board and the USDA were to allow DHA in products certified organic that FDA's limitations would supersede and control what foods were allowed to include DHA. And if that's the case, then is it true that the regulatory body USDA, under its certification program, does not need to limit – or does it? – the allowed products in which this could be used? I guess that's my question.

Tracy Miedema: Essie, I think I'll repeat that for you.

Dr. Essie Yamini: Yes. Do repeat it.

Tracy Miedema: The question was about – that was Jay Feldman and he was referring to your list of commodities that are not appropriate to fortify under your fortification policy like the carbonated beverages, candies, and snacks, fish, poultry, meat. He was asking if, given that list, he would presume that, you know, if the organic program decided to allow DHA in food those rules would still apply to organic foods without being explicitly mentioned in our restrictions?

Or do we need to – if we wanted to restrict them, do we need to explicitly restrict them in our regulations? Did I capture that, Jay?

Dr. Essie Yamini: Yeah. Yes, you did. If I understand it, correctly, first of all, let me make sure you understand. Fortification policy is a policy, again. But we do have food with a standards of identity. Those are regulation. So, for

example, if DHA is added to a food that is under our standards of identity, they have to follow that standards of identity, even if it's organic.

So, for example, if it's milk and if they want to add the DHA to an organic milk, they have to follow the standards of identity and, you know, if any questions they have to go and talk to our standards of identity people. So, yes – and then there should be one – what would be the labeling of these?

I mean, if there is any way the labeling, as I said, if they put labels in that's fortified with DHA they have to follow the fortification policy, even if this is a -- it's not one of the foods that is not appropriate, they can add, you know, I don't know, to another food. But if that labeling, first of all, for the DHA there is no daily value, there is no reference intake.

So when there is no reference intake or, you know, in RDI and DRV together will give us a daily value which you would see it on our, you know, nutrient facts labels. So if there is not, then you have to go see what kind of claims they can make. And there a lot of the claims cannot be made with DHA, for example, or EPA or any of these other substances.

So, yeah, FDA can definitely, you know, I think it's all regulatory. They can go after the manufacturers if they are not following our regulatory, you know, regulations, nutrient content claims, or any of the claims. I hope I'm answering that question.

Tracy Miedema: Yes. Thank you.

Dr. Essie Yamini: Okay, then.

Steve DeMuri: Any other questions? Nick?

Nicholas Maravell: Yes. I'd like to follow up on the standards of identity issue that was just given to us by trying to make it a little bit simpler for me to understand. And I was wondering if – one of my colleagues was able to give me a dry carton of Horizon milk. Currently the Horizon milk has some claims on it and I just want to get the FDA input on this.

It says that it's fat-free milk with DHA and so what I'm trying to get at here is, is that acceptable? It also says low-fat milk with 32 milligrams of DHA. So I'm trying to see where the fortification policy comes out on that and also there's a health claim made. It supports brain, heart, and eye health and so I wanted to know if FDA is – if this is within their purview to review that type of information as well.

Nicholas Maravell: And whether or not that meets their current policy.

Tracy Miedema: Okay. Essie, do you need me to repeat that?

Dr. Essie Yamini: Yes, please.

Tracy Miedema: Okay. So that was farmer Nick Maravell from Maryland and he asked a question about the standard of identity for fluid milk.

Dr. Essie Yamini: Yes.

Tracy Miedema: And has a copy of a label of a product here for organic milk that's called fat-free milk with DHA. It also makes a claim – low fat milk with 32 milligrams DHA and also makes health claims for brain, heart, and eye, you know, improvement features. Would that fall within – is that – do you know if that's a legal labeling under FDA's (inaudible) ?

Dr. Sue Anderson: That is really outside the scope of what we are prepared to talk about this morning. Labeling issues were not part of what we had prepared to talk about. And that – with regard to the question about a health claim, health claims have to be stated specifically in terms of reducing the risk of a certain disease. So that would not be regarded as a health claim. I can make that point.

Those follow more in the realm of structured function claims and, like I said, we're not prepared to talk about labeling this morning.

Dr. Essie Yamini: Yeah. That is under standards of identity. But let me make a clarification again. The standards of identity is a regulation. So if we have a new, say, food that is standards of identity – let me give you an example of, say, folic acid was one new addition that we added, the folic acid to the enriched cereal grain product.

Enriched cereal grain product is under the standards of identity. During addition of the folic acid to those cereal grain products, they had to follow the fortification policy to make sure that there was a public health issue out there. So that one met the fortification policy.

However, that -- (inaudible) the standards of identity with the regulation, they really are – they basically, I'll tell you this. They trumped fortification policy because they're regulation. And that's why I said you have to follow those regulations. Though if it is all the food additives regulation for the food like folic acid. Fortification policy is really there to guide people that – what are the principles of addition of these nutrients to the food?

And so that, you know, nutrients should be physiologically available. It shouldn't be over-consumption if you're adding it to the food. But standards of identity are regulation. And, again, as Sue said, our standards of identity are under another, you know, branch and maybe we can get you a contact person that you can talk to them, but unfortunately, we cannot really answer that question.

Tracy Miedema: Okay. Thanks, Essie.

Dr. Essie Yamini: Sure.

Steve DeMuri: Any other questions? We'll take a couple more. I've got one. Do you know how long ago both ARA and DHA were permitted to be allowed in infant formula? What year?

Dr. Sue Anderson: ARA and DHA have been added to infant formula since early 2002. The GRAS notification for them was submitted in 2001 and manufacturers started adding the fatty acid or the single-cell oils containing the fatty acids, in early 2002.

Steve DeMuri: Okay. Thank you. Any other questions? Jay.

Jay Feldman: Thank you. One of your slides said only essential nutrients is within the scope of the fortification policy. So I'm trying to reconcile that with the fact that we've been told – I mean we understand that DHA is not identified as an essential nutrient, at least not by FDA. So does that mean, then, that DHA falls outside of scope of the fortification policy at FDA?

Dr. Essie Yamini: Again, essential vitamins and minerals were the ones that are under the fortification policy. But then again, let's go back and talk about it again this rational addition of the nutrients to the fortification policy. For the DHA and EPA there is really no, again, reference values. Okay? So we can just say it. So there is no daily values. It would be harder.

What we know, as you can see, and we see it, there are many products that they have DHA and EPA and we do really encourage our manufacturers to just look at it to see what they're adding, how much they're adding, because it's really hard to say, you know, -- because, again, since there is no reference value out there, it's really hard to say that – how much of that, you know, is out there and what is the rational addition of these nutrients in the food.

But, yes, again, fortification policy is for essential vitamins and minerals. And protein, of course, and that was there from 1980. So a DHA is not

under it, of course, but if you go ahead and make a more claim, a more claim or fortified, you have to have all of the fortification policy and that is not a nutrient on that fortification policy. So really, you cannot make the more claims. And plus, there's no daily value for it.

So really you can – that was under the labeling so it becomes really, you know, complicated, actually. But it's a rational addition for benefits, I guess, you know, that would be (inaudible).

Tracy Miedema: Okay. Thanks, Essie.

Steve DeMuri: One more. Anybody else have one last question? Okay. Thank you. Drs. Amini and Anderson, you were very helpful. Thanks for taking time out of your day to talk to us this morning.

Dr. Sue Anderson: You're welcome.

Dr. Essie Yamini: You're very welcome.

Tracy Miedema: Thanks, Essie.

Dr. Essie Yamini: Sure. If you need any – again, if you need to talk to someone from our labeling we can provide you with their contact information and I'm sure they'll be happy to help you out.

Tracy Miedema: Okay, great. Thanks a lot for helping us today. It's great to have you.

Dr. Essie Yamini: Oh, you're very welcome. Have a good day. Bye-bye.

Tracy Miedema: Okay. We're back in session with public comments. Next up is Gary Simliness. Betty Schumacher is on deck.

Gary Simleness: Good morning. Excuse me, good morning. What a mind-numbing process this is. I'm just absolutely amazed. So I haven't fallen asleep and I've just been here for a couple of minutes. My name is Gary Simliness. I am third generation organic rice farmer from Willows, California. I've been producing organic rice for over 20 years. I love what I do. I stand before you to voice my concerns regarding the Crop Committee's recommendation on copper sulfate use in organic (inaudible) both as an algaecide and in control of tadpole shrimp and, more specifically, to the annotation about a drill seeded mandate for the production of rice in California.

Ladies and gentlemen of the board, the proposed annotation to mandate rice growers into a drill seeded planning system in California is both short-sighted and demonstrates a lack of understanding of our weather patterns, our soil restrictions, and the micro climate affecting our rice industry.

My family farm produces organic rice in a saline-sodic soil which, by its nature, is heavy and has water table limitations. The industry standard culture is to flood the rice fields for a seedling establishment and weed management. And also, I might add, to prevent the incursion of red rice which is a horrible weed that has stricken the southern rice production areas that use the upland drilled method.

We don't have that in California. This flooded culture has allowed our family to successfully produce organic rice for over two decades. Without the use of synthetic chemicals. Due to the soil salinity, sodium, and high table restrictions, our farm cannot grow organic rice through a drill seeded program, nor can many of my neighbors'. In a saline-sodic environment, the tender rice seedlings could succumb to salt toxicity before they reached a stage of maturity for establishment.

The flushing flows that we have of that water, the snow melt water, helps us to establish a good organic rice crop. If the NOSB were to mandate the drill planted rice, it would surely force out our family from organic production as well as many of my neighbors. And I submit that this new annotation, if allowed into the law, will reduce the organic acreage and move it more into conventional practices.

Which means more synthetic pesticides and fertilizers into the environment. Is it a sound decision to move away from sustainable organic industry by a mandated tillage method? I don't think so. We all need to be diligent stewards of the environment. I consider myself a very diligent steward of my family's farm. I'm very concerned about this policy and where it will drive our industry. Again, I repeat, I'm opposed to the Crop Committee's copper sulfate annotation with the drill seeded mandate.

Please. Let's not throw out the baby with the bathwater in our attempt to be good stewards. Thank you for your time.

Tracy Miedema: Thank you for coming to see us today, Mr. Simliness.

Gary Simleness: Okay.

Tracy Miedema: Any questions from the board? Mac, then Nick, then Steve, then Jay.

Robert Stone: What's the source of the water? You said snow melt. And do you have – what are the water rights policy where you are to access that water?

Gary Simleness: Excellent question. The snow melt that we get is from Shasta Dam which is one of the larger, surface water retention facilities in northern California. It supplies water through the Sacramento River. The irrigation – we don't have any underground water aquifers on our ground and so we have – we get our water through the irrigation district which has pre-1917 irrigation rights which are before Shasta Dam was even built.

So we've got very secure rights, very good quality water.

Tracy Miedema: Nick.

Nicholas Maravell: What's the amount of copper sulfate that you might put on per acre when you need to use it and how often are you finding that you actually use it?

Gary Simleness: We don't use it every year on every field. I will say we use it every year but not on every field. We probably apply, I want to say, active copper two to three pounds per acre. All right? And I have on occasion – on one occasion – I've had to go back because there was not a successful treatment with the copper.

And because of the sensitivity and my stewardship as an organic grower, I chose to use the other product that was named in the Crop Committee's recommendation. I don't remember the full scientific name. It was unsuccessful. All right? We need the copper sulfate. We use it in a small, minimized application rate. We monitor the soil to make sure that the accumulation is not ramping up high.

It does accumulate. There's no question about that. But we're not applying it like, say, France has over decades and decades and has run into copper toxicity. And, you know, I might add, you know, increase of one part per million on your soil analysis is equivalent approximately to one second in 32 years. So we're talking about finite measurements that we are using now.

Gary Simleness: Okay? And trying to work that into a system that we can provide safe, organic product to consumers.

Tracy Miedema: Steve and then Jay.

Steve DeMuri: My question was actually the same as...

Tracy Miedema: Jay Feldman.

Jay Feldman: Thank you so much for making the trip and coming to speak with us. I appreciate it. I have a several-part question. I wanted to know if you were aware that in the community of alternative agriculture for almost 20 years now there has been extensive discussion in reference to drill seeded rice production as "the" organic method both by the National Academy of Science and ATRA and even on the websites of major producers of organic rice.

So I just wanted to know if you knew the context for which this proposal emerged, number one. Number two, do you think we could do anything that would help restrict the use of copper sulfate to the kinds of applications you're describing? Minimum, not on every field all the time, you know, so that what you're describing would be the model perhaps of what we would hope to see in our quest and goal and mandate to reduce hazards.

Jay Feldman: I mean, we're reducing synthetics but we're also reducing hazard...

Gary Simleness: Absolutely.

Jay Feldman: ...hazardous materials and advancing – trying to advance biodiversity at the time the same time. That's my second part. The third part is could you explain to us, not in tremendous detail, obviously, but what the monitoring process actually looks like? What you do and what others do to monitor the levels of copper sulfate. Thank you.

Gary Simleness: Well, if I forget one of yours, I mean, we monitor through soil analysis. Okay? And I was doing soil analysis on all my field every year and the cost of that became prohibitive. So now we do it on a frequent basis but we don't do it every year. All right. That's how we monitor where our accumulation is. We, as I said, we do not use it on every field every year. Okay?

Most of the organic production is on a one year in, one year out in California so that we can maintain some kind of weed control pressure. That's not to say that there isn't fields that go back to back and then are rotated out. Okay? But that also stretches out that potential application.

Over – as I said, over two decades of organic production I have seen the levels increase but they've only increased a few parts per million in my soil. Okay? So that's not – for me that's not an overly alarming rise or increase. There was also a mention about the toxicity towards mosquito fish in the Crop Committee's recommendation. I personally on our farm have planted mosquito fish several different times.

We're doing it because of the whole West Nile problem. Okay. We work with the mosquito abatement district. They will not plant those fish until after the rice is through the water because of predation from birds and other species. Okay? And that's well after the copper sulfate application has been used and has been precipitated out.

Okay. And so there has not been a toxicity of those fish. Okay? And I don't remember the third point that you asked me.

Jay Feldman: I was just – I wanted to – it was actually a statement I was trying to cloak as a question so that you would appreciate, hopefully, that there was a sincere effort here to respond to what has been described as the continuous improvement in the rice growing community to adopt cultural practices that would presumably replace the reliance on a product input and that, quite frankly for me, your testimony and others' comes as a surprise, believe it or not.

Gary Simleness: Okay.

Jay Feldman: So there's mutual respect here, to our mutual surprise, at both our recommendation and the response we're getting. Because there has been such excitement. This was a case study in a major publication by the National Academy of Sciences is indicating the industry is moving in this direction. And what I'm hearing now is that, in effect, this drill seeded process does not work.

And, you know, we obviously need research in this area. There's agreement on that. I do agree with that, that we need more research. And what direction could you see the research going that would assist you to reduce reliance on this input? Because as you know, we're talking about aquatic impacts

Gary Simleness: That's right.

Jay Feldman: You see minimal impacts but, you know, our responsibility is to look at biodiversity and there's no – there appears to be clear evidence,

growing evidence, that there is impact on biodiversity. So to the extent that we can reduce that and we can clearly identify research opportunities and needs that would help you do that, that's what we want to do, I think.

Gary Simleness: Let me address a couple things here. First, let's address the biodiversity. Okay? On my particular farm over the last 20 years we have got a tremendous change, a tremendous flourish, of biodiversity from the insects that are in the flooded rice field and the levies. Because we don't spray so we don't kill and so you have all this extra fauna and vegetation for insects.

That brings in shore birds. We have shore birds by the thousand on our ranch. We've got stilts and snowy egrets and lesser herons and great blue herons. We've got migratory water fowl with all kinds of ducks and geese. I have – every summer I have many, many hatches of Mallard ducklings on my property, okay. We have a very alive, dynamic, biodiversity system going on in that organic production.

That's not to say that there isn't some of that going on in conventional rice, but because of the nature of organic and because we haven't suppressed that whole biodiversity. From the insects and the minnows that come in from the irrigation ditch and everything, we have just a tremendously alive system. Okay.

From the standpoint, now, see, I've already lost your other stuff. You know, you're talking – and I have – normally I lose my memory after I've slept one or two nights and now I'm doing it right now in front of you. So.

Jay Feldman: The question really was are there things we could do? I mean, obviously you're way ahead of conventional. There's no question about that. Right?

Gary Simleness: Oh, yeah. Yeah.

Jay Feldman: Are there things we can do and should do in terms of creating incentives to reduce reliance on an admittedly toxic material?

Gary Simleness: I think we're already doing that with the rotational things that we have mandated in the OSP. I don't know that there is a product out there that works, okay, like copper sulfate does in our system. There could be some drilled rice, okay, maybe on some river bottom ground, but most of the rice is grown on a heavier soil and so the timing to get in there to plant it – and then what happens is, is – and that would be a reduction method.

But what happens is, if you drill it and then you get any kind of rainfall, and we get rainfall in the springtime, okay, then you get weed flushes and you lose your stand. You lose your stand. So I don't have a specific recommendation that I can say, yeah, let's go ahead and try and implement this or change what we've already got in place. You know? I will say that Cici Weff (ph) who inspects me is constantly monitoring the copper levels and constantly asking me, you know, what we're trying to do.

So it's not like we're set out there and we don't care and we're not being monitored about this. We're very sensitive to this. And as I told you before, when I had to make a second application I chose another product because of that sensitivity. It didn't work. I spent thousands of dollars on the product and it didn't work. But I tried.

Okay? And I think that there's that measure out there.

Jay Feldman: Thank you so much, again, for making the trip.

Gary Simleness: Certainly.

Tracy Miedema: Last question. Calvin.

C. Reuben Walker: I like your passion and how – I've been reading your first paragraph of what you have shared. Could you share briefly the best management practice for planting rice? Would that be flooding?

Gary Simleness: In California, absolutely. For a lot of reasons, okay. We are all – California rice ground is laser level flat now, okay, because of the whole production practice so that we haven't introduced red rice, which is a bane for rice industry in the south. And they spray and they spray and they spray because it's such a problem. Okay?

Our flooded rice culture has allowed us not to have that, besides having a very dedicated research facility in California that is bringing us varieties that will help us in that aquatic environment. I think that's the best management practice. Bottom line. You're welcome.

Tracy Miedema: Thank you very much.

Gary Simleness: Thank you for your time. And – and for your willingness to serve on this board and go through what you do to try and help us have a good, safe, secure organic system. Thank you.

Tracy Miedema: You're welcome. All right. I need to do a time check this morning. We're about 40 – 40 to 45 minutes off schedule and it's awful early in the day to be this far off. Some of that was the technical difficulties. I'm going to let people know that from this point forward I am going to clip things clipping along out of respect for our legally published agenda and people's travel schedules.

So we've actually budgeted a total of six minutes to include the three minutes of testimony plus Q&A plus the transition time. It's imperative that we hear all the voices today. No doubt we have experts in the room that we would love to speak with all day. They have lifetimes of experience that we could draw on. We just don't have that luxury. So keep it tight, precise, focused, and we are going to keep clipping along. Okay? Thanks, everybody.

Tracy Miedema: Next up is Betty Schumacher and Beth Ann Roth is on deck.

Betty Schumacher: Good morning. What I've handed out is samples of fresh California organic prunes. They're a delightful fruit. They do not need any additives. And I hope you'll – the board will share them. I'm sorry I don't have enough for all of you but I couldn't carry them on the airplane. So at any rate, it's a delightful fruit which we raise.

We have an orchard on which I live, 60 acres, in northern California, and my main problem is the gophers. And so I'm appealing that we can use the propane rodent/gopher devices to solve my problem. In my area -- I'm in an agricultural area where the minimum property is 40 acres, goes up to a minimum of 80 to 120. So there's no possibility of subdividing or, you know, getting houses in there to improve your income.

So I really rely on my prunes. I'm handing out also pictures of the gopher damage which is most apparent in the winter when the grass is short and you can really see the rodents' – the little trails that they make. We have to replace our trees at this point. Most of our trees are 31 to 32 years old and they are senior citizens and they do need to be replaced, unfortunately.

I'm looking at planting at least 3,500 trees very shortly. It's been our experience with the gophers that we will plant very healthy trees and within a year or two years we see at least 10 percent to 20 percent of them dying off. The gophers love the young trees. And when we look at these trees that, say, have reached the producing age of six years and all of a sudden they die, it's due to strictly the gophers' work on the roots.

So we have explored all of these other methods. First of all, we don't do tilling because we have a drip system of irrigation. You can't mow over that. We have planted a perennial Australian clover to enforce the nitrogen replacement in our soil. We don't want to use, of course, poison because that would damage not only our own dogs but our resident coyotes, foxes, and other rodents too, birds as well.

Trapping is a terrible chore and on 60 acres it would require far more than we could afford in man hours. We do have beneficial predators there. We encourage – we have rental signs out for foxes and coyotes. We have no barn owl takers yet for our barn owl boxes. So it comes down to the fact that we really need to try to use this predator control that uses the propane that explodes in the rodent tunnels. These--

Tracy Miedema: Thank you, Miss Schumacher.

Betty Schumacher: ...tunnels are very hard to discover from the top. We really appreciate your consideration.

Tracy Miedema: Thank you very much. Thanks for the information. Questions for Mrs. Schumacher. Mac?

Robert Stone: How many of these propane bombs or applications might you have to use from looking at this pictures? How many might you use and how often might you have to come back around?

Betty Schumacher: You know, I'm not sure because we haven't really used them. It is a system that comes, I think, with a propane tank and a very small amount of propane gas, I believe about 3 percent in relation to oxygen. And it's inserted into the gopher burros and it explodes so it reaches all of the far little tunnels that you wouldn't normally reach if you were trying to trap from the top. Any other questions?

Tracy Miedema: Thank you again.

Robert Stone: Please enjoy those California prunes.

Tracy Miedema: Beth Ann Roth is up now. Willem Russo is on deck.

Beth Ann Roth: Good morning. My name is Beth Ann Roth and I am the founder of Calypso Organic Selections. We have spent the past few years developing the market for organic and biodynamic wines in the Washington, D.C. area. Our region is small but it has a diverse population and a very large number of wine drinkers. My statement to this board

reflects my experience in that market, both through the restaurant and retail customers and with consumers themselves.

They demand clear – what merchants and consumers want and what they deserve is simplicity. They demand clear and concise labels to help them make their own choices as to what to buy and drink. A label should convey exactly what the product is without having to do research. But the distinction between organic wine and wine made with organic grapes is not intuitive on its face.

So what happens in reality is that the difference is meaningless except to a small number of people. When I visit wine shops around the country, I find that even people in the trade either don't realize there's supposed to be a difference or they misunderstand it altogether. Our wines are in food stores and in restaurants. The stores range from Whole Foods to small chain organic markets and to mom and pop shops.

The restaurants are of all sizes, may or may not have an organic focus, and include a few run by some of the most highly regarded chefs in town. I'm out in the market and I often talk to people about wine and about organics. They tell me that what organic means to them is that they're getting something grown without the use of artificial pesticides, fertilizers, and herbicides. That makes sense to me.

As a mother and a grandmother, I study labels for the same reason. All the wines impacted by today's discussion qualify under that discussion. Identifying all these wines as organic will help establish clarity and uniformity. It reflects NOP regulation and in reality, reflects what the market has already adopted as its terminology. That some of the wines have added sulfites while others do not is purely a matter of disclosure.

All labels should bear a sulfite disclosure statement and most do. The statement says either "contain sulfites" or "contains naturally occurring sulfites." Allergy sufferers get the information they need while the USDA Organic seal provides proof of organic integrity. This is clear and simple, no longer misleading or confusing, and allows consumers to make choices that rightfully belong to them. Thank you.

Tracy Miedema: Any questions for Ms. Roth? Jay Feldman.

Jay Feldman: Thank you for your testimony. Are you familiar with the standards of the Organic Foods Production Act?

Beth Ann Roth: I'm sorry?

Jay Feldman: Are you familiar with the standards of the Organic Foods Production Act?

Beth Ann Roth: To a certain degree.

Jay Feldman: Okay. Do you share my perspective that our – one of our major objectives is to reduce to the extent possible the use of synthetic materials?

Beth Ann Roth: I do not claim to be an expert on that point. I know what the NOP regulations currently permit. And what we are arguing in favor of is merely a disclosure on the product of when there are allergens present and when there are not.

Miles McEvoy: Just a point of clarification, Jay. That's no where in statute does it say to limit the amount of synthetics in organic foods. So you're misrepresenting the statute.

Tracy Miedema: Thank you, Mr. Deputy Administrator. Nick.

Nicholas Maravell: Yes. I just had a question. You're suggesting "contain sulfites" is currently a moniker or a label not under the control of this board. And then another label saying "contains naturally occurring sulfites," that was your suggestion. Would you be amenable, and I'm not suggesting that we could even do this, but where it says "contains sulfites" perhaps it says "synthetic sulfites" to make it clear that "contains naturally occurring sulfites" are two different approaches here?

So I just was wondering if you would comment on that.

Beth Ann Roth: I don't feel comfortable responding to that without going out to the market and seeing how they would respond. My comments reflect what I hear from our customers based on what the existing practice is.

Tracy Miedema: Thank you. Any further questions? Thanks very much. One last call for Willem Russo. Muhammad Musa, you are up now and Jenny Moffit is on deck. Jenny, are you here?

Muhammad Mousa: Good morning. Thanks for the board. It's a lot of work. You guys is exceptional well. Thank you. Organic movement in our country is very, very important. I cheer for that. I work for it and I encourage a lot of our producers to switch to organic. Farmers produce corn and soy bean and

producer to produce eggs. I have some concerns today to reflect on the issues related to the birdhouse and also the food safety.

The birdhouse – I thank Wendy for reaching out to Dr. Temple Grandin, whom I know and also I read her books. She's a behaviorist and I have a lot of respect for her when I meet her (inaudible). Very, very wonderful person. She cares about the animals. I care also about those birds. That's why I'm here today. I'm here as a citizen. I'm here also as a cheerleader for the organic movement in our system.

I am concerned about the animal welfare. We have Animal Welfare committee. I cheer their work but I don't see in their presentation – I could not get anything related to the bird health. I did not see anybody talking about disease control. I did not see anybody talking about higher mortality. When you have sick birds, when you have dead birds, gentlemen, you don't have animal welfare.

Birds are just like any other animals. Need a special condition and special care. We can't care of those animals if we don't put them in the right environment. I'm 100 percent for outside door access but the continent of United States is different. Have different climate, you have different flyways, and you have also different disease contamination.

Last month, I was very surprised with the disease completely been eradicated from United States called ADS76 animal virus. That virus never been isolated in the United States for the last 30 years. Was isolated from my farms about – I think it was May when we found it out. But the university just acknowledged that we have it. No vaccine for this disease.

I will ask the board please do risk assessment to protect those birds. Outside access must be accompanied with a very high level of care about those animals. The issue is (inaudible). I would encourage the board to get back to the drawing board for the issue of salmonella. Salmonella make children sick, make people sick, and kill people.

Other issue is a concentration of birds outside. In the end of your folder, if you would, you go to those pictures, I took those pictures in Germany. I was there last year. I visit so many farms. This farm is no longer in business. The government in Germany pay people to shut down their farms if they have contamination. In United States, the EPA will fine us and the neighbor will sue us.

That farm was closed and then the man whom run this farm and own it, he better be producing eggs and not shutting down his farm. Thank you for listening to me. I would be delighted to help or to serve in any capacity for the success of this program. Thank you.

Tracy Miedema: Thank you, Mr. Musa. Any questions? Appreciate you coming.

Steve DeMuri: Thank you.

Tracy Miedema: Jenny Moffit is up now. And Phil LaRocca is on deck.

Jenny Moffitt: Good morning and thank you for the opportunity to provide comment. My family owns Dickson Ridge Farms. Can you hear me? My family operates Dickson Ridge Farms, an organic walnut farm and processing operation. We grow walnuts on 230 acres and we also buy from about 67 other growers, encompassing a total of 1900 acres. The average farm size of our growers is 35 acres.

Dickson Ridge Farms does not support the Crop Committee's recommendation to reject the petition listing odorized propane to control burrowing pests on the national list. The basis of this committee's recommendation, that adequate alternatives exist, does not take into account all crops and all environments – in our case, walnuts. While the alternatives may be adequate in some circumstances, they are not adequate to control larger infestation problems and more aggressive populations. As you may suspect, burrowing pests, like squirrels, love walnuts and are not easily deterred.

In the past two years we've had two growers drop their organic certification because they needed more options to control their squirrel problems. These growers both practice dry farming in the coastal ranges mountains of California. Let us review the options that the committee has listed. Tillage. To actually destroy the squirrels' burrows in a walnut orchard would also destroy the walnut orchard.

Tillage also damages natural ecosystems bordering the orchards and can cause soil erosion on hillsides. Flooding is not an option for these farmers where water is so limited that they currently do not irrigate their orchards. Smoke bombs have been recommended for removal from the national list. Removal of food is practically impossible in a walnut orchard. Carbon dioxide is not a method used for rodent control in orchards.

Vitamin D3 is not approved for burrowing passage of squirrels, and trapping alone will not adequately control squirrel populations where their populations are so aggressive. The one grower told me that he put traps out on his orchard and within three days the squirrels had wised up and had moved on to just eating walnuts.

So I pose this question to you. What are the alternatives that these two growers have available to them? Certainly odorized propane is not the first tool a farmer should or would use, but it should not be excluded from their toolbox. The committee in their recommendation acknowledges that if this material is included on the national list, the organic operator would still have to demonstrate that they have exhausted all cultural methods before using this management method on their farm.

This also means that – oh. Because it will be allowed on the list does not mean that the grower has to – does not have to also comply with Endangered Species Act, safety regulations, and all other state, federal, and local regulations. Burrowing pests are a problem with walnuts. They kill our trees. They destroy water efficient irrigation systems by biting holes in soaker hoses and off of micro sprinklers.

They destroy our ecosystem such as cover crops and prevent hedge row planting and they eat our crop. So please, when you go to vote, remember squirrels like nuts.

Tracy Miedema: Thanks so much. Any questions? Barry Flamm.

Barry Flamm: Could you please clarify what squirrel you're referring to?

Jenny Moffitt: Oh, the ground squirrel.

Tracy Miedema: Any other questions? Thank you.

Jenny Moffitt: Thank you.

Tracy Miedema: Next up is Mr. Phil LaRocca. Dena Jones is on deck. Dena Jones, are you here?

Phil Larocca: Good morning and thank you for giving me the opportunity to speak with you. My name is Phil LaRocca. I am the owner and the winemaker for LaRocca Vineyards. We farm close to 200 acres of wine grapes and produce about 25,000 cases of wine annually. I've been in the organic industry for 40 years. I was first certified in 1974 when the inspection was a little bit rough around the edges because I inspected myself.

I also served in many capacities. I was president of the California Certified Organic Farmers for seven years and Gray Davis administration in California, Governor Gray Davis, I served as the organic representative on about seven boards and was also taken to the WTO to speak on organics in the state of California.

So I've been around the block several times. As president of CCOF I was involved when the USDA was taking over the organic standards. And being a winemaker I was very much involved in producing the rule that we have today on organic wine. When we started, there was a problem with this. Not for me, because I don't use sulfites, but the Food and Production Act of 1990 clearly forbad the use of sulfur dioxide in any organic product.

Any organic product. Now, coming from my heart, I think anybody that believes in organic should grow and process organically simply because it's the right thing to do. it's good for humankind and it's good for the environment. But, unfortunately, economics does play in effect. So there were several winemakers out there, and wine growers, that did use sulfur dioxide.

So myself, working with this board very closely 10 years ago, came up with an alternative for these folks and that was the "made with" category. I spent a lot of time, as you people do on this board, working with this board and the chair of the Handling Committee, to come up with this alternative, the "made with organic" program.

I spoke with senators from two different states to get what we now have the Boxer Amendment. We then took it back to this board and the board voted unanimous on two levels of organic certification. One, organic wines, 100 percent organic grapes, in that and no sulfur dioxide or any synthetic added. You were allowed the seal and to call that wine organic. Category two is those 100 percent organic grapes and you have a "made with" level and you can use up to 100 parts per million.

Which is actually shaky because Madam Chair spoke about the FDA a lot, you know. The FDA is the one that came up with the rule of 10 parts per million being the safety line. So even at this level you're 90 parts per million over what the FDA actually considers a safe level. But at any rate, we worked on that and we kind of worked the kinks out of it.

And I want to address the label yesterday. As Miles pointed out, that's an absolutely illegal label. The rules as was passed by this board with the made with category is 100 percent organic grapes. And there was a mix-

up by the TTB and the certifier, because you submit an organic label, your certifier looks at it, then we send it to the TTB, then it gets sent back to the certifier.

And as you're inspected that gets – you go through all your labels because wines are multiple years. So you have to show this. So somewhere along the line somebody blew that. But the correct thing, Madam Chair, is 100 percent organic grapes.

Tracy Miedema: Thank you, Mr. LaRocca. I have a question.

Phil Larocca: Was that my three minutes already?

Tracy Miedema: That was your three minutes.

Phil Larocca: Oh, man. I speak fast, too.

Tracy Miedema: Mr. LaRocca, I have a question for you.

Phil Larocca: Please.

Tracy Miedema: Why do you believe – just a moment, please. Mr. LaRocca, why do you think the sulfite provision is in the OFPA? You know, it seems like there was a translation of what was in the OFPA into the reg, or that's what happened, and maybe you have some additional historical background on that part too.

Phil Larocca: I do. Basically, when we were early pioneers – you can see by my gray hair I am an early pioneer – basically, when we came up with the concept, synthetics were to be kept out of organic. And that was pretty much the basic concept. And when we went down the list of items, sulfur dioxide was considered toxic at that time and was not allowed in the production.

And it still isn't, except for wine. That was the one exception that we made. And when we put it in the bill, the bill is kind of yada, yada, yada and by the way, at the end of the bill let's allow sulfur dioxide in the made with organic wine category. And that's how it was passed.

So it was kind of an idea where let's try to do this as clean as we can, as organic as we can, without the use of synthetics.

Tracy Miedema: Any other questions? Jay Feldman.

Jay Feldman: Thank you. Thank you, Phil. Can you help me educate folks a little more on the history of the law and the spirit and intent of the law and tell

me, you've been around since the beginning of all this, whether this language rings a bell with you and where it might come from. Most consumers believe that absolutely so synthetic substances used in organic – are used in organic production.

For the most part, they are correct and this is the basic tenet of this legislation. The committee, this is the committee that wrote the legislation, does not intend to allow the use of many synthetic substances. This legislation has been carefully written to prevent widespread exceptions or loopholes in the organic standards which would circumvent the intent of this legislation.

I would – could you help me correct the program's interpretation of this legislation vis a vi, one of the goals of this legislation, I repeat, is to reduce to the extent possible the reliance on synthetic substances. Thank you.

Phil Larocca: I believe that in the preamble it says quite clearly that whenever a product can be made without it should be made without. And if there was any health hazard, it should be left out. One of that comes from the fact because when I was president of CCF we did a poll.

And this was a few years back, but we did a poll and it was mostly, quite frankly, women that were buying organic between the ages of 32 and 55, usually very well educated with an income because at that time it was considered to buy organic you spent about 30 percent more. And when we took the poll every one of them said they were willing to spend the extra 30 percent on organic but, by god, if they're buying it organic it'd better be 100 percent organic in the sense that they – most consumers when they see an organic product consider it to be grown without chemicals and processed without chemicals. We do have exceptions to that but this is what the consumer thinks. And I think we need to go along with the consumer because that's who's buying our product.

Tracy Miedema: Jennifer and then Nick.

Jennifer Taylor: Thank you so much for taking time to explain this issue with us. Can you explain again the benefits of an organic product?

Phil Larocca: The benefits in an organic product is – I like to use this example. I have grandkids now. My grandkids can walk through my vineyard at any time and grab fruit off of my grapes and eat them whole without any fear. I think that any time that anybody, anybody could put something in their mouth that is free of synthetic chemicals, that's the way it was meant to be.

Tracy Miedema: Nick.

Nicholas Maravell: I don't want to strike too far here but I too have some gray hair. And you referred to a preamble in the OFPA and I guess I just want to say that that preamble was never enacted into law, despite the good intentions. But what the law does say is to be, you know, sold as organic "the product shall have been produced and handled without the use of synthetic chemicals, except as otherwise provided in this title."

Phil Larocca: And this was an important foundation, if you will, of the organic program and in the beginning there were no synthetics permitted in any processed product such as a wine. And that was later changed in law. And I think the consumers got started off on the line of reasoning that you have portrayed here, that there were no synthetics, but that's not exactly what the law says. But there was a strong intent in that direction. And I'd just like to add that sort of for the historical aspect.

Jay Feldman: If I may make a comment, remember that this board passed this allowance of sulfur dioxide only in the made with organic category.

Phil Larocca: Absolutely.

Tracy Miedema: John Foster.

John Foster: Thanks, Phil. Good to see you. So I had a question. I don't remember what day it was, just recently, though, about – it had to do with kind of the growth of organic wine...

Phil Larocca: Mm-hmm. Yes.

John Foster: ...sales and we'd heard some figures. But we hadn't heard figures on the growth of wine cells, the made with organic grapes. And I was – I would – if you have a sense of that growth...

Phil Larocca: I do.

John Foster: ...in comparison, that would be helpful.

Phil Larocca: I have a couple statistics, one from CCOF was that in 2010, which according to OTA at that time, a five percent growth was considered good. Wine experienced a 12 percent growth. In talking to most of my distributors, a lot of that was in the non-sulfite category, but the wines made with grew as well.

But this is a real good statistic. Remember, in 2010 the only major growth that CCOF saw was that barley was number one and wine grapes were number two, and that was an 18 percent increase on that.

Statistics from the University of California, Karen Clonsky's report, the number two cash crop in California after lettuce, my friend, is wine grapes. So the industry is doing quite well.

Tracy Miedema: John Foster.

John Foster: So excellent on the grapes. I'm all for that. But on –

Phil Larocca: You like the lettuce too, I bet.

John Foster: Well, I don't mind the lettuce. That's even better for, you know, that's – thank you for pointing that out. But so clearly the increase of organic wine is on the rise.

Phil Larocca: Absolutely.

John Foster: (Inaudible) here. So--

Phil Larocca: I have 77 percent growth from, what was it, 2005.

John Foster: Okay. Of organic wine.

Phil Larocca: Correct.

John Foster: Then what is the growth in wine made with organic grapes?

Phil Larocca: I think they link them together. I haven't really – what I got, and you know, there's a distributor here today that can maybe give you better, but it was my understanding from talking to my distributors across the country that both sales are up in both categories but they are seeing a little higher growth in the non-sulfite category.

Tracy Miedema: Thank you very much, Mr. LaRocca.

Phil Larocca: Thank you and thank you for all your hard work. I know the effort it takes.

Tracy Miedema: Dena Jones is up now. And Didier Jacquet is on deck. Pard NOSB on our interruption, ma'am. I wanted to make sure all the board members get seated before you proceed and make sure we're all giving you our full attention. Mr. Feldman, will you please be seated for our expert testimony at the podium? Thank you. Please proceed, ma'am.

Dena Jones: Thank you. Good morning, members of the board. My name is Dena Jones and I work for the Animal Welfare Institute. I'd like to offer a few brief comments this morning on the Livestock Committee's proposed Animal welfare recommendations.

The Animal Welfare Institution operates its own welfare certification program called Animal Welfare Approved and about half of our farmers are organic certified. So this is an issue of great importance to us. I don't know if you realize it or not, but in general, animal welfare organizations in the United States do not endorse organic to consumers as a means of obtaining a product for animal welfare considerations.

The reason for this primarily is because of the great variability that currently exists in the level of animal welfare among the different organic producers. Probably you realize that. We don't seem to have that same level of inconsistency within our animal welfare certification programs that we currently have. We feel that there shouldn't be a need for a watch dog group like Cornucopia to rate organic producers, but unfortunately, that's the case today

Some organic consumers simply are not getting what they think they're getting or they're not getting what they want, or both, in terms of how animals raised for organic products are treated. Over the past decade I would say that animal advocacy groups, and myself in particular, have lost faith in the integrity of the organic seal.

One of the things you need to do restore that faith is to increase consistency in the application of organic certification. To do that, we need clear and measurable requirements. And in fact, if they are requirements they need to be in regulation and not in guidance. They should be a combination of outcome based and quantifiable engineering standards.

This shouldn't be about setting the bar low enough that everybody can reach it, but rather, about meeting consumer expectations, rewarding farmers that are fulfilling the organic concept, and providing animals with a high level of welfare under the organic seal.

I've heard many of you say yesterday when I was here that it's not just about the amount of space an animal receives, and believe me, I wholeheartedly agree. We have dozens of pages of standards for every single species and very little of that speaks to space. But not only are some of the proposed space allowances inadequate in our view, you're also not requiring basic environmental enrichment both indoors and out.

Things like vegetation, shade, and cover for birds and pigs, water for swimming and bathing for ducks and geese, a couple examples. So we encourage the Livestock Committee to begin the process of making these improvements by adopting the minority opinion. And thank you for your consideration this morning.

Tracy Miedema: Thank you very much, Ms. Jones. Before I call on any board members with questions, on the last speaker let me just make a point of order here. I asked a question first and it is most appropriate for me to call on my colleagues first. This has greatly disturbed one of my colleagues on the board. I beg your forgiveness for asking a question first and I will not make that mistake again during the proceedings.

Ma'am, we are ready your questions. Are we ready to take questions from the board? Does anyone have any? John and then Jennifer.

John Foster: If you could point to one specific number of area that is most critical, that if you could – if you could, just a little experiment, if you could have no other changes made what would your highest priority be?

Dena Jones: That's difficult because, to be honest, there are just...

John Foster: Well--

Dena Jones: ...dozens of things if I was to redo it.

John Foster: Understood, but some half to rise to the surface more than others.

Dena Jones: Right. Well, last spring we identified space for pigs and that was increased. We currently feel that the outdoor space for birds should be increased but that's just one thing and it's very difficult for me to rank. And in my written comments we go through about a half a dozen things. We tried – we don't want to hit you with a laundry list.

Dena Jones: We think it's a start. It's not a good enough start for animal welfare groups in the United States to endorse this program. If you go forward as it is currently, we will not.

Tracy Miedema: Who else has a question for Ms. Jones? Jennifer. Thank you.

Jennifer Taylor: Thank you so much for talking with us. Can you tell me how, if there is a vision between your approach in working with animals and the one that we've – the concepts that we've provided, and where does the issue of sustainability lie? Or is there an issue with sustainability?

Dena Jones: You know, we look at humane and sustainable as being complementary. They're slightly different but they're both – we embrace both of them. And we do look – I think all of our – the welfare certification programs also look at sustainability but our focus, primary focus, is animal welfare. And I do want to make the point that animal welfare certifications, and there are several of them, they're not the same.

But within each of those programs there is consistency. So we have some programs that are closer to the industry conventional level and some that are very high welfare level. But within the program they're all consistent. Because the organic is currently not that way. We treat it not as a welfare program.

Tracy Miedema: Thanks very much.

Dena Jones: Thank you. Didier Jacquet is up next. Greg Herbruck is on deck. Mr. Herbruck, are you in the building? Thank you.

Didier Jacquet: Thank you. Good morning. So as I spoke to this board in Seattle a few months ago, sulfur dioxide is a dangerous synthetic additive and flavor modifier that has no place in a natural product. The United States currently has the highest standards in the world for organic wine and there is no valid reason to lower them. Although some want to place it in a separate category, wine is a food product and the FDA makes that classification by considering wineries as food processing plants in the Bioterrorism Act of 2002.

Therefore, why should we allow SO2 and other preservatives in wine while not allowing them in other organic food products? Award-winning wines of all styles are produced worldwide without the use of this harmful chemical which also puts at risk the health of a great number of individuals that are allergic to it, not to mention the winery workers handling the product. As a winemaker, I object to the taste imparted even at low levels to otherwise perfectly good wine.

Plenty of alternative methods exist that are not harmful to the consumer, operators, or the environment in which certified organic producers are using with great success. Also in my experience as a nanologist, the chemistry of sulfur dioxide in its various forms present in wine when added is still poorly understood by many of its users and I cannot emphasize more the dangers of this product present at high concentration in the winery environment.

There is also a myth that SO2 is an absolute necessity as an antioxidant and preservative in commercial wines and that organic wines don't age. As the producer with LaRocca Vineyards of the first certified organic sparkling wine in the U.S., I can testify that our 2003 vintage shows no sign of premature aging and fares as well, if not better, than conventional wines in the same category in blind tastings.

It was praised by several of the foremost experts in Europe and the U.S. for its style and quality as a non-sulfited wine. Consumers have total trust in the USDA seal and it is indeed consumer confidence in the organic label that is at the forefront of this issue. It would be irreversibly damaged if SO2 was to be allowed in certified organic wine.

The public has already overwhelmingly rejected this proposed change in formulation. As for them, the USDA seal is the only guarantee of getting a sulfite-free wine. A specific category already exists for those who choose to use SO2 in their wines which is "made with organic grapes." It would be foolish, in my opinion as a wine professional, to allow sulfur dioxide or any other synthetic additives or preservatives in certified organic wine.

I can only question the motivations of the petitioners who are putting commercial interests ahead of quality and consumer safety by requesting to allow SO2 in a natural food when proven alternatives – alternative methods exist. To make a quality product that is close as possible to nature while respecting the environment is the cornerstone upon which the entire organic movement was built upon.

Didier Jacquet: a betrayal of the very principles of certified organic farming and the beliefs of its founders. So please keep organic organic. Thank you.

Tracy Miedema: Thank you, Mr. Jacquet. Any questions? John Foster.

John Foster: You said that the organic label is the -- I'm sorry, I'm paraphrasing – is the only guarantee of no added sulfites. And my understanding is that there's a mandatory labeling from another agency that must be there if sulfites are added.

Didier Jacquet: That--yeah.

John Foster: What – I want to parse that out a little bit because what my ears heard was that that label, the no sulfites added claim, is not – is somehow insufficient or not trustable? And I – what is your take on that label claim?

Didier Jacquet: What the customer is looking for, for a non-sulfited wine is the USDA seal. We hear that over and over again in trade shows, in fairs, in all kinds of events that we go to and we participate to. They are looking for the USDA seal as a guarantee that they are no synthetic additives in the product and that of course includes sulfur dioxide which is a byproduct of the oil industry.

Tracy Miedema: John Foster.

John Foster: But my question was is that other label claim "no sulfites added", is that reliable?

Didier Jacquet: Somehow. It has to do with the way the TTB interprets the way the front and the back label – the mention "contains sulfites" is often put in a very, very inconspicuous place and you really have to look for it in order to find it.

Tracy Miedema: John Foster.

John Foster: I just want to know if it's reliable. When it's there. Yes, I understand it may not be as prevalent or as prominent but I'm operating under the assumption that it's a reliable claim when it's there. And you have more experience with that, about that. That's not my world. TTB is not my world. So is it – when it's there is it reliable? That's all.

Didier Jacquet: Oh, it's just an indication that it contains sulfites. It's never going to tell you how much. You know, 100 parts per million is a lot. So if the test contains sulfites it's basically telling you that it has more than 10 part ppm of total sulfur dioxide content. It doesn't tell you how much and it doesn't tell you about your level of sensitivity to it. You're welcome.

Tracy Miedema: Steve DeMuri.

Steve DeMuri: Thanks for testifying to us this morning. Like many on the board, probably I'm wrestling with this issue. And looking for a marketing study that will support your claim of what the public wants. I've been looking myself; I cannot find anything. Can you point me in the direction where I can actually see something with some data in it?

Didier Jacquet: That would be a question for a distributor to answer, because as a producer I'm not involved in the marketing and distribution of the wine. I just know the health hazards associated with the product.

Tracy Miedema: Thank you very much.

Didier Jacquet: You're welcome.

Tracy Miedema: Greg Herbruck is up now. Shawn Harmon is on deck.

Greg Herbruck: Good morning. My name is Greg Herbruck. I'm an organic producer in Michigan, and we, along with 30 contract producers, work in Michigan and Indiana. I offered to the board to share some of my time if you are willing to look at this research that I've provided in this packet. It's pretty concise. There is research and science to support this. It's from ag specialists, veterinarians, and state veterinarians that represent recall-type situations.

The bottom line is within the animal welfare guidelines is that there was very little consideration for the salmonella and (inaudible) risk to the hens and to the welfare of the hen. Salmonella is a real risk. We just have frequent information on this that – we had a recall in a small farm in Minnesota that is the model of what we do – or what was proposed. But there truly is a direct conflict with the APAs – or the FDA's egg safety rule.

When you look at what is required of a bio-security program. Producers are required to keep wild vermin, animals, and birds away from the hens. What's proposed with a direct outside access will not allow that to do both, to be a certified organic producer and to comply with the FDA rule. And I fear that we're going to have a program that's trying to get around the rule.

It still – food safety is important. It has to be considered. So I would say that if we – if the board goes ahead and removes a porch as an option as to what can be considered as a tool for protecting our birds in a bio-security, then this animal welfare and stocking guidelines need to be withdrawn.

The NO – the NOSB needs to limit or to – the NOSB needs to limit – or the listen to the farmers and experts who work with poultry every day and have voiced their concerns on this proposal. Disease is a real threat. SC is a real risk to humans consuming the eggs. People who care for and treat hens for a living understand this. And the hen – the hen on the NOP program does not have a protective halo just because we think it so. Thank you.

Tracy Miedema: Thank you very much. Mac and then Tina.

Robert Stone: What is the method of vaccinating pullets and what are you vaccinating for?

Greg Herbruck: It's a fairly extensive program. It includes bronchitises. We also do coccidiosis. There's two – or three salmonella vaccines, two live, one kill. It's fairly extensive. It all – incurs – occurs in the pullet program. The last one is at 14 weeks and typically, as you know with a poultry background, it takes at least a week or two for the bird to go through its immune – immune response to be – to have the protection after a vaccine – vaccination.

Robert Stone: How is that administered?

Greg Herbruck: The SC vaccines? Well, some are water, some are spray, and some are injections.

Tracy Miedema: Tina.

Kristine Ellor: I just want to – I just want to say that of course we've taken the FDA's position on this into account and the program is working with them. Outdoor access is written into the regulation; it's just been not applied very evenly and that's what we're trying to ameliorate here. And we keep hearing mention of this one farm when there have been, in fact, many, you know, farms that keep their birds inside who have also had trouble with salmonella.

Kristine Ellor: So just to clear that up.

Greg Herbruck: But that the science that I support – that I've supplied does support that. The soil based system is a higher risk and once you've got a disease or salmonella in the soil, how do you clean it up?

Tracy Miedema: Tina, did you have a reply?

Kristine Ellor: I'm – I don't want to get into this in this format but of course organic standards are soil based.

Tracy Miedema: Joe Dickson.

Joseph Dickson: So Greg, I hear you, you know, making a particular argument for either no outdoor access or limited outdoor access or porches for chickens. And from the perspective of a consumer buying eggs labeled as organic in a supermarket, how do you feel that that environment you're arguing for squares with that person's expectations, generally?

Greg Herbruck: It squares because it's been approved. We've been certified organic with porches since – and they've been authorized since 2002. I'm sure you're going to hear more about that. But our consumers understand

that. They look at what the total system is. They – organic to them is about the purity of the system and that there's no pesticides, herbicides, and that they're – the birds are free-roaming in their environment.

And we do provide outside access in the porch that's been approved ever since we started using them in 2004.

Tracy Miedema: Thank you very much.

Greg Herbruck: Thank you.

Tracy Miedema: Shawn Harmon is up next. Dr. Allen Green is on deck.

Shawn Harmon: Good morning. My name is Shawn Harmon and I am the director of operations for Barra of Mendocino in Mendocino County. Barra of Mendocino is our family-owned winery which is led by my step-father and veteran grape grower Charlie Barra, who has just completed his 66th harvest.

Charlie, who will turn 85 this month, is still the driving force behind our family's 200 acres of certified organic vineyards, most of which have been in the family since 1955 and which have been certified organic since 1991. Charlie's years of experience and dedication to organic farming shine through in the wine that we make, all of which is produced from our estate-grown certified organic fruit.

The reason I am here today is to impress upon you how vitally important it is to the organic wine grape and wine industry that we move beyond the sulfite fanaticism of the late 20th century. The changes to the organic wine labeling regulations that we have proposed will have a positive impact on the demand for, and the expanded production of, certified organic wine grapes. Currently, there's very little demand for organic wine groups due to the lack of certified organic wineries in the United States.

Because of this lack of demand, many certified organic grapes end up being used in non-certified brands. They may be combined with fish-friendly grapes and sustainable grapes to make an eco-friendly blend, but there is no requirement for organic certification to make such claims.

So even if you want to continue to farm organically because you know it's the right to do for the environment and the health of your employees, why would you pay certification fees to the state, and an accredited certifier, and subject yourself to all the additional paperwork and inspections when

you aren't even selling your grapes to a winery that is going to use them in a certified organic product?

The answer is: You wouldn't. And this is why there's currently a trend of decertification in our industry. So how do we change that? Well, the solution is presented in our petition. Certified organic wineries that use 100 percent organic grapes to make their wines with a minimal amount of added sulfites deserve the right to use the USDA organic seal because their product is 99.99 percent organic.

For those wineries that choose not to add sulfites and follow in the footsteps of the Frys by making wines that are 100 percent organic, and you can refer to attachment A, they will have the elite distinction of being able to label their wine as 100 percent organic. This is an equitable, practical, and commonsense solution. The current and unfortunate division amongst the US organic wine industry over the use of sulfites is simply a difference of ideology.

It has nothing to do with health impacts or environmental degradation associated with the use of sulfites. It is simply a choice made by the NSA producers not to use sulfites in the winemaking process because of a chosen ideology. It has nothing to do with innovative winemaking procedures or vineyard health or physiological maturity of the grapes used. It has to do with the absolute refusal to use added sulfites, regardless of the risks even when microbial problems are encountered or when non-ideal growing conditions warrant their use. It should be noted, ironically...

Tracy Miedema: Thank you, Mr. Harmon.

Shawn Harmon: Last paragraph. That the Demeter International Biodynamic Wine Standards that are heralded as being a step up from organic standards actually allow the addition of sulfites in greater concentrations than the current US Organic Standards. While Demeter has the aim, or the goal, if you will, of having sulfur dioxide use restricted to the absolute minimum, the standard for dry whites is 140 parts per million...

Tracy Miedema: Thank you, Mr. Harmon.

Shawn Harmon: Thank you.

Tracy Miedema: Any questions for Shawn Harmon? Jay Feldman.

Jay Feldman: Thank you. Thank you. Are you saying that we – wine cannot be grown without the addition of – or, not grown but cannot be processed without the addition of sulfites or are you saying that the quality is insufficient? What – what is your claim regarding the impact that the current standard, the current process has on your winery in terms of your inability to meet the current standard of no sulfites?

Is that a technical problem? Is it a philosophical problem? Is it a question of taste? What is it?

Shawn Harmon: No. For winemaking it's a technical aspect. It's a high risk in many situations not to have the tool of sulfur dioxide, sulfites, to add to the wine to cure potential problems. In perfect growing conditions and perfect growing year and perfect environment with no exposure to oxygen during the winemaking process, in a perfect world, yeah, the ideal situation would be to minimize, you know, any additions to wine.

But that's not the reality. Not every year is perfect. And it's too big of a risk from a winemaking standpoint, from a winery profitability standpoint, to sacrifice or potentially sacrifice, you know, a vintage if everything doesn't, you know, if the stars don't align. It's not a perfect world. It's not a perfect system.

Tracy Miedema: Nick Maravell.

Nicholas Maravell: Yes. I had a question mainly of clarification. You say there's currently a trend of decertification in our industry. I assume you're not talking about decertification as in somebody had a potential violation and lost their certification. You're talking about people who are voluntarily leaving the area of organic grape production; is that correct?

Shawn Harmon: Correct. Or at least the certification.

Nicholas Maravell: They may still be using organic practices but they may not be seeking certification.

Shawn Harmon: Correct. I get that comment quite often. We also own a custom crushing winemaking facility that is certified organic so we process grapes for both conventional and organic growers. I'll get a phone call and they want to know if we can crush the grapes for them. I ask them are they organic. Well, yeah, they're organic. They're just not certified. Well, you know, are they or aren't they?

Nicholas Maravell: Right.

Shawn Harmon: Unless they are certified, it, you know, it doesn't matter. I mean, they have to be certified for us to be able to do anything with them.

Nicholas Maravell: Right. Well, do you have any more information about this trend? In other words, what is it – over what period of time and--

Shawn Harmon: It's based on what I've seen over the last three years, in part due to the economy. The price of grapes dropped dramatically over the last few years. Supply was – there was an oversupply and an underdemand. Growers – certified organic growers, couldn't sell their grapes as organic. They couldn't sell them as conventional. And there's just, you know, there's no money in it.

You know, there's no profit in it. And so why would they pay for continuing certification if their potential sell is going to be to a conventional winery? There just -- there's not enough demand for the organic acreage that is out there.

Nicholas Maravell: Okay. So there's – and you feel that adding sulfites, then, to a wine – what we currently have is "made with organic grapes" but changing that to simply say "organic" would change not the supply side but would change the demand side for organic wine? That's my question.

Shawn Harmon: It'll change the demand side, which then obviously will drive the supply side because as the demand goes up, the more vineyards will convert back to organic or convert to organic.

Nicholas Maravell: Want me to stop? Oh.

Tracy Miedema: Nick, did you have a follow-up question?

Nicholas Maravell: Well, okay. I have a follow-up question, then. The increase – I'm trying to – I'm really trying to grapple with this because, you know, as John points out, you know, what's inside the bottle is not going to change; it's what's outside the bottle that would change. And you're suggesting that simply by making this change, this one change, more people would buy the wines that are currently being produced, many of which are labeled "made with organic grapes."

Shawn Harmon: That's correct. And I believe what it would do, it would actually solidify the category of USDA certified organic wines because instead of having just no sulfite added wines produced from a very limited number of wineries from very limited regions, it would open it up to a much broader category of different varietals, appellations, winemaking styles.

It's not just about sulfites. Individual winemakers have their own ability to make wine. Different tier water has different flavors. If the consumer has a broader selection, I think it'll be a benefit for even the NSA wineries as well as the sulfite-added wineries. And I also think it's a good step and a logical step just as with – I mentioned biodynamic and in Exhibit B you'll see the biodynamic aim and the goal is to use the absolute minimum amount of sulfites.

Shawn Harmon: That's a perfect goal for the USDA organic seal. But it's not realistic to say absolutely you can't use any.

Tracy Miedema: Thank you, Mr. Harmon. John Foster.

John Foster: So if you – if you have a sense of the growth of wine made with organic grapes relative to what sounds to be extraordinary growth in organic wine, I'd love to know about that. What is the growth--

Shawn Harmon: I'm sorry; I missed the first part of your question.

John Foster: I'm sorry. We've heard – we've heard about numbers of growth of organic wine, that that's doing very well, but I haven't heard where that fits relative to growth of made – wine made with organic grapes. I don't know that. If you know that, that would be helpful.

Shawn Harmon: I don't know that either and I...

John Foster: Okay.

Shawn Harmon: ...can't verify or deny but I find the numbers that were just reported earlier, again, I'd like to see some hard data on that.

John Foster: Okay.

Shawn Harmon: Because I know what our own sales are. We produce about 30,000 cases a year. Over the last two years our sales have been flat. And so if there's been 12 percent sales growth then obviously somebody's doing 24 because we're doing zero. I don't see it.

John Foster: Okay. And, I'm sorry. I was going to – I was going to do a two-part question. And then, oh, back to the reliability of the "no sulfites added" claim.

Shawn Harmon: Yes.

John Foster: When it's there, again, is it reliable?

Shawn Harmon: Absolutely. And "no sulfite added" does not mean organic. Organic does not mean no sulfite added. You can have a conventional wine that says no sulfites added.

Tracy Miedema: Any other questions? Jay Feldman.

Jay Feldman: Thank you. Do you have any survey data that would indicate there would be an increase in sales if the label change was to be made?

Shawn Harmon: No.

Tracy Miedema: Thank you very much, Mr. Harmon.

Shawn Harmon: Thank you.

Tracy Miedema: Dr. Alan Greene is up next. And after Dr. Greene we will be taking a short break.

Dr. Alan Greene: My name is Dr. Alan Greene. I'm a clinical professor of pediatrics at Stanford University School of Medicine, a children's health advocate, primarily at DrGreene.com, and with respect to this issue I've been a consulting pediatrician with Horizon Organic for several years in an effort to improve the health of our nation's kids.

And I've been looking forward to these meetings very much. But on Tuesday afternoon, Mr. Kastel from the Cornucopia Institute pulled me aside in the hallway outside this room and warned me pointblank that if I testify in favor of the petition on DHA, that he would devote considerable resources – his words – to a public campaign to ruin my reputation and destroy my career.

I've consulted for three organic food companies including Organic Valley and Stonyfield Farm in an effort to improve children's health. When Horizon was considering adding DHA to their milk, they asked my opinion, which I gave. My views are mine, not theirs. The only person who has used economic incentive to try to change my opinion is Mr. Kastel.

I first came to DHA, the issue, not as a pediatrician, certainly not as a businessperson, but as a dad. My wife was diagnosed with inflammatory breast cancer when she was nursing my now-16-year-old son and she was told she wouldn’t survive the year.

She turned to me and asked, "What do we feed my baby?" I became a citizen scientist in search of what was best for my son. And what I found I shared with others as a pediatrician and a child health advocate. DHA was

the issue that led me to my passion to good food as central to good health and to organics as our best hope.

Mr. Kastel knows this. Because this is not the first time he has specifically told me that he would seek to destroy my livelihood if he did not approve of my testimony. The reason I decided not to attend the previous NOSB meeting about this issue that I've long cared about, is that he made similar statements in the past.

But I remained silent. After weighing his statements this week I've concluded that the value of my three minute testimony in advancing children's health would not be worth the risk to myself, my wife, and my children. So I will not comment on the DHA petition before the board.

But I will say that we're living in a time of nutritional crisis for our children and the way we've been feeding them has not been working. Children are built from the food that they eat. We've been talking here about other ingredients. If America's children came with an ingredient label, the number three ingredient would be soda.

They're overfed and undernourished and seriously lacking in recommended amounts of calcium, Vitamin D, potassium, fiber, and Omega 3 fats in general, as well as DHA in particular. Now, I appreciate the concerns expressed here about GMOs by (inaudible) and others. I don’t believe GMOs have any place in organics. Further, other ingredients used in DHA formulation should be held to the same standards as substances already on the list like fish oil.

DRBut I'm not – I've got nothing else to say about it except that I appreciate your work at the NOSB in advancing the health and our planet by advancing the standard and the integrity of organics. It's our future. It's our future. Thank you.

Tracy Miedema: Thank you very much, Dr. Greene. (applause)

Mark Kastel: He gaveled down others by simply saying the name of a (inaudible).

Tracy Miedema: The galley is out of order. Do any board members have any questions? Jay Feldman.

Jay Feldman: Alan, thank you very much. I know that was difficult and you know I appreciate your long history and commitment to protecting public health in children especially. And especially educating the public on the hazards of pesticides and the impacts they can have on their health and

development. So I thank you for that and your commitment to these issues over the long years.

Jay Feldman: Does that mean – your statement, does that suggest you're not going to take any questions on DHA or--?

Dr. Alan Greene: I'll talk about anything except the petition itself.

Jay Feldman: Okay.

Dr. Alan Greene: I want to be a resource where I can.

Jay Feldman: Yeah.

Dr. Alan Greene: If that's okay.

Mark Kastel: Tell them how much money you--

Jay Feldman: Okay, Mark. Mark, please. Please.

Mark Kastel: Well, he just – he just turned me away.

Tracy Miedema: The galley is out of order. Dr. Greene, my apologies. Do any members of the board have a question for Dr. Alan Greene? Jay Feldman.

Jay Feldman: I would think this board would want to take – or hear your perspective on this. And given what we heard from FDA this morning I sort of have a couple questions. Why is it so difficult to get this thing to be an essential ingredient? Okay. That would be one thing, especially given all the work that you and others have done on this.

So that would be one question. And then the other question you know we're grappling with – we've spoken about this – is how this thing is produced and whether it has the production process. And I understand there were two, having read the petition, which we're not going to talk abut, but that there are – there are different production processes even when you're talking about a generic – this in the generic sense, and we somehow have to figure out, I believe the one that fits within the standard of the Organic Foods Production Act and I wonder if you – I'm not sure you have any thoughts on that, but if you do have any thoughts on the production process, I'd be interested in them as well. So the first issue is the essential ingredient. How do we get to that, if we do, down the road?

And two, given what you know about chemicals, I mean, you've spent your life looking at these things, we have a duty under the standard of the law

but we also have a concern about chemical production processes. Thank you.

Dr. Alan Greene: The word "essential" is used in a couple different ways I've heard this week and one of them is, my understanding relevant to the petition, is whether something's essential to the production process. Like is this DHA essential to make DHA milk kind of question. And that essential is something better answered by food producers in relation to the petition, so I don't want to even deal with that.

But as far as is DHA essential to human health, there's no question about that. The only question is what sources there are. Is it essential to improving the health of our nation's kids to raise the levels of DHA and Omega 3s in their bodies? Yes.

And even with all the different sources that are available today, including the part – the amounts that our body make and all the organic products on the market and the non-organic products on the market, we're falling very short of what kids need for optimal health. In terms of the processes that are used, if my wife were breastfeeding right now and couldn't, my first choice would be to go to a human milk bank and try to get other breast milk.

But if I couldn't afford that or it weren't available in my area, I would choose an organic formula on the market today with DHA, even though I don't like the processing that's used for it. I don't think that there's – and there's better options available. I think that one of the things that we should do as a community is phase that out.

I don't think it belongs, going forward in organics. My only question would be what's the best way to do that? To keep confidence high and to keep products available that people need.

Tracy Miedema: Barry Flamm.

Barry Flamm: I'll show my ignorance but I've got a question for you. Why is DHA now in short supply?

Dr. Alan Greene: Omega 3s in general have been falling rapidly in the last 50 years or so for a variety of reasons, and DHA in particular. It's partly because people don't consume as much seafood, especially children. And organ meats, which used to be common when my parents were growing up. Organ meats which have high levels I don't eat, my kids don't eat.

And partly it's the way that our animals are raised. They have lower levels of Omega 3s than they used to have because of the feed that they get. And so there's less in general in milk, in meat, and in poultry and in eggs because of that. And then the American diet is so bad.

I mean, the kids are eating processed foods that the Omega 3s are specifically processed out of because they shorten shelf-life. That's the reason brown rice went to white rice, was to shorten – to extend the shelf-life, to make it a perennial crop. And you take out the Omega 3s to make that happen.

Tracy Miedema: Any other questions from any other board members before I ask a question? Dr. Greene, we heard testimony that somewhere north of 98 percent of infant formula now contains DHA. In your opinion, if DHA were to disappear from organic infant formula, would your – the mothers that you consult with, do you believe they would choose conventional with DHA or they be among that two percent choosing a product, say, an organic, without it?

Dr. Alan Greene: I think there would be a split among the consumers that I deal with but most of them would choose conventional with DHA. Would be my expectation.

Tracy Miedema: Thank you. We'll now take a recess for 15 minutes. A short break. That puts us back in here at – let's go ahead and say – what time would that be? Eleven.

[BREAK]

Tracy Miedema: NOSB members, please be seated. One more time. NOSB members, please be seated.

Ten NOSB members are present, which is quorum, and we'll proceed. That will probably be our last longish break of the day. We need to make up a little bit of time. It's about 10 after 11:00 which puts us at a little over an hour off schedule this morning. I'm committed to getting us back on schedule, folks. We'll get started with Chris Pierce and on deck is Paul Fry.

Chris Pierce: Don’t start the clock yet. Man, tough act to follow. Whoo. Madam Chairman, thank you for the break. Wow. Okay. Anyways, start the clock now. Thanks. Hi. I’m Chris Pierce. I'm president of Heritage Poultry Management Services. We're located in Anvil, Pennsylvania, real close to

Hershey. The sweetest place on earth. Our company partners with many different egg companies, along with many different small family farms.

We have a team of certified poultry technicians, PhD'ed poultry nutritionists, a support team with the emphasis on assisting our family farmers in the detailed hen husbandry care of their flocks in addition to being a tool to assist the farmers and meeting the various organic and welfare and food safety requirements on the farm.

We work with around 30 different small family farms in Pennsylvania producing organic eggs. Most are sold in the major cities of Boston, Manhattan, Philadelphia, Baltimore, and the home city of our NOP, Washington. All the organic farms that we work with, the family owns the farm, personally provides the care and the management of the flock as well as that family packs the eggs.

Seven days a week, 365 days a year – many of you are farmers – it's continuous, you understand that. Meanwhile, they're raising their families while on the farm. An important fact to share with the board is the approximate age of the organic farmers I'm talking about that we work with is 35 years old. That's – with the increased demand of organic eggs it has created new opportunities for the next generation family farm.

Can anybody give me a wahoo? Thank you. Our farmers are able to make a living for their family producing organic eggs on the farm that ranges anywhere from 10 to 100 acres, which is a different model than conventional production. They're motivated and committed to meet the consumer's expectations while meeting future increased defined welfare in animal and food safety requirements.

I appreciate the opportunity I had this past April to host Dr. Fulwider, the NOP leadership, as well as a representative from FDA to visit a variety of our small organic farms in Pennsylvania. The continuous growth of the US egg markets is consumers' preference to buy organic due to what I believe is they believe USDA's logo is the gold standard.

On behalf of those many organic family farms that I represent, whom they have invested their finances, along with their total commitment, I strongly encourage the NOSB to approve an outcome-based standard and send it to the NOP. We at the farm level fully understand the road after the NOSB is going to be long and challenging but we have confidence that right will prevail and organic standards for eggs will meet the consumers' expectations.

Time's still available. I also want to encourage the NOSB to set expectations for the accredidated certifiers to ensure those performing the on-farm organic inspections are trained and qualified in that specific type of operation being inspected. It's hard for a trained auto mechanic to perform a root canal. I had to throw something in there.

As the standards become more defined and yet still subjective, it's critical to the process that the inspectors are able to properly comprehend and evaluate the operations. Thanks to the NOSB and to the NOB – NOP for allowing me to share my comments.

Tracy Miedema: Thank you, Mr. Pierce. Any questions? Mac Stone.

Robert Stone: If – two questions. Do you know the square footage per bird on the houses that you – the operations that you have now, if that increases how much does that increase the cost of the eggs?

Chris Pierce: Good question. Yes, I can tell you that. All of our farms are certified currently by Humane Farm Animal Care certified humane. I'm sure it's an organization which you've looked at. They're one of the many that focus on welfare standards. The density that they require is minimum of 1.2 square foot. So if we moved to 1.5 or 1.8 –

Mac, if you bought the farm and it cost you half a million dollars to build the house, and you have this many thousand hens producing this many dozens eggs, if you have that less hens and that less dozen eggs that's the increase that we need to compensate our farmers. Because the income needs to basically stay the same with less yield. So if that answers your question.

Tracy Miedema: Mac.

Robert Stone: But we hear and understand that feed cost is sort of the primary driver of the cost of eggs versus the spatial relationship of housing birds.

Chris Pierce: Yeah. And that is another avenue. And actually, you made reference yesterday when you commented that – basically I'm paraphrasing – more modern conveniences of tools in the house ventilation. Because we do not provide alternative heat sources in our barns. So if it greatly changed the density, that is going to change the birds' performance, feed efficiency. There's going to be welfare aspects. So I'm encouraging the board to utilize some existing – Humane Farm Animal Care, American Humane.

There's a number of science based programs out there that are pulling in detailed proven information.

Tracy Miedema: Any other questions from the board? Katrina and then Wendy.

Katrina Heinze: So just so I'm clear, you don't support the recommendations as they stand right now.

Chris Pierce: No. There's details in there that I don't support but my worry is it's going to take you – this is such a big cruise ship; you guys move so slow. We can be here for 10 years from now talking about the same thing. I want you to pass this thing with just a general perspective. Let the NOP deal with it. Let's interact with FDA. There's so much ahead of you guys, yet we can't even start the race until you blow the – shoot the gun off.

So let's get this thing moving to NOP and then face those other battles that are beyond you. My opinion.

Tracy Miedema: Wendy Fulwider.

Wendy Fulwider: What is your biggest concern with the document as it stands?

Chris Pierce: Pullets. We are strongly opposed to pullets being required. Whether you're a big farm, little farm, whatever farm – excuse me, maybe the pastured folks may disagree with me but those that are producing the commercial eggs, organic eggs, for those living at 55th Street between 5th and 6th Avenue in Manhattan that don't have a neighbor producing eggs, they got to buy them in the store.

To have that commercial quantity you need some bigger farms. And those bigger farms need to be able to vaccinate like Mr. Herbruck shared earlier. We follow the same vaccination schedule with a final killed vaccination probably around 14 weeks of age. So that's probably my biggest concern, is that I do not believe it should be mandated that pullets should be required to have outdoor access.

Layers, that's a different story. I support that. I actually support that you have a training period for the birds to acclimate to the new house. Where is feed? Where is water? Where are the nests? Before you worry where the playground is. Let's learn where the life essential operations are. So that answers my – your question, Dr. Fulwider.

Tracy Miedema: Any other questions from the board? Thank you, sir.

Chris Pierce: Thanks for doing the right thing.

Tracy Miedema: Paul Frey is up now. Steven Frankel is on deck.

Paul Frey: Good morning, or afternoon, or whatever it is. My name is Paul Frey from Frey Winery. We've been making organic wine for about 30 years. We make about a million bottles a year. Before I start on this topic, first slide, please, I'm just going to spend about 10 seconds to urge the board to adopt the stance of board's statement on genetically engineered crops.

We banned GMOs in Mendocino County back in '05 and currently there is GMO yeast allowed in organic – not, organic winemaking, conventional winemaking and that could pollute, you know, other winemakers as the yeast blows in the wind. So I urge the board to adopt the stance of the board statement on genetically engineered crops.

So the title, I guess everybody saw it, sulfur dioxide is non-essential in organic winemaking. Recent use of sulfur dioxide has proven alternative. Sulfur dioxide has recently been used in winemaking primarily for its anti-microbial, antioxidant and antioxidation action. The following proven methods show that -- offer production alternatives to sulfur dioxide now and into the future.

Next slide, please. Anti-microbial alternatives to sulfur dioxide. Sulfur dioxide is primarily used to kill unwanted yeast and bacteria. What we use is integrated microbial management in the same way that a farmer uses integrated management on the farm.

You do the same thing in the cellar. So they'd have like a (inaudible) approach, use multiple approaches, starting with good grades, good cellar hygiene, steam sterilization, etc., etc. Next slide, please.

Antioxidant alternatives to sulfur dioxide. Sulfur dioxide has been used as an antioxidant during winemaking. Both red and white wines need variant amounts of oxygen at different times for proper development, actually. Too much or too little oxygen at the wrong time can lead to unwanted oxidized or reductive taste.

So, again, integrated oxygen management in the same way that farms have an integrated approach – with the oxygen, same thing. How do you do that? Oxidation analysis tools. General pressing, floatation, different methods. So you're oxygen bottling, primarily. Near zero oxygen closures, inert gas fleshing when you transfer, natural yeast and plant compounds that have antioxidant properties.

Next, please. Antioxidation turns into sulfur dioxide. Some use sulfur dioxide to prevent browning in the early juice. Interestingly, the alternative is not to add sulfur dioxide but to allow controlled enzymatic oxidation to occur before fermentation. This creates insoluble brown phenolic precipitation in white juice and leads to phenolic stabilization. This will minimize phenolic chemical oxidation in the finished wine.

So, strange as it sounds, if you nuke it with sulfite early, you're going to have more browning and oxidation in the bottle. Laccase enzyme which is associated with Botrytis fungus can also cause oxidation. Quick temperature increase neutralizes that enzyme. Next slide, please. Next slide, please.

Tracy Miedema: Your time's up, sir.

Paul Frey: Oh. Next slide? Right. Conclusion. Sulfur dioxide is not...

Tracy Miedema: Please make it quick.

Paul Frey: Excuse me?

Tracy Miedema: Make it quick, please.

Paul Frey: Oh. Oh. Conclusion: It's used for three methods, antimicrobial, antioxidant, and antioxidation. It's important to note that traditional methods can do the same thing. So proven and modern and traditional winemaking methods make sulfur dioxide use not essential now and into the future with an integrative approach.

Tracy Miedema: Any questions from the board?

Paul Frey: I just want to point out there's more details in the revised technical review.

Tracy Miedema: Jay Feldman.

Jay Feldman: If I were a wine grower who currently relied on sulfites in my production processing, and I wanted to transition to a process that did not use sulfites, where would I get information on that? And does one of the sources on that include or not include the extension service?

Paul Frey: There's actually non-sulfite production consultants that you can hire to do that now.

Tracy Miedema: Jay.

Jay Feldman: So is that something relatively accessible to the community of wine growers? In other words, if I wanted to transition away from the use of sulfites could I readily find somebody or some institution beyond one consultant roaming around somewhere?

Paul Frey: Globally, the information is available. You have to do your homework and it's fun doing the homework because you'd be surprised at what you find. But, again, there's currently consultants on the Internet that do non-sulfite wine production You can hire a consultant today.

Tracy Miedema: Thank you. Jay.

Jay Feldman: Thank you. Does that include the extension service? Is the extension service at all engaged in advancing organic practices in winemaking?

Paul Frey: Again, we basically – we did work with UC Davis about 20 years. We found all the different people. We sent some samples to them on different phenomena we were noticing in wine aged in barrels versus stainless tanks and oxidation rates and whatnot. There's a lot of good research in Europe coming out of Germany. We visited scientists in Germany and France, top scientists related to wine oxidation.

So it's out there and, like I said, it's fun because – the funnest part for me, as you might've noticed, in the technical review is the historical part of it where the German wine standards of 1487 currently beat current NOP standards right now without the use of all those 20 different methods I told you. They basically have a similar thing: it was without sulfur dioxide or you could use it once.

Once only gives you about 10 to, tops, 20 parts a million when you burn a sulfur candle in a barrel. So they only use it for sanitizing the barrel. It wasn’t really an addition. So it's inter—if anything, this board should be talking about why can't we match those German standards of 514 years ago with this arsenal of technology? It's really saying in a way that we can't even match the standards 500 years ago.

I mean, it's a statement of, you know, where we're at. They beat our standard now.

Tracy Miedema: Thank you, sir.

Paul Frey: So.

Tracy Miedema: Steve DeMuri.

Steve DeMuri: Thank you, Paul. I understand it would be a daunting task but have you – has your industry considered trying to get the law changed?

Paul Frey: Oh, you mean to not have sulfur dioxide in any organic wine?

Steve DeMuri: That's correct.

Paul Frey: I mean, in the "made with" category? No. I mean, ultimately what you'll hear later from some of the later speakers, this non-sulfite thing is exploding in Europe. I give a talk at the biggest organic and made with organic show in (inaudible) in Montpelier two years ago on the history of non-sulfited wine. And about what – there's about 3,000 mom and pop wineries over there right now and about one in 10 or 20 are now doing non-sulfited.

The whole category's exploding. What I'd have to say is, believe it or not, the future of organic and just regular winemaking is going to be non-sulfited. It's easy to do. It's been done for 8,000 years and, you know, it makes a pure product. It's all about food purity. And if the USDA wants to be the leader – if that seal is going to stand it's got to stand for something.

Tracy Miedema: Mac Stone.

Robert Stone: If you had a batch of wine that your aeration and some flash heating and things, the tools that you're using weren't working, would you use a sulfite and then use the "made with" label...

Paul Frey: No. No.

Robert Stone: ...to save the batch?

Paul Frey: Absolutely not. No. There's always a tool in every situation. And I've been to all parts of the world. There's ways to do it if you have extreme weather conditions. Everything that's written there is also for extreme weather conditions. What we use in that whole took kit is generally about two or three things, mostly zero oxygen bottling, sterile filtration. That's the core – that's the core of it. Closures today are – excuse me – anyway, we – I could go for 24 hours, so.

Tracy Miedema: We don't have that much time.

Paul Frey: I know.

Tracy Miedema: Thank you, sir.

Paul Frey: Yes. Thank you. And keep up the good work. The future of organic is in your hands.

Tracy Miedema: Steven Frankel is up now. Christopher Ely's on deck.

Steve Frenkel: Hi. I'm Steve Frankel and I own Organic Vintages. We've been distributing organic wines and wines made with organic grapes for 23 years in New York and New Jersey, Connecticut. And we've gotten to know our retailers and consumers pretty well over these many years doing lots of trade tastings, tastings every week, several days a week, ourselves. We're actually out there pouring in stores and at trade shows.

And we do find invariably that most of our retailers and most of our consumers do want the USDA seal to stand for organic wine with no sulfites. That's what most of the consumers are looking for. We do sell many wines in the "made with" category. I represent over 35 different wineries and many of them are in the made with organic grape category. In fact, most of them, in that sense, percentage-wise.

And our sales have been growing in both categories over these many years. We've had – up until 2008. For many years prior to that we had 15 percent average increase in sales each year and I'd say that was spread across both categories. And then for 2008 to 2010, due to economic turndown we did have a – we had flat sales for a while.

And then, in 2011 we're up again this year about 13 percent. And that's in both categories. And we do find that the – the market is price-driven, though. People are going to lower priced wines. Every store has about the same customer count but the cash flow is lower. The people are spending down. And so I think that's some of the reasons some of the "made with" wineries are concerned.

Sales maybe have dropped for them or gotten flat. And partly it's because it may be higher priced wines which many of these fine wineries produce. And it is harder to garner those higher prices in the marketplace today. The other thing is that the petitioners sometimes say that organic wines maybe are not technically sound or whatever, but it's completely false.

You can taste some of the great organic wines that are out there. They're absolutely delicious, many of them, and award-winning. And also the other night we got to taste some library wines ranging in age up to 23 years old

and they were great. So people, you know, really do find that they're good quality wines. And the other thing is that you could really confuse the consumer by changing—making this label change. Right now things are pretty well delineated.

To me, it's clear. You've got your organic wine that's USDA organic, no sulfites added, and you've got your "made with" category with a "contains sulfites" warning. And many consumers are not that concerned about sulfites so they buy the "made with" and they're happy to get the organic grapes. It's still a premium wine, in a sense, and there are very good quality wines in that category.

Tracy Miedema: Mr. Frankel.

Steve Frenkel: To change the rule-

Tracy Miedema: Your three minutes are up. You can make your last sentence, please.

Steve Frenkel: Well, to change the rule could really mislead and confuse the consumer, I think, in the future with many years of the USD -- there's a precedent that the USDA seal stands for purity and integrity and it's what people grab off the shelf first. I know when I shop it's the first thing I run in – anyway.

Tracy Miedema: That's a long sentence.

Steve Frenkel: Thank you again. Sorry.

Tracy Miedema: Jay Feldman.

Jay Feldman: Thank you. So you just mentioned that there is a premium for the "made with" label in your experience.

Steve Frenkel: Absolutely. We sell a lot of it.

Jay Feldman: How does that break out in terms of on the spectrum of price? You've got the organic, sort of certified organic label, then--

Steve Frenkel: Well, in both categories we have wines ranging in price from anywhere from $7.99 up to $60 a bottle, so – and we have some in the "made with" category, the Ripon Pinot Noir. So, you know, $60 a bottle. It's a great bottle of wine. And it gets very high ratings. Certified biodynamic too.

Tracy Miedema: John Foster.

John Foster: So several years ago before the economic downturn, 15 percent over both categories. And by both categories I'm assuming organic and made with organic grapes, right? Okay. So – and then downturn and then back to 13 percent in 2011, to date, anyway. Any difference in growth between organic and non-organic or do you know?

Steve Frenkel: Well, unfortunately I don't really have the statistic for it.

John Foster: Okay. That's fine. Thank – thank you.

Tracy Miedema: Any other questions? I have one. I'm a fellow winemaker and wine lover and it's all about the fruit, so we all know who – those of us who make wine. My question is – and I've heard this again and again from the commenters – organic wine, you said "organic wine stands for no sulfites." Getting to that question. In other words, organic has become synonymous with no sulfites. Might there be an untended consequence of no sulfites means organic?

Consumers, you know, as a consumer behaviorist, consumers are easily confused by labels and this kind of interchangeability. Might we lose focus on the organic agriculture, the organic (inaudible) of the fruit when these are terms are synonymous?

Steve Frenkel: Well, I think that people are looking for both. They're looking for the organic wine. They want it to be as pure as possible. They wanted to be – the grapes to be grown organically and they want it to be processed organically. So when they walk away with that product, they feel they're buying the best and purist product possible. I think that's the number one priority of most consumers.

Tracy Miedema: Jay Feldman.

Jay Feldman: Do you think your business would be hurt if we were to change the label?

Steve Frenkel: It's hard to say. In fact, it might be the opposite. I might actually have increased sales if it's true, which I actually don't think it is true. But if the regulation label is changed maybe I would have increased sales. Who knows? But it would mislead the consumer and that would eventually create a backlash. I think it would create a serious problem in the long run.

Tracy Miedema: Thank you, Mr. Frankel. Thank you.

Steve Frenkel: Thank you.

Tracy Miedema: Christopher Ely is up next. Andrew Wilcox is on deck.

Christopher Ely: My name is Christopher Ely. I'm cofounder of Applegate, producer of further processed, anti-biotic free and organic meat products. I'm also a third generation farmer and a certified PACO animal humane welfare auditor. I would like to first congratulate Dr. Fulwider for her Wednesday presentation. Having Dr. Grandin weigh in on the subject gives a non-emotional balanced view that helps bring organic welfare discussion to a strong position that I hope can move forward to practice in the organic livestock industry.

For the last 25 years, I have spent and continue to spend much of my time on the farms and slaughter plants that provide the poultry, the beef, and the hogs we use to produce our products. These visits are as much an audit as they are a learning experience. I would like to comment on a few points that have been raised concerning animal welfare based on my observations through these years.

There is no reason a state inspected slaughter plant cannot easily have an AMI based welfare audit at least once a year. These standards were developed by Dr. Temple Grandin. These standards are not just for large, federally inspected slaughter plants, but any slaughter facility to assure that the animals are treated with the respect they deserve. These standards were written with smaller plants in mind.

The number one criteria for the best welfare on any farm is the management of the livestock. Without good management, all the standards for outdoor space, access, etc., mean nothing. I've been on broiler farms that are plenty of space, outdoor access, but the chickens have leg problems, their ammonia levels are unacceptable, and the birds are dirty. This is a lack of management.

Promoting good management and stockmanship is the most important welfare standard. These include biosecurity standards such as Danish entryways that are found on many hog barns. Unless you're a farmer who just won the lottery, you need to be profitable to survive. It is possible to raise pigs outdoors year round as long as you provide shelter from wind and weather, even in Iowa.

But when it's below freezing for several months and the pigs are eating only to stay warm, they will not put on any weight. If you can't make

market weight during this time, you will not be able to sell them. Hence, your cash flow suffers. Sixty percent of the cost of raising a pig is in the cost of the feed. That when every – that's when everything is perfect.

Double or triple that amount of feed you're giving that animal just to stay warm, you'll never be able to recuperate that cost, let alone make any profit. Do not let outdoor access standards cause undue financial hardship to the farmer. There will be times that these animals will never be given outdoor access because of weather. This does not make them any less organic.

When it comes to poultry space standards, please realize that turkeys are not just large chickens; they grow – turkeys grow vertically. Excuse me. Turkeys grow vertically; chickens grow horizontally. The scale of space is different vis a vi their body mass. Simple health records of livestock--

Tracy Miedema: Your last sentence, sir.

Christopher Ely: I'm sorry?

Tracy Miedema: Last sentence.

Christopher Ely: Okay. Thank you.

Tracy Miedema: Who has a question for Mr. Ely? Wendy.

Wendy Fulwider: What other most important thing did you have to say yet?

Christopher Ely: The most important thing? There's been talk of trying not to – of – of not, and I agree, the less undo responsibilities you have to give a farmer than letting them just work on growing, the better off they're going to be. But I do believe strongly that some form of health records do need to be kept. For example, if you have a broiler farm you accept your chicks. You will know exactly what you receive.

When you spend your daily task of going through that farm and you will be culling some because of health issues or you'll pick up the dead, a simple recording of what you just did that day is essential. I find it important that when I am auditing to – the first thing I look at are those health records and it gives me an instant view of how and what's been going on on that farm, such as they may also record they had to add a little cider vinegar to water to reduce the pH which helps give a healthy gut. And you can find out what other health issues they've had through these health records. It takes a moment. This isn't hours every night that they're recording this;

this takes moments just to say, you know, five birds were culled, three birds I found dead.

Tracy Miedema: Any other questions? Thanks very much.

Christopher Ely: Sure.

Tracy Miedema: Andrew Wilcox is on. Paul Dolan is on deck. Paul Dolan, are you here? Lorraine, will you scroll down, please? Steven Copeland is on deck. Steven, are you here? Norman Coats would be next up on our list. Norman Coats, are you here? Next. I'm hearing some sound from the galley. Were any of these folks here that I've just listed? Okay. We'll make that adjustment. Sir at the podium, please proceed.

Andrew Wilcox: Excuse me. My name's Andy Wilcox from Wilcox Farms. We're a family farm near Seattle, Washington. We have organic egg layer barns that are aviary systems but also have outside access. So with the current new recommendations we support the outside access recommendations but we're very much against the recommendations that would make aviary barns uneconomical.

Specifically, not counting the floor space that aviary barns create and then, secondly, not giving aviary systems extra credit at 1.2 square foot per bird versus the 1.5 square foot per bird. The reasons why we believe this is important is that if this rule came in place, our aviary barns would reduce the amount of birds by 50 percent. In our family and in our barns we would no longer be able to produce organically.

I think this is real negative for organics in that there's some major positives to aviary barns. Number one, from an animal welfare standpoint, the birds in an aviary barn use a cubic space so they're constantly either on a roost, they're either on -- there's a lot more litter space on the floor that they can go to, or they're moving between the multiple tiers.

Conversely, the system that we'll be left with is a flat deck system and when the birds are inside in that situation, 80 to 90 percent of them are on a slat with manure underneath that. And then there's very little scratch area. That's the reason why either Europe or the other animal welfare regulations always give them multi-tier system less square foot and then on a flat deck system which is conversely, is why you need more square foot in that sense.

The other major issue with this flat deck system which organics will be left with is that the manure has to stay in the house the life of the bird. And that's really troublesome, especially in the wintertime for ammonia levels. It's very hard to keep that at a humane level. Whereas, on an aviary system they're – the manure is on belts that you remove every other day.

And the other real benefit that we've been working on is we take the manure out every other day and then we use forced aeration with composting. And we did a carbon footprint study and that showed that we were reducing our methane release significantly. If we're left with this flat deck system, you're not really – we're trying to prevent carbon – or reduce our carbon footprint and reduce methane release, you're not allowing the farmers with any significant way to do that.

And so we're stuck with a system that's really antiquated. And then I'll just say the last thing. Especially on the animal welfare, we notice the birds moving through the system, the muscular development on these birds is significantly higher than either a cage or this flat deck system that you'll be left with. And this – what these new recommendations are really inconsistent from what you see in European organic standards, Canadian organic standards.

And I think we really...

Tracy Miedema: Mr. Wilcox.

Andrew Wilcox: ...the Germans and the Dutch – just a summary. The people that have made these systems have really looked at the inherent problems of a flat deck system and have made some systematic changes to really make improvements. If this recommendation goes forward, we're really going backwards.

Tracy Miedema: Thank you. Any questions? Wendy.

Wendy Fulwider: How much do your birds use the outdoors? Or how many of the birds get outdoors every day?

Andrew Wilcox: I think – it's hard to tell how many actual birds actually rotate but at any time generally it's between 10 and 15 percent. And what we've noticed, it's not necessarily the system that accounts for outside access. The biggest thing that we've seen is when we widened our door openings and allowed more door openings and had them on an even side.

That was the biggest factor. And then we're experimenting as far as what age we're letting the birds out. And I think there's a lot of other factors. It's entirely not the system. There's like four or five other variables that really drive whether a bird goes outside.

Tracy Miedema: Thank you. Steve DeMuri.

Steve DeMuri: Is your operation certified to Canadian regulations?

Andrew Wilcox: No, it's not. They have a different – we use 1.2 square foot on the inside space and they have a different square foot requirement.

Tracy Miedema: Wendy.

Wendy Fulwider: Do they have any allowance for aviaries?

Andrew Wilcox: Yes, they do. They all allow – both Europe and Canada allow for the floor space created in the aviary system to be counted.

Tracy Miedema: Mac.

Robert Stone: How do the – how do you manage the ventilation when you have – does opening the doors more or less affect your ventilation management? To allow outdoor access?

Andrew Wilcox: Yeah. And we have no issue with – I mean, it's – we have to utilize different, both a negative and a positive ventilation system to allow outside access and that's how we accompany that.

Tracy Miedema: Joe Dickson. No? Okay. Any other questions. Thanks. Sir, please state your name for the record.

John Schumacher: Hi. I'm John Schumacher. I'm a winemaker – I actually like to refer to myself as a wine shepherd – and president of Hallcrest Vineyards in the Organic Wineworks, Felton, California. So basically what I wanted to address specifically with the board and the petition in reference to sulfite additions to wines that they're considering to be called organic.

I've been making wine for over 30 years. The Organic Wineworks is the first brand to actually be certified organic in the United States to be recognized by the Bureau of Alcohol, Tobacco, and Firearms. So in a sense we kind of broke through the technical bureaucracy of really introducing organic wines and complying both with California state law and then eventually with a national organic program.

And in that compliance I think it's only fair to say that we make both organic wines, wines made from organically grown grapes, and conventional wines. And I like making all three wines and I like drinking all three wines and my customers like all three wines. The current definitions of standards and delineations the way they are, are simplest to explain and simplest to follow by our customers, our retailers, and our wholesalers.

As long as that information is not disseminated by other producers that are trying to greenwash in this industry. Unfortunately, some of the petitioners that are asking for this change have been drawing to this confusion. I noticed on their petition that one of the reasons why they want the change is alleviate the confusion when, in fact, if you go through some of their websites and whatnot, they either use the term organic, organic wine.

It is part of their mission statement. It's part of their search engine. It's part of their links. It actually takes a huge effort and a lot of reading to find out, oh, these wines aren't organic; they're organically grown. They don't mention anything about sulfites, by the way, on some of these websites when you're looking to purchase. That, you'd have to buy the bottle, have it shipped to you, and then read the back of the label.

So I think this would be a huge disservice to the wine industry. And, quite frankly, for those of us who followed the rules for the last 10, 20 years, first within California and then here in the United States, what do we go out and tell our retailers and the people that we've been trying to explain this for all these years? That we are wrong and these guys are right? I – that's just –

That's a huge slap in the face for the hurdles that you guys have asked us to do. I'm not really sure how the integrity of organic is going to – how many other people are going to just, you know, jump into taking chances in this industry if that's going to just, you know, let her, you know, let us say that a large wine lobby is going to be able to –

Or some large lobby is going to be able to change it to make it easier and lower the bar standards for everyone else. I've got tell you, this movement's changing. There's a whole bunch of 20-somethings out there that are actually making wines called naked wines, raw wine, authentic wines. They're actually looking at making wines without additives, without these additions, a lot of them unsulfited, without the use of a lot of oak, without the use of a lot of these other preservatives.

And the wine industry -- we're the only industry. Why – why are we so special? We're the only industry, we don't have to put ingredient labeling as a food on the back of the bottle. We are the last – the wine industry fought getting rid of leaded capsules. So I'm trying to figure out why the organic industry is, in a sense, wants to capitulate to the wine industry when in fact there are a group of winemakers out there take – taking up the challenge. Thank you.

Tracy Miedema: Thank you. Any questions? John Foster.

John Foster: Do – do you feel like the sulfite, either the sulfite claims that are now on – on wine, do you feel that those are reliable?

John Schumacher: Absolutely. Most sulfite claims are. We are actually the first to discover that it's a myth that sulfites are produced as a byproduct in all wines. There was no study that was done on a commercial basis until we started making wines and we're getting results back – originally from BATF and then from BATF-certified labs. No detectable sulfites. No detectable sulfites. No detectable sulfites. I've got that included in the information I'm passing out to you, a study that we did back in 1991.

So this is one of the myths that we always had to fight in the industry. All wines contain sulfites. That was the reaction of the wine industry when, in fact, when they had to put the ingredient on as a warning label that was mandated – they were the last industry that was mandated. Just went, by the way, you guys are adding sulfites to your wines; now you have to put it on your label.

The wine industry had this huge hiccup. "Oh, we're special. We shouldn't have to do it. It's always been traditionally done." So if you open the door to one prima donna industry your job's going to get a lot more complicated because everyone else is going to want to rush in and they're going to want something special done for their industry. I'm sorry.

Tracy Miedema: Thank you, sir. Any other questions? Jay Feldman.

Jay Feldman: You're growing wine for the certified label as well as the "made with" label?

John Schumacher: Correct. Mm-hmm.

Jay Feldman: And what-

John Schumacher: And also the conventional wines.

Jay Feldman: Okay.

John Schumacher: In the Santa Cruz mountains not all our growers have been able to go to – go the organic route. We were the first certified organic vineyard in the Santa Cruz mountains. Now we have four.

Jay Feldman: Can you describe the economic breakdown of those various markets and how they affect you?

John Schumacher: There's a perceived value ratio in all wines. Unfortunately, with organic when we started off in this industry we were kind of like thought of the hippie of the nuts and twigs. And we were also producing wines for people who had never had wine before. And so you had to introduce wines at entry market level. And originally it was under $10 a bottle 20 years ago.

I broke that barrier in 1990, '91, '92. I started making a $13, $14 bottle of organic wine that was selling. I broke the barrier over $20 with a $28 bottle of unsulfited wine about eight years ago. That started selling. But that's only several hundred cases compared to the thousands of cases of the under $10 bottle of wine. Our flagship wine is Radical Red. It does quite well.

Consumers can afford to put it on their table every night. It won a silver medal at the San Francisco Chronicle competition against conventional wines in a blind tasting.

Tracy Miedema: Thank you. Any other questions? Thanks.

John Schumacher: Yeah. Thank you.

Tracy Miedema: And are you Steven Copeland?

Paul Chartrand: Oops. No. I'm Paul Chartrand.

Tracy Miedema: Paul. Sorry, sir. Mr. Chartrand you are up and Paulo Bonetti is on deck.

Paul Chartrand: I started importing organic wines to the US in 1985 and at that time you could them anything you want. But I'll use the term organic wine today as it was used then in the world entire and you can still use in most of the world, and that’s wine from 100 percent certified organic grapes processed by a certified processor using approved amendments. And in most cases, in most countries, that includes sulfur dioxide, or sulfites.

When the US adopted mandatory sulfite warnings in 1987 on all foods due to allergies and at the same time, organic wines labeled as such were making their way into the marketplace, that really began the huge confusion over organic versus sulfites. The immediate reaction of the public was "Organic wines? I've never heard of those before. I just saw warnings on labels for the first time. Organic must equal no sulfites." And, in fact, it did not at that time and still shouldn't.

The Organic Foods Production Act in 1990 continued that fear of words that end in "I-T-E-S" and ruled out without any due process for amendment sulfite, nitrite, and nitrates. That made it very hard for us in the 1990s to convince the NOSB that sulfite dioxide in fact should be an approved amendment for organic wines. But we succeeded.

The first rule in 1997 did allow organic wines to include added sulfites. As you probably know, that rule was sent back for a multitude of reasons and the primary one certainly was not allowing sulfites in organic wine. Nonetheless, the NOSB lost a lot of institutional memory and education, I would say, on that subject.

And when the second proposed rule came out in 2001, it took the totally opposite tack of saying you cannot use sulfites and use the word "organic" in wine in any form whatsoever except on the ingredient statement. A number of us then took up the charge with USDA and with Congress to change the OFPA so that we could get permission to add sulfites.

Otherwise, we would've restricted organic grape growing to only the few no-sulfite producers who were existing at that time. A compromise was made that you've heard something about, that "made with organic grapes" would be the category that would use sulfites and "organic" would not be. But nonetheless, in the OFPA, the wording allows sulfites in organic wine.

That was a decision – the famous compromise that was made by NOSB and I think historically it was a bad decision. We're not talking about whether somebody can make a wine without sulfites or with it and we're not talking about how they taste after a year on the shelf.

Someone can and someone does, but that's not the standard you should use to decide the need for a processing aid in organic food. You remember the Harvey decision. For a short time, all organic foods would've had to be made with no synthetics. The organic world went crazy. They said, "This will be impossible. We can't do that." But yet, the wine industry is still held to that same standard.

If the Harvey decision had been implemented, I'm sure every other food commodity would've come up with niche alternatives that avoided synthetics completely. But luckily we did not.

Tracy Miedema: Thank you, sir. Who has a question for Mr. Chartrand? Thanks so much.

Paul Chartrand: Thank you.

Tracy Miedema: Paolo Bonetti. Next up after Paolo is George Bass on deck.

Paolo Bonetti: Thank you. My name is Paulo Bonetti, president of Organic Vintners, a Colorado wine importer dealing exclusively with organic wine producers. All of the 50-plus farmers and suppliers I do business with make wine from 100 percent organic grapes. However, the final product is wrongfully boxed into the inferior and meaningless "made with organic grapes" category. It's inferior because this category does not allow for the use of the USDA seal, a symbol our industry recognizes for products that are 95 percent or more organic.

In the case of wine, it's also meaningless because, as Ms. Mediema pointed out yesterday, if I have two bottles of wine next to each other, one is made with 100 percent organic grapes and one is made with 79 percent organic grapes, as Mr. Maravell referenced yesterday, they're both still made with organic grapes.

Sulfites currently dictate whether a wine is organic or not and whether that wine may use the USDA seal. It's actually agriculture integrity that should dictate the use of the word "organic" as it does in most other food categories. Consumers with allergies are well aware of how to find products which do not contain their allergen. The consumer should not depend on the USDA seal to tell them this.

There are, after all, many organic peanut, dairy, and wheat products that display the USDA seal and yet there are many consumers with severe and deadly allergies to nuts, lactose, and gluten. These compounds found in many foods do not dictate whether a product is organic or not. Agriculture integrity should.

The organic wine category, as testified by Paul Frey in 2010, is responsible for 316,000 cases of wine sold in the US in 2009, compared to 313 million cases of wine sold total in the US in the same period. So while

the average organic food industry enjoys a healthy 3.5 percent of food sales, organic wine industry accounts for a paltry 0.1 percent.

Simultaneously, in a five-year period where CCOF certified organic acreage grew by 112 percent, certified organic wine grape acreage grew by only 42 percent. It would appear that this petition says you gave us an inch and we're trying to take a mile. Actually, we were given the mile with the Boxer McConnell amendment to OFPA, mile that we can't use, not an even inch.

The USDA organic category benefits a handful of winemakers who are here today. What about the 50 winemakers I work with? What about the 123 winemakers I met at the (inaudible) last February who make up wines without organic wines. What about the 59 out of 64 wineries listed in the CCOF resource guide for 2001? They use sulfites.

Current regulations are encouraging 90 to 95 percent of global organic winemakers either to change their practice or to keep out. That's what it looks like to me. Please consider the vast majority when you vote tomorrow. Thank you.

Tracy Miedema: Thank you, sir. Any questions? Jay Feldman.

Jay Feldman: Thank you for your testimony. I'm interested in your interpretation of the Boxer amendment in OFPA because there seems to be some suggestion that that amendment approves sulfites in wine and doesn't – and then the sentence stops there – and this is where I want to ask you the question – and then doesn't suggest that we, as a board, must subject the synthetic, in this case only allowed in wine, this particular synthetic, to all the other aspects of the statute, namely, the national list criteria.

So what I'm getting at is are you implying in your testimony that because of the Boxer amendment those who grow wine or process wine with sulfites have a right to the organic seal?

Paolo Bonetti: My interpretation is that you are correct. The Boxer amendment in my opinion – the spirit of the Boxer amendment in my opinion is to allow sulfur dioxide to be used by winemakers who are making organic wine because without that ingredient it's been recognized that there would be no organic industry. Wine. Excuse me. No organic wine industry.

Jay Feldman: So I was asking you does that – are you suggesting to this board that it doesn't have a responsibility to look at all the other criteria that we look at normally when we put a synthetic on the national list?

Paolo Bonetti: I'm not sure about that, to be honest with you.

Jay Feldman: Okay. Thank you.

Tracy Miedema: Thank you for your testimony today.

Paolo Bonetti: You're welcome. Thank you.

Tracy Miedema: Mr. George Bass and next up on deck Hal Kreher.

George Bass: Thank you very much. Thank you to the committee for all the work in the past. You are volunteers. You are not paid. And you'll be doing for five years. You're an outstanding group, obviously. One question. Do you think it is fair to have these porches allowed by the NOP and the NOSB in 2002 and now change the system?

We were the first farm to have legal porches. We were the – we have the other reasons. We had an old poultry farm very close to the town, and one of the problems, we've got neighbors all around. And therefore, if we put hens on the ground, we'll have manure all around and the smell would be terrible.

And they'd probably shut us down. The last thing, probably the biggest thing, we think it's disease and mortality is the most important. The previous owner of the farm talked to me on an outdoor flock in 1947. She had 2,000 pullets on two acres. The disease and mortality was about 25 percent. Another friend told me about his father had 10,000 pullets on a hayfield. In about two or three months, all the grass was destroyed by the pullets.

So this summer, we wanted to do a lot of scientific journals. And we found – we didn't find much in the USA but about Europe was a lot, a big disease and mortality. And therefore, in the last 10 years they have at least about four different countries. Germany has – at that time was 19 percent for disease and mortality for these free range.

Denmark is around 21 percent for this survey and Holland was – one report was 11 percent. Holland, was another one, was 15 percent and Sweden was 8 percent. The Country Hen, ourselves the company, the

mortality is less than five percent. Finally, I hope we can come up with a good compromise on these porches.

Tracy Miedema: Thank you very much. Calvin.

C. Reuben Walker: Could you share with me what would you consider a good compromise on the porches?

George Bass: Well, we would still – we don't want to put the hens down door because we think it's really the disease. And I think we could get more space. We have it on the left side, but I think we could do it also on the right side. So therefore, we could do more space.

Tracy Miedema: A follow up question there? Or any other questions?

C. Reuben Walker: Could you explain again to me? You said you can get more space? That's within the porches?

George Bass: Porches. For the porches. Yes. Yep.

Tracy Miedema: Any other questions? Thanks, sir.

George Bass: Thank you.

Tracy Miedema: Hal Kreher is up next. Gwendolyn Wyard is on deck.

Hal Kreher: Thank you for the explanation from the Livestock Committee yesterday morning. It was very interesting to hear this discussion; it was different from what was presented in the documents. I'd like to make one comment regarding the presentation and that is that antibiotics are hardly ever used in night production.

I know that you don't wish to be repeating something that is not true, but you made it sound like this is a common occurrence and it is not. I have submitted a package of printouts to go with my comments. The first page you have seen before; I submitted it in Seattle also. It's about avian influenza and backyard birds.

Number two is an article that explains that not only waterfowl are carriers of this disease, but also songbirds. Twenty-two species have been identified as carriers of this very – of this disease is very concerning to me as a poultry farmer and should also concern the other poultry farmers as well.

Number three and four are reports of avian influenza in backyard flocks in Pennsylvania. I spoke to Nan Hanshaw from the Pennsylvania Department of Agriculture yesterday and she told me that there have been 10 investigations of avian influenza in Pennsylvania this year, a majority of them leading back to backyard flocks.

In 1983, '84, avian influenza in Pennsylvania developed into the high pathogen form and 17 million birds had to be destroyed before it was contained. More recently in 2004, 19 million birds were killed in the Frazier Valley in British Columbia to contain an avian influenza outbreak.

I hope that this proves to you that the risk of avian influenza is real, not imaginary. It's not caused by (inaudible), as some would have you believe. Some wild birds carry avian influenza. It is a fact. If domestic birds are allowed to mingle with wild birds, the number of cases is bound to increase.

This is why I think the use of porches is an important tool to be able to use to protect my farm from this risk. The same is true for salmonella. Wild birds and rodents are known carriers. There was recently salmonella traced back to an organic egg farm.

Organic birds are not protected merely by being organic; they need protection from these known vectors to ensure the safety of the eggs they produce. The FDA will be out to inspect farms with between 3,000 and 5,000 starting in July of 2012.

Last item, number six, is an article "Do Extensive Poultry System Really Offer Superior Welfare?" This article talks about the mortality level of free range systems and how it is much higher than the other systems. Is this what we are being told is the gold standard?

You may wish to read this article very closely before you vote tomorrow. I was pleased to hear yesterday that you were taking another look at aviaries. They're used in organic production in Canada and Europe. There's absolutely no reason why we shouldn’t be allow to use them here.

I understand the desire to listen to the customer. Unfortunately, we are faced today with a customer base that has no agricultural knowledge or experience but thinks they know how agriculture should be done. The farmers are the ones dealing with reality. You need to give our experience the weight it deserves when making these tough decisions.

I would also like to see you reach out to more poultry scientists to make sure you are not putting rules in place that endanger the entire poultry sector of the US.

Tracy Miedema: Any questions? Thank you. Gwendolyn Wyard is up now. Jessica Lundberg is on deck. Jessica Lundberg, are you here? Thank you.

Gwendolyn Wyard: Good afternoon, Madam Chair, NOP staff, and ladies and gentlemen of the gal—of the gallery. My name is Gwendolyn Wyard. I am the associate director for the Organic Trade Association and I'm here today on behalf of OTA's 1,200-plus members, representing over 6,500 organic businesses across 49 states. For those of you who aren't familiar with my background, I also co chaired the Material Working Group with Kim Dietz and I've been involved in certification for the past 15 years.

For the last seven years as a technical interior reviewer for Oregon Tilt. Today I'll be highlighting a few key issues from our written comments related to crops' handling and CACC. I passed around a summary sheet of our requested changes to the comments – to your recommendations.

First, I'll start off with propane. The primary concern that we expressed about the recommendation for propane was the belief that adequate alternatives exist when the TR expressly states that they're not adequate. I think we heard earlier a great testimony that took us through why those other alternatives are not adequate.

We ask the board to recognize that rodents are a number one ranking problem in certain areas and we ask the board to recognize that odorized propane is an essential tool that may be used in combination with other control methods and that odorized propane is either not allowed or not prohibited in Europe, Canada, and Japan.

Copper sulfate. OTA supports the allowance of copper sulfate as it's currently listed. We don't support the added language. Drill seeding is a mechanical method that, if viable, is already required by the regulations under 205 and 206. And it's for this reason alone that we don't think it's appropriate to annotate copper sulfate.

It would send a mixed message and it would set a bad precedent. We see this pattern coming up again and again where we agree that there should be restrictions on the use of synthetics but we really need to put it in the context of the regulation and understand the regulation and understand

the role of the certifier, that they're monitoring the OSP and they are placing those restrictions on the synthetics.

Material review organizations. We support the recommendation. We thank the committee. We think it's great. It's critical that material review organizations operate under the oversight of the NOP so we can enforce uniform material review at the federal level. We want to make it very clear that we support accreditation and we support creating material review criteria. That's absolutely essential.

We'd like to see the board pass the recommendation, express your intent to the NOP about accreditation and we'd like to see you put on our work plan the development of criteria. We think they both need to happen and both need to happen at the same time. One doesn't need to happen before the other. We think that they can happen – they can coexist.

And if you have any questions about DHA or ARA I've been somewhat involved in this topic for a long time and I'll take any questions. Thank you.

Tracy Miedema: Does anyone have any questions for Gwendolyn Wyard? Tina.

Kristine Ellor: I myself would like to hear your take on that subject.

Gwendolyn Wyard: Well, it's complicated, it's messy, and it's certainly not pretty, but we are excited. We do believe that we're making progress. We think we're heading in the right direction because I've been grappling with the same issues that you've been grappling with since 2004.

And certifiers need to be able to make clear decisions. They need to know what to allow and what not to allow when they're looking at materials that are on the national list. So in our comments, we requested that you document the other ingredients that you look at in your recommendation, and you've done that. And we think it's great.

We think they're, you know, they're clearly spelled out in the addendum that you passed around and that's really going to be very helpful for certifiers. I heard a certifier, I hope they don't mind, in the audience look at that and say perfect. That's exactly what I need. I need to just look at that list and now I know what to do. I also want to encourage you to use annotations if you're not comfortable. If you feel like there's a practice or a material that's not right, then use an annotation to express that rather than rejecting the material altogether.

I think that you're following your process and I think everybody's doing a good job. And like I said, it's not pretty to watch but I think we're going to improve as we move forward.

Tracy Miedema: Thank you. Any other questions?

Gwendolyn Wyard: Oh, come on. Don't let me off the hook so easy.

Tracy Miedema: Thank you, Gwendolyn.

Gwendolyn Wyard: Thank you very much.

Tracy Miedema: Jessica Lundberg is up now. Johanna Mirenda is on deck.

Jessica Lundberg: Excuse me. Good afternoon, Madam Chairman and members of the board. Thank you for this opportunity to comment on the committee's recommendation on copper sulfate in organic rice fields. My name is Jessica Lundberg. I'm from Chico, California. I serve as chairman of the board of directors of Lundberg Family Farms as well as overseeing our sustainability initiatives and I manage our specialty seed nursery which looks over our specialty varieties and research.

My family and I are organic rice farmers and organic rice handlers. We work with about 40 other families to grow 17 different varieties of rice for our products. Lundberg Family Farm supports the recommendation to retain copper sulfate in sections 205, 601 A3 and E4 but we do not support the committee's recommendation annotation that specifically dictates a method of planting and mandatory weather monitoring because it is unnecessarily constricting.

Adding the recommendation of drill seeding restricts the rice farmer from choosing and documenting in their organic system plan the most appropriate of allowed methods for their individual farm. Furthermore, NOSB for 10 years have restricted organic rice farmers using copper sulfate more stringently than for more – the more common purpose of disease.

We request that the NOSB allow the use of copper sulfate uniformly for all crops for disease, algae, and insects. The need for copper sulfate is equally shared by row crops, tree crops, and flooded rice. The NOSB allows for the use of copper sulfate for disease control with the annotation that it must be used in a manner that minimizes accumulation in soil.

Organic rice farmers should not be more highly regulated than other copper sulfate users. There is a demonstrated need for copper sulfate in organic rice production. Given that roughly 95 percent of the 25,000 acres of organic rice in California are limited to water seeding, copper sulfate is the best tool we have to suppress algae, scum, and tadpole shrimp.

We and other growers have tried other methods such as sodium carbonate proxyhydrate, mechanically breaking up the algae with an airboat, draining and reflooding, all to disappointing results. I'm an elected member of the Rice Research Board which has sponsored studies on alternative research methods for managing algae in California rice fields since 2005.

Studies which have looked at organic and synthetic alternatives with no success to date. At Lundberg Family Farms, we continue to experiment on our own farm with drill seeding and alternative methods and share our successes and failure with our growers and the public. The use of copper sulfate in rice is consistent with organic and sustainable agriculture.

Our growers monitor the copper levels in the soil and have not seen an increase in copper levels. Recently, copper went through the EPA re-registration process to update the data set and make changes relative to current regulations. Data from California Rice Commission's extensive network of water quality monitoring stations provides assurances that there are no negative impacts, which under the EPA review includes cumulative effects to humans and environmental effects related to species and environment.

California rice growers are excellent stewards of our rice fields and their incredible living ecosystems. We have not seen a degradation of that ecosystem as a result of the use of copper sulfate. Copper sulfate is a very important tool for California rice growers without which we would likely not be able to sustain production of organic rice.

I urge you to continue to allow its use in organic rice production as an algaecide and for control of tadpole shrimp with the annotation that it be used in a manner that minimizes accumulation in the soil.

Tracy Miedema: Thank you, Ms. Lundberg.

Jessica Lundberg: Mm-hmm.

Tracy Miedema: Jay Feldman.

Jay Feldman: Hi. Thanks.

Jessica Lundberg: Hi.

Jay Feldman: For the record, I just want to make sure I understand. Is – in your whole system with all the growers you work with including your own family, is there any significant or worth talking about acreage in dry land drill seeded planting?

Jessica Lundberg: The organic acreage that I mentioned, the 25,000 acres of which 95 percent is drilled, about half of those acres are drill seeded. I think in the letter that my cousin Bryce had submitted to the committee, he referenced that this year our family farm did about 100 acres. We consider that an experiment. Because of that, probably about 75 acres didn't produce. Twenty-five percent produced about half a crop.

We have a handful of growers that will occasionally, depending on the year, choose to drill seed but that's maybe four or five different growers and this year we had one of our grower that drill seeded and he lost a field also. Mm-hmm.

Tracy Miedema: Calvin.

C. Reuben Walker: Do the crop in—USDA crop insurance cover your loss?

Jessica Lundberg: In short, no. We do have crop insurance but it's minimal and a lot of times our base production on those acres doesn't meet what you need to recover the full amount. So like for instance, with our family farm, we do consider the drill seeding research so we'll cover that with research dollars coming out of the company. But we think it's an important enough endeavor to look at drill seeding for an alternative method as a method for rotation in the future.

We're committed to it and we put money to it every year. And so that's why we'll make up the crop loss for our family farm through research money.

Tracy Miedema: Jennifer Taylor.

Jennifer Taylor: Thank you. I'd like to know as your farm is using integrated management practices instead of the copper, when you did use that is it really that you had no success? Or what level of success did you actually see?

Jessica Lundberg: Well, we don't use copper every year.

Jennifer Taylor: Mm-hmm.

Jessica Lundberg: Like I mentioned, copper is for scum algae and tadpole shrimp. The copper, there's many years that we can get into the fields while the weather's still fairly cool, and we can beat the shrimp where the rice seedlings can get large enough that the shrimp won't affect the growing root tip. So in that case we wouldn't need it. There might be a – there'd be times when, again, with the temperatures fairly cool that we don't have algae blooms that are going to affect the rice.

And in fact, once the rice is through the water, the algae becomes a great weed tool for us. The years that we did not have tools such as our dry up, we'll dry the fields completely out for broadleaf and aquatic weeds. That was a little more difficult. That's when we were experimenting more with mechanical ways of breaking up the algae and with things like the air boats and looking at draining the fields and reflooding.

Jessica Lundberg: A lot of times it depends on – the algae can wipe out sections of fields, the tadpole shrimp can wipe out entire fields. So we've been experimenting with quite a few different tools for several years so it just depends on the year and the weather to the success that we've had.

Tracy Miedema: Any other questions? Thank you very much.

Jessica Lundberg: Thank you.

Tracy Miedema: Johanna Mirenda is up next. Norman Salem is on deck.

Johanna Mirenda: Hello. My name is Johanna Mirenda. I'm a material reviews specialist and inspections coordinator Pennsylvania Certified Organic. Material reviews and onsite inspections are two critical but challenging areas of the certification process where certifiers differ in aspects of policy and protocol. The accredited Certifiers Association is an effective forum for achieving consistency and the recommendations from the Appliance Accreditation and Certification Committee will contribute to even greater consistency among certifiers in these areas.

For material review organizations, we support the general premise of the recommendation for material review organizations to operate under the authority of the NOP. However, the immediate need of the organic community is uniformity and consistency of material reviews among certifiers and we urge the NOSB to prioritize the development of review criteria for approval of input substances, as requested by the NOP.

For inspection – for inspector qualifications, we support the recommendation for baseline qualifications for organic inspectors. We've outlined in our written comment a few minor changes that could enhance the recommendation, notably that inspector training provided by ACAs should count towards the minimum number of hours required for continuing education when the training covers standards and general knowledge.

For unannounced inspections, we also support the recommendation with a few minor suggestions that we've outlined in our written comment. We expect to be able to perform most, if not all, unannounced inspections without any announcement but in the rare cases where some announcement is necessary, we sympathize with the challenge of allowing enough notice to efficiently employ the inspectors' time and resources while still retaining the surprise aspect of the inspection.

Johanna Mirenda: We suggest that the maximum number of hours that notice is given to the operation be measured from the time of the inspector's departure to the inspection site instead of from the inspector's arrival at the inspection site. This way the policy could be consistently implemented regardless of the inspector's travel time or distance to the inspection site.

Lastly, I want to respond to something said yesterday about PCO's written comment on silica dioxide. Our comments simply warned against big annotations because they only create more room for inconsistency among certifiers. Otherwise, thank you all for your work in these challenging areas.

Tracy Miedema: Any questions? Mac and then Joe.

Robert Stone: Who bears the cost of unannounced inspections at PCO of your clients?

Johanna Mirenda: Up to this point we've only done unannounced inspections for a complaint based and some risk based and it's been a combination that we've evaluated on a case by case basis whether we absorb the cost or the operator does.

Tracy Miedema: Joe.

Joseph Dickson: So in the materials review organization recommendation we do acknowledge that the creation of a new accreditation scope is a long-term and complicated undertaking and that in the short-term the NOP needs to

put a guidance to guide the materials review organizations in the short-term. What would you want to see that sort of short-term solution encompass as a sort of interim measure towards a broader more robust solution?

Johanna Mirenda: In the short-term some guidance on specific review criteria for the various types of input materials that certifiers could start using immediately and immediately begin to bridge the gap between the different criteria that certifiers currently use.

Tracy Miedema: Thank you. Normal Salem is up now.

Norman Salem: Good afternoon. My name is Dr. Norman Salem. I've spent my entire career studying essential fatty acids, particularly the role of DHA in neural development including 30 years at the NIH where I published more than 200 research articles and book chapters. In 2008, I joined the world' leading provider of Algal DHA, Martek Biosciences, as chief scientific officer. DHA is a major structural and functional fat found in the brain and retina.

ARA is the primary Omega 6 fatty acid in the brain. It is important for optimal growth and proper infant brain development. These fatty acids are the very stuff of the brain. Unfortunately, despite its importance, most Americans and other consumers around the world do not consume enough dietary DHA to support optimal bloodstream and organ levels.

DHA is always found in breast milk. It's considered important for optimal infant brain, eye, and nervous system development. DHA has also been shown to support a healthy pregnancy and gestation. Visual and neural cognitive and vascular benefits are evident for infants whose mothers are supplemented with DHA during pregnancy and breast feeding.

Research also continues to support the critical role that DHA plays during the first years of life for optimal nervous system outcomes. Sources of preformed DHA are limited in diets of toddlers and children. Also, humans have very little capacity to form DHA in their bodies. But even modest intakes of DHA rich weaning foods, toddler foods, and supplements have been shown to increase bloodstream DHA levels and are associated with improved outcomes.

Recent studies have shown, for example, a benefit for visual acuity in infants and a decrease in respiratory illnesses in toddlers when given DHA. As a result of such studies, international authoritative groups such

as the FAO, WHO, states that there is, quote "convincing evidence of its critical role in retinal and brain development for 0 to 24" unquote, months of age. And thus it is an essential fatty acid.

Low blood levels of DHA have been associated with cognitive decline and a recent NIH workshop publication confirmed this. A large clinical study has also recently shown a benefit for memory during normal cognitive decline associated with aging. Another benefit for adults is the reduction of many of the risk factors associated with cardiovascular disease.

While it is true that fish offer an alternative source of DHA, fish are not a staple of US diets. Thus, supplemental foods play a crucial role in ensuring that all consumers have access to DHA. Claims that DHA and ARA do not have significant health benefits and that these benefits are not supported in the research are simply false.

The body of science supporting the critical role of DHA and ARA in supporting optimal health is strong and growing. After nearly four decades of research in this field, I'm convinced that DHA and ARA play a critical role in supporting optimal health in every stage of life.

If we can increase the intake of these fatty acids in the American diet, a very significant public health benefit can be gained. Food supplemented with trusted, vegetarian, and sustainable sources of DHA and ARA, including organic foods, will play a key role. The benefit of these nutrients should not be denied to consumers of organic foods.

I thank the NOSB for the important work that you do for the gan—organic industry. And I also strongly urge the board to add DHA and ARA to the national list. Be happy to answer any questions.

Tracy Miedema: Thank you, sir. Any questions from the board for Mr. Salem? Jay Feldman.

Jay Feldman: Thank you. We had some questions yesterday about the manufacturing processes and both the enzyme extraction with the alcohol and the hexing. The petition asks that the board approve both or approve Agal oil and generic and the presumption is both methods would be used. What are the limitations that you see for the enzyme-extracted process?

In other words, why do you feel you need to – I guess there's – one of the products that goes into baby food has some limitations with the other

process. But could you explain that for us, where your limitations are regarding the enzyme extraction process? Thanks.

Norman Salem: Sure. Be happy to. The DAH used in infant formulas is from the Crypthecodinium organism which has a tougher cell membrane. In the enzymatic treatment, that can just – can open the cells for the – for our other oil, other product the Schizochytrium simply doesn't do the job. So it needs a –it needs a more vigorous extraction.

The hexane is really not present of course in the oil. We show that it's non-detectable and with very sensitive methods of analysis. I think the specifications below .2 parts per million, if I recall correctly. So certainly, like most vegetables oil, like many vegetable oils, hexane is used for extraction but it's completely removed. Does that answer your question?

Jay Feldman: Yes. Can I ask --

Tracy Miedema: Jay Feldman.

Jay Feldman: I'm just trying to get a sense of whether it limits your ability or it just – it simply makes it impossible to break that cell membrane? Whether there are any other alternatives and--

Norman Salem: Well, we are certainly – we are certainly exploring other alternatives and I think eventually you'll see those. But, you know, that’s a big development process.

Jay Feldman: Okay. Thank you.

Tracy Miedema: Nick Maravell.

Nicholas Maravell: Thank you. I may have several questions. Do you want me to stop after each question and ask? Yeah. Okay. We've been hearing a variety of issues raised surrounding DHA and ARA. One of the issues revolves around whether or not there were, in layman's term, any generically modified organisms or in – in our regulatory terms, excluded methods used in the production of either the DHA and the ARA.

And just as a little bit more background, I did check some of the patents that went through on this and they provide for that as a possible patented process. That doesn't mean that it was necessarily used. So I guess my what my question is – these patents started in the early '90s and have gone up through 2010 that are owned by the Martek Corporation.

The petitioned substance that we are looking at, is there any relationship or was there any derivative from a recombinant DNA or other excluded type of method used to produce these substances? Is that as – or those things going into milk or baby formula or anything else with genetically modified characteristics?

Norman Salem: No. Absolutely, positively the answer is no. There is absolutely no generally – genetically modified product being made by Martek and – in any of our products. We actually have a policy not to use it. We, of course, put it in our patents. That prevents other people from making a similar organism and compete with, you know, with our product. But we do not use genetically modified organisms.

It's certainly not in any of our oils. I hope that's as clear as I can possibly--

Nicholas Maravell: Yes. Yes, it is. I'm going to -- I'm going to--

Norman Salem: This is – this is entirely false.

Nicholas Maravell: All right. But we're going to go through this step by step.

Norman Salem: Okay. I welcome that.

Nicholas Maravell: Yeah. Yes. Yes. The petition and the technical review that we had indicates that classical mutagenesis was used in order to produce some of the strains. I also note, from looking at some of the literature, that the wild, if you will, or naturally occurring versions produce a lower level of DHA and ARA and that the strains that you are working with almost double the amount of DHA or ARA in the oil.

Is that a result of having bred this through classic mutagenesis-type of procedures?

Norman Salem: Well, you're correct that it's much more highly productive. It makes more fat. It makes more DHA. It's suited to grow with low salt. We have developed these strains for – since the mid-'80s. So that's 25 years these strains have been developed, immediate development, strain development, so we have a lot of ability to do that. Have the – specifically, the mutagenesis question, I believe that the Schizochytrium organism went through mutagenesis, you know, through classical kinds of mutagenesis.

Although I'm not – I -- I won't say that with certainty. I don't -- I'm not aware that the Ctrypthecodinium organism went through that.

Nicholas Maravell: Okay. Can--

Norman Salem: So I can't give you a definitive answer but I don't – but certainly they – the strains have been developed through classical means, non GM means.

Nicholas Maravell: Right. Right. And just to double check with the program, classical mutagenesis does not fall within the definition of excluded methods; is that correct or incorrect?

Female: Correct. We don't believe classical mutagenesis is normally considered to be an excluded method. It's a – this is a historic method used in plant breeding for many of our crops plants and, I mean, there's not – there wasn't much description, there's just those two words. So you probably want to look, have more information. But my understanding of classical mutagenesis is it's a one-time treatment of seeds or plants with radiation or mutagenic chemicals and then subsequent generate – then you select from many generations of progeny for the desired traits. So it's a common technique in classical plant breeding.

Norman Salem: So there you have it.

Nicholas Maravell: Moving on to a – a different topic here. We have reviewed the petition substance and we did get information that there are other ingredients other than ARA or DHA in the petition to the substances. And some of these ingredients we found from a label that was presented to us. We're -- were not presented in the petition or in the technical review.

I was just wondering if you were aware of this situation, if you have any comment as to what – what you feel you presented in the petition in terms of a complete description of the material.

Norman Salem: I think you're referring to what, the antioxidants that are added? Or?

Nicholas Maravell: Well, no. There were some antioxidants listed. Charlotte Vallaeys from the Cornucopia Institute shopping one day and found a label and it listed, oh, maybe – now my memory is not going to be accurate because I don't have the label in front of me, but maybe let's say four to six additional ingredients that we did not see on the technical review or in the petition substance. I was just inquiring as to what – what – what your opinion is on this. Do I have a problem here?

I mean, am I inaccurate? I'm trying to be accurate here.

Tracy Miedema: Yeah. Nick, thanks. Point of clarification. The ingredients that we saw on the can of infant formula passed around were some things like (inaudible) pometate and sunflower oil. I think there was maybe two or three others. They were all listed in the petition, the technical review, and we went ahead and did the other step of including them in our addendum about other ingredients and everything that was on that label cleared the nine criteria that we set forth for other ingredients. So just – just that clarification.

Nicholas Maravell: Okay. There was the answer.

If we could see the label that was passed around to us. I distinctly remember looking at the technical review and looking at the label. I could be wrong but could someone produce that can with that label? I just -- I'm not saying that there's anything wrong here. I'm just trying to get the facts on the – on the table. If we are able to read what ingredients are on that label and if it is consistent with what we reviewed, that's fine.

Tracy Miedema: I guess while that effort is being made Katrina had a question. I guess Nick would like to keep the floor. Then, Katrina, I'll call on you.

Nicholas Maravell: No. Staff is just helping me out here. All right. The additional ingredients that were on the label that I did not remember from the technical review were mannitol, glucose, syrup solids, modified starch, sodium polyphosphate, and high oleic sunflower oil not organic. So I don't – I'm just trying to figure out what it is that we're talking about. So what I'm going to be ask – what I would ask you is are those indeed ingredients that are in the DHA and ARA?

And is there a reason why we should or should not be cognizant of them?

Norman Salem: I think you're reading the formula label, not our oil product.

Nicholas Maravell: Correct. Correct. I'm trying to become educated here.

Norman Salem: Okay. I think only – I think only the sunflower oil, as you just heard, originates from our oil. I didn't – that came a little fast but I don't think that the other – the other ones you mentioned come – are coming from our product.

Tracy Miedema: My preference here, if we're asking a very technical question about another company's label would be that we would direct that to another company. The person whose – that company's representative is here.

Does anyone on the board wish to hear from the company whose label Nick is inquiring about? Including Nick. You would? Okay.

Please state your name for the record.

Jessica Rolph: My name is Jessica Rolf from Happy Family.

Tracy Miedema: Nick, will you please restate your question?

Nicholas Maravell: Yes. We looked at a product of yours that lists DHA and then in parentheses lists what appears to be the ingredients of the DHA. And many of those other ingredients were – appeared on the petition and in our technical review. I am simply asking about the following additional ingredients that I didn't see in the petition. Mannitol, glucose, syrup, solids, modified starch, sodium polyphosphate, and high oleic sunflower oil not organic.

And I would simply ask what was the intent of your listing those and how did you identify those as things that you would want to list in that way on your label?

Jessica Rolph: Sure. That's a great question. Thank you. So just to clarify, this is our Happy Bellies organic cereal. So it's not an infant formula. We source – because it's a dry flowable cereal powder, we actually source the powdered version from Martek. I think it's called PFF-something, some number. And as opposed to the actual oil format of Martek's product, we need to source the dry flowable powder because the oil is really hard to formulate with.

So what we did is – we are actually not regulated but the FDA has basically said because these ingredients are such trace small amounts and they fall under sort of sub-ingredients of certain vitamins and minerals that you might include in any other foods, that you actually are not legally required to list those sub-ingredients on your label. However, we felt like we wanted to share this with consumers so we added all the sub-ingredients of Martek's PFF powdered formula.

Powdered, you know, recipe to our label. We've since actually changed that because we want to be in alignment with FDA standards and regulations. We've done a more deep, regulatory review and are trying to be in line with other companies. But we did for a period of time, and still do in some of our products, include that enumeration.

And then I guess I would leave it up to Martek to tell us, you know, any – answer any other questions about that specific – those specific ingredients that you might have.

Nicholas Maravell: Thank you.

Norman Salem: Yeah. I just want to add that I – those sugars probably do come in, in the powdered form of the oil. I thought we were talking about oil in a different product, so.

Nicholas Maravell: Well, that's what -- I'm -- I'm -- I'm just trying to fully air this and what I want to know is are we approving in the petition the dry powdered product or just the oil product? Does someone – can someone here clarify that for me?

Tracy Miedema: I think that's a good question for Martek. Is the material used in the product that was just described by Ms. Rolf among the materials that are being petitioned for the national list?

Norman Salem: I have some help here.

William Friedman: I can answer that. That's not the petition material.

Tracy Miedema: Thank you.

Nicholas Maravell: Okay. Could you please identify yourself for the record?

William Friedman: William Friedman and I'm counsel for Martek. I filed the comment from Covington and Berling.

Tracy Miedema: Okay. So for the record, the material that was passed around to the board yesterday is not anything – it's not part of the pending matters of this board or any of our proceedings. Any other questions for Mr. Salem? Jay Feldman.

Jay Feldman: So I guess the question would be, Nick, help me out here, are there any other ingredients that accompany the – or are used and used in the processing and – and then are – remain in the final algal oil product that Martek is asking for approval – or listing?

Norman Salem: I think I'm going to defer that to my colleague.

William Friedman: I'm actually giving a comment, but if you – Jay, if you could repeat the question. I was in back and didn't hear it. Jay, we're just trying to figure out whether since we have been working under the impression that this

label constituted one form of the oil or the powder that was being – for which the company's seeking listing and we have just now found out that that does not apply to this discussion.

Are there any other ingredients besides the algal oil that accompanied a product that the company's seeking to be listed?

Norman Salem: No. The petition described the products that – for which listing was requested and fully disclosed what are being called the "other ingredients" here in this discussion. And the product, as was just said, the product that was on the label that was held up was not the petitioned substance. So it's the algal oil and the fungal oil, the DHA from algal oil and the ARA from fungal oil.

So the other ingredients are the ones that are in the petitions and in TR and in the handling committee addendum.

Tracy Miedema: Katrina Heinze.

Katrina Heinze: I actually have a much simpler question which is maybe for all of you involved in this topic. Are you going to be here tomorrow? And just what I was going to offer up, Madam Chairman, is I know we are behind and this is a complicated topic and maybe out of respect for the folks who come after this we could just ask these folks to stick around so they can be part of our conversation tomorrow.

Norman Salem: Yes.

William Friedman: Yes. I believe everybody from the folks at Martek will be here tomorrow. We'd be happy to come right back up to the podium again.

Tracy Miedema: Thank you very much. We'll take one more comment before we go to our lunch break. Next up is Kelly Shea from White Wave Foods.

Kelly Shea: Hi, everybody. First, I want to start off by really thanking NOP and the NOSB for preparing for this meeting. I mean, those of us that come to testify think that we do a lot of work, but we're focused on our particular materials. And so I can't thank you all enough. And a special thank you for the last five years that I've got to spend here with Tina and Katrina and Steve and Tracy. Thank you so much for your five years of service.

At White Wave we support the recommendation to remove an (sounds like) auto color with all annotations. We use organic (inaudible) so we're really comfortable with that decision you're going to make. Silicon dioxide,

we want to thank the petitioner for recognizing that there are not alternatives to silicon dioxide for defoaming so it's very important that you leave it on the list and annotate it that it is still allowed for use in defoaming.

We support the recommendation to add a descriptive annotation for chlorine materials and we support the annotation language as it was published before the board meeting. As well, we want to thank the CACC for really excellent, timely, recommendations and we especially support the use of unannounced inspections. CCOF has done an awesome job with their LUCI program and would love to see other certifiers around the globe making use of unannounced inspections in order to continue to raise the bar on organic integrity.

As we said in our public comments, we also support the addition of DHA algal oil to the national list. I think there's been a lot of bad information floating around at this meeting and before this meeting and I think it's just crucial that board members get all the facts that they need to make the decision.

I mean, the worst thing for those of us out in the community and our farmer suppliers that are trying to do business based on this set of regulations is if you, you know, a citizen advisory board that has statutory authority for materials – basically, the decisions that you make here affect our lives. And we want you to have the right information to make the right decision.

A no vote based on erroneous information would be a travesty, really a travesty of justice for those of us out here that rely on you. GMOs cannot be used in organic agriculture and, you know, at White Wave and Horizon and Silk we're huge supporters of the "Just Label It" campaign, the Right to Know March." I mean, we not only don't want to see GMOs in organic, but we want to see mandatory labeling of all GMOs in our food and our fiber system.

So, you know, the idea that a company like ours that's been involved in organic for over 20 years would use a GMO is just absolutely insulting. So I did ping the non-GMO project during the day and asked them if they were aware of any algaes existing that were GMO and they are not. But we want you to have the right information.

I mean, when you vote I want you to go home feeling like you did the right thing. And I want to have certainty that I'm putting out a great integrous

product. So to us, you know, the transparency, the information, you know, nothing in darkness, all brought to light is what we want to see happen and am I out of time? Oh, I'm sorry.

Tracy Miedema: (Inaudible). Nope. Nope.

Kelly Shea: I didn't see it. I apologize.

Tracy Miedema: Any questions for Kelly Shea? Jay Feldman.

Jay Feldman: Kelly, what's your recommendation to the board? What should we do?

Kelly Shea: Thanks, Jay, for that question. I think that you should go back over it and make sure you have the information right. Huddle together, see if you have any questions. If you have questions, there are experts in the audience that can help you. I mean, we've brought people that can help you. If you're uncomfortable with our experts, we'll find another one. You know, and do what you need to do. Take the time that you need to take to get the right information.

Do not vote no just because you don't know. And use your statutory authority to annotate. I mean, if you are uncomfortable – for example, when our – when fish oil was petitioned, right, it was annotated that it could be only stabilized with organic ingredients (audio difficulties) to not just shoot something down but use your authority and your intelligence to make good decisions.

And we're all happy to work with you. I mean, we've got computers out here. We can do research for you and give you third-party footnoted information, you know, to – in order to answer your questions. But we've been using this in our product since 2007. USDA didn't let us petition at first. They said it was allowed. Then we had the new thinking in April of 2010 so we ran and, you know, got our supplier to put a petition in.

This has been going on for a long time. We just want the right thing done and we don't want to be, you know, a – a statistic because this board listened to bad information, you know, had 14,000 proxies in front of them saying they don't want a material. Well, I don't want the material that was listed on those proxies either. That's not my material.

Tracy Miedema: Any other questions for Kelly Shea? Nick Maravell.

Nicholas Maravell: Kelly, I'm going to try to ask you a question I attempted to ask the FDA earlier today and didn't get--

Kelly Shea: Oh, gee. I have a major in ancient Japanese theater. And I'm going to get asked an FDA question. Okay, Nick. Go for it.

Nicholas Maravell: All right. Here's the milk carton. This says on the top "supports brain, heart, and eye health."

Kelly Shea: Mm-hmm. Mm-hmm.

Nicholas Maravell: I was trying to find out is that a statement that is endorsed, regulated, or permitted by FDA. And you can--

Kelly Shea: Well, I'll tell you, milk is the most highly regulated product in America and organic on top of that, all of our labels, everything we do, is under the purview of not only the National Organic Program but FDA and FTC as well. And our – actually, White Waves general counsel Roger Theodoredis who's responsible for that is in the room and if you'd like, he can come up and address it.

But I can tell you that everything we do is under the purview of those organizations.

Nicholas Maravell: Okay. So I guess my question is this makes a health claim, supports claim.

Kelly Shea: I don't think it's called a health claim.

Nicholas Maravell: Okay.

Kelly Shea: Health claims are different. They – a health claim – I don't quite understand it. It -- Roger?

Nicholas Maravell: Yeah.

Kelly Shea: There we go.

Nicholas Maravell: Perhaps we should get someone who does. Yes.

Kelly Shea: And you know what?

Nicholas Maravell: Yes.

Kelly Shea: I just need to go on record here as saying that White Wave has the most humorous general counsel in the industry.

Nicholas Maravell: Okay.

Tracy Miedema: Humorous general counsel, please state your name for the record.

Roger Theodoredis: Yes. I'm the humorous Roger E. Theodoredis. I'm the general counsel and I'm also in charge of the cafeteria at White Wave. It's true. So the question is the statement "support brain and eye health." I think Kelly is accurate when she says that the claims that we make on the label are claims that are regulated by FTC, FDA, and of course the NOP. We go through a pretty sophisticated internal process before we make a claim like that.

Obviously, we don't want to be putting things out there are going to fun afoul of any of the regulatory authorities or run afoul of competitors who might be saying something. So when we look at our labels we say to ourselves what's the most conservative thing we can say. And on the package "supports brain and eye health" is the statement that's made and is among the most conservative in this organic milk category.

So if you go out and look at some of the competitors you might see more aggressive claims.

Nicholas Maravell: Okay. So to translate that a little bit into layman's terms, this is not necessarily one of those health claims that FDA has to approve, is it?

Roger Theodoredis: Oh. No. I see what you're saying.

Nicholas Maravell: And I'm -- I'm trying to educate myself here and I didn't get a clear answer out of FDA other than I was asking the wrong person in FDA. So perhaps you might know the answer.

Roger Theodoredis: Well, the – and Martin Han will speak to this a little bit later. He's the outside counsel who works extensively with FDA. The reason I think that you didn't get a clear answer from FDA is because they're considering this. Right? And they've stated, "Hey, we're going to go look and see. There's currently a health claim out there that can be made." And they are considering, geez, do want to look at that. And they haven't really been clear, frankly.

And they haven't given guidance that is usable for us in coming up with a package. Now, having said that, we've had discussions with both FTC and FDA and I personally have had discussions with them both in this role and in my former role at another company in which they also use DHA and I can say that the claims that we are being made – that are being made on

our package from the FTC's perspective are claims that they are comfortable with.

Indeed, they are also comfortable with going beyond and making developmental claims. A developmental claim is one that says, for example, that children's brain development can be helped and supported by us by the DHA, by the DHA Omega 3. So we don't say that on our package.

We simply say supports brain and eye health. FDA is another matter and I think you didn't get an answer to that because they're considering it.

Nicholas Maravell: Gotcha. Okay. That's – that's helpful. That's as far as I think we can get the information at this point.

Roger Theodoredis: Thank you.

Tracy Miedema: Before you leave the podium.

Roger Theodoredis: Oh. Sorry.

Tracy Miedema: I'll hold off on my question. Jay Feldman.

Jay Feldman: Thank you. Here's where I have a problem and a question. Horizon, White Wave, etc., has attached its caboose to the Martek train and yet we as a board are struggling with a whole – a larger set of issues that go to the production of different types of algal oil, ARA oil. What exactly does your company want out of this process?

Roger Theodoredis: I think Kelly – I think Kelly stated it pretty well. We want to make sure that ingredients that we are using is one that is GMO-free, is one that is supported for organic production. We don't want to be doing anything that is against our company values. Our company values – Kelly's outlined them really well in my view. We want to make sure that we're doing the right thing.

We've, you know, we've hitched our caboose, really, not to a particular process; we've hitched our caboose to trying to provide to consumers something that they clearly want, to – to say to people here's what you can get out of it. To do it lawfully, to do it ethically. Right. That's what we want to do.

Kelly Shea: Can I just tag onto that? And so to be clear, what we've hitched our caboose to, specifically is a vegetarian plant-based sustainable form of DHA because we have had issues within our building. Our former CFO is

on the board of directors of Seacology. We have a lot of concerns about over-fishing. We have a lot of concerns about endangered species in the ocean.

And so we worked really hard to try and find something that would be able to be used by vegetarians and vegans and would be plant based and would be sustainable. So that's – no – no offense to Martek, but that's what we hitched ourselves to.

Jay Feldman: But the one thing you didn't mention in there is the issue we're struggling with, which is the manufacturing process, the use of hexane. So if--

Kelly Shea: Yeah, but Jay, if we don't have a--

Jay Feldman: If we as a--

Kelly Shea: But Jay, just to be really clear. We don't have a horse in the race on hexane.

Jay Feldman: Okay. So the point is if we were to carve out a category of generic algal oil that we as a board felt met the standards of the national list and the act, presumably it is the form that you've described repeatedly, that would not be a problem for you?

Kelly Shea: That would not be a problem for me and with all respect to my colleagues in the room that aren't in the same boat we're in, I, you know, speaking for my company that would not be a problem for me because we would continue to make our products. And my other colleagues in the room would need to work with you on their products.

Tracy Miedema: Just a reminder, and I really don't mean to be picky, everyone on the board, just for the good of the order, please do just wait to be recognized and then we'll – conversation will flow most smoothly. Mac Stone.

Robert Stone: Kelly, I mentioned this to you a while back but just looking we've had a lot of conversation around the wine labeling and the clarity of the label. Just in – in glancing at this label where the yellow banner of organic and DHA, it seems a little misleading to me that DHA is organic. And does that – have y'all had that conversation of the clear labeling around what's added to the organic milk?

Is that – how does that work?

Kelly Shea: Yeah. Actually, we have a whole department in our building that works on this. And if you hold that package next to the package without DHA in it, it's really, really clear that we are calling out the DHA. So if somebody goes into the store and doesn't want to buy milk with DHA, it's so easy on the shelf to see the difference. The DHA product is priced differently as well.

We do have a 24 hour/7 day a week hotline that consumers can call us with any questions and we've never had a question or a concern like that come up. So you almost have to see the two next to each other.

Tracy Miedema: Any other questions from any other board members? I have one that I think is just a yes or no question to sum up what I heard among my – or between my colleagues Mac and Nick. Is there anything on your package whatsoever that violates any known labeling law?

Kelly Shea: Absolutely not.

Tracy Miedema: Thank you.

Kelly Shea: And I'll be around in the hallways today and tomorrow if you guys need anything. Thank you.

Tracy Miedema: Okay. Okay, thanks.

Kelly Shea: Am I done?

Tracy Miedema: Yep.

Kelly Shea: Okay.

Tracy Miedema: It's lunchtime. It's 1:05. I haven't tallied how far off schedule we are but it's real off schedule. We need to be back here in 55 minutes at 2:00 p.m. Thank you, everyone. We're at recess.

[LUNCH]

Tracy Miedema: Board members, do please be seated. Four, five, six, seven, nine. NOSB members who may be in the hall, we're one hour and 10 minutes off schedule. Please do be seated. We're back in session. Lorraine. Lorraine. Next up is Ashley Swaffer. Beth Unger is on deck.

Ashley Swaffer: Hi. My name is Ashley Swaffer and I work for Arkansas Egg Company. The first topic I would like to address is pullet spacing in the welfare documents. As written, it is five pounds per square foot. That

would only equal .6 square foot for pullet at 17 weeks of age. Most producers do grow pullets at about 1 square foot per bird at their 17 weeks of age.

And I do feel that it needs to be written in the pounds per square foot due to the fact that many of us have house brood for part of the time. To equal any other humane certification, which is one square foot, it would need to be written as three pounds per square foot. The committee has also recommended that pullets need to placed outside at 12 weeks of age.

Every egg producer I've heard speak at this meeting, the Seattle meeting, or has given written comment, has asked that pullets do not – or pullets not be required to go outside until all their vaccination programs are completed. And everyone of these producers is concerned about the health of their birds when they ask for the birds not to go outside.

And we do, at Arkansas Egg, we give the most important vaccination, in our mind, and that's at 16 weeks of age and that's the salmonella vaccine. And then that vaccine needs about four weeks after administration before the bird has built immunity. So we're only trying to protect the welfare of our hens and our customers when we ask you this.

My last area of concern is not allowing the beak trim at 10 days. The infrared trim that was – that would be allowed is not a good option for ground birds. I did speak with our chick salesman and he said that many of the producers have experimented with this trend and have seen that the brown birds' beak will grow back without that 10 day trim.

So we do have birds that we don't do any trims on and I've seen firsthand what a flock of birds will do when they start pecking and – and I do not consider that more humane when we don't peck because it's something else. And I have a video if anybody on the board would like to see it. I didn't feel it was appropriate to show but you may like to see that.

So I do ask the committee to reconsider your recommendation on the issue and listen to the majority of the ag producers and also Temple with her recommendation yesterday. So I'd like to thank the Livestock Committee and thank Wendy, all your hard work. We do know, you know, this is a big task to take on and we appreciate your work on this. So.

And we do ask that you move this to the NOP so we know what direction our industry can go in. Okay. Thanks.

Tracy Miedema: Thank you.

Ashley Swaffer: Questions?

Tracy Miedema: Before I talk questions, Ashley, Lorraine if you're setting the signup book back out we're not taking any more signups. Just wanted to make sure if that was going on. Thank you. Sorry about the interruption, Ashley. NOSB, do we have any questions? Wendy.

Wendy Fulwider: Do you have any other concern with the document as it stands?

Ashley Swaffer: Yes, I do. Michael Cox will be talking earlier in the – or later in the day and he'll be presenting the spacing issues that we have with the document. I just wanted to cover pullets.

Tracy Miedema: Any other questions? Thank you. Beth Unger is up now. Leslie Zuck is on deck.

Beth Unger: Good afternoon. I am Beth Unger. I am with CROPP Cooperative, the largest farmer-owned organic cooperative in the United States. And I'm very pleased to have an opportunity to speak to the board and I'm equally pleased that one of the main themes that I've seen at this meeting from the National Organic Program report (inaudible) has to deal with the paperwork burden. That's in my written comment so I won't belabor that right now.

But I had a few thoughts I wanted to share with you based on the board discussion. First of all, I want to recognize the fact that there are – I tried to read all of the documentation that the National Organic Standards Board put out for this meeting. It was a daunting task. I can't imagine all of you being intimately familiar enough with it to discuss it.

But on top of that, there was 1,015 public comments registered, something that I expect each and every one of you looked at all of them, although I have some questions about that. I think that it's a really difficult task to get through that. But I want to ask you to exercise caution when you are counting comments because there – to – when there was a discussion yesterday in regards to the animal welfare document, there was a statement and I don't know if I have the number right in my memory, but it was something like 277 of the comments were in favor of the minority opinion. In fact, the majority of those comments were a cut and paste of the constituents at one particular organization. To me that’s one comment.

If you're not getting something in the words of the person that has a concern, that shows that they put some thought into this, that's one comment. A cart wheeled in here with 14,000 proxies that is essentially a fill in the blank form is one. Those are not thought comments that somebody has presented. So be very careful about that.

And going into that to our concerns with the animal welfare documentation, and your discussions yesterday, I think that what the organic community really needs to see – first of all, real meaningful outdoor access. A quali—a quanti—pardon me. A qualitative process-based regulatory suggestion for the National Organic Program that they can do something with.

Putting numbers in the standards, we've seen from the pasture rule has really created, oh, let's go back to the paperwork burden. That's a real good example of how that works, no numbers. I would expect that every one of you and all of the organic inspectors could enter on to a farm and get a general impression of just how well that farm has managed by the way those animals look.

Thank you very much for your attention and for your hard work and all the other thank yous.

Tracy Miedema: Any questions for Beth Unger? Jennifer Taylor.

Jennifer Taylor: Thank you so much for your remarks. Can you tell me how many farmers your organization represents?

Beth Unger: Eighteen hundred.

Jennifer Taylor: Eighteen hundred. And what kind – what kind of farm enterprises do they have?

Beth Unger: Our – the majority of our farmers are dairy farmers. We've got approximately 1,400 dairy farmers. We've got about 90 egg farmers. We have a variety of meat producers. We also have produce and juice and soy farmers for soy beverages. I hope I covered it all.

Jennifer Taylor: Okay. Thank you.

Tracy Miedema: Any other questions? Tina.

Kristine Ellor: This is probably a big can of worms but how would you enforce, for instance, you know, any kind of – how would you – how is it enforceable

without some numbers attached to it? And I ask that question sincerely because we've had that feedback a lot.

Beth Unger: That goes – thanks, Tina. That goes right back to that general impression thing. You can walk onto a farm and tell whether or not it's well managed and you've heard that in previous public comment today. Numbers do not mean good welfare. You can give chickens or whatever species you want to talk about lots of space and still have poor management going on. Those numbers do not guarantee good management practices.

Tracy Miedema: Wendy.

Wendy Fulwider: If the general impression is not good, then do we need some numbers to go to?

Beth Unger: Not necessarily. When the general impression is not good that should be noted in the inspection report and sent back to the certifier to go through the review process and have the certifier go back to the farm to establish corrective actions or a major non-compliance if that's necessary. There are systems in place.

And one thing that, you know, you may have noticed in my written comment over the years, there's five criteria that's pretty much remained the same over the years in terms of what we want to see from the National Organic Program and – but the – and the work that the NOSB does. And that is to truly understand the importance of the organic system plan and the – and the interaction between the certified entity and the certifier. This has got to be the key area where these things are decided.

Tracy Miedema: Any last question? Mac.

Robert Stone: I want to point out to best point that the inspection report asks lots of questions around what might be one section of the OSP but the inspection report can drill down to lots of aspects within that which can play into this evaluation of are you meeting the intent or not.

Beth Unger: Thank you, Mac.

Tracy Miedema: Thank you, Beth. Leslie Zuck is next. Patty Lovera is on deck. And I'm going to go ahead and read a few more of the names just so people in the back of the room, since we're off schedule, let them know they're coming up soon. Patty Lovera, again, on deck. Peter Holt, James Astwood, Alexis Baden-Mayer, Brenda Book. Thank you.

Leslie Zuck: Okay? Hi. I'm the owner and operator of Common Ground Organic Farm, an 80 acre certified organic vegetable and crop farm in central Pennsylvania. And some of you might also know me as the executive director of Pennsylvania Certified Organic. I have – I do that in my spare time. I have a few comments on the Crop Committee's recommendations, which I really thought you did a great job. And they were – the discussion was very thorough and well written and it was great to read.

So I appreciate that. And in an interest of full disclosure, I do have groundhogs and weeds on my farm. PCO asked a question on the organic system plan and the question goes like this: How do you control rodents? And farmers are not known for being extra wordy, as you know, so we'll get an – one answer and there'll be all these lines and one word – gun. Cat. Trap. Dogs. Poison.

You know, that's how they answer those questions. And of course they require follow-up information. We have to get in touch with them and contact them. I'm like what? So the rodents in Pennsylvania. You're going to have rats, mice, groundhogs. We don't have gophers but we have groundhogs. They're big gophers.

One time that answer was "truck." I'm like, "Truck? What? Do they run over it or what?" So we called the farmer up and we find out, well, he – he says he backs his truck up to the groundhog den and connects his shop vac hose and the one end of the truck exhaust pipe and the other end to the – to the den. So, anyway. Don't know if it works; never tried it myself.

And PCO did used to allow the use of the propane things for underground groundhog extermination up until 2007 when the NOP told us that that was not allowed. And our rationale – PCO's rationale for that was that the material did not come in contact with the crop or the soil. So that was our rationale for that.

And you may have discussed that. It wasn't really part of the recommendation but maybe that's sort of along the lines of it being more of a physical type of control. And the reason I bring that up is because PCO also deals with a lot of farms up in northern Pennsylvania that have gas well drills on – gas wells on them where they drill down into the ground and they inject lots of chemicals 200 feet down to extract the natural gas.

And they might not even be on an organic farm. They might be next door to an organic farm. But our, you know, rationale is that those are way

down underground. They're not really coming in contact with the soil or the plant. Another one of our staff likes to refer to the underground – idea of putting the propane underground as a vertical buffer. You know, essentially there is this 10 or 15 feet of soil between where you put it in there and where you're growing the crops.

And the other thing I was going to talk about. Oh. When you all were discussing the ammonium nonanoate – I asked Lindsey how to pronounce it. I still can't pronounce it. Nonanoate. Heard yesterday that this would be the first synthetic herbicide that would be on the national list and that sort of worried me a little bit and I went and I found a chart and it listed 50 synthetic herbicides in order of toxicity.

And it had all of the same – a lot of the same criteria that you look at. You know, the different types of environmental effects.

Tracy Miedema: Quickly finish up, Leslie. Your time's up.

Leslie Zuck: Oh. It is. Okay. Sorry about that. At the very top of that list was ammonium nonanoate, the ammonium and potassium salts of fatty acids, copper sulfates. They were all at the top as the least toxic materials you could use for herbicide and the very next material in line on that list, number five, was glyphosate, which is Roundup.

So one thing you may see yourselves hear next is, you know, looking at a petition from someone who wants to – you know, get Roundup on a national list.

Tracy Miedema: Thank you. Any questions for Leslie?

Leslie Zuck: Not that I'm advocating for Roundup on the list. That's not what I meant.

Tracy Miedema: Any questions from board members? I have one.

Leslie Zuck: Oh, sure.

Tracy Miedema: I wasn't clear on whether – and I'm sorry if I missed this in your comments – is PCO in favor of the rodentator product being available? That odorized propane being available for organic farmers?

Leslie Zuck: Well, I'm glad you asked that because is our policy not to advocate in favor as an organization of a material or not? I was sharing that with you to let you know what our rationale was in the past when we did permit its use. It doesn't really matter – I don't really like it because I have – there's

a lot of other ways to manage groundhogs as a farmer. You know, we are – we do have livestock so we are concerned about that.

And we also – when we did the research we tried to educate our farmers that even when you do use such a product, exterminating the animal doesn't keep them from coming back. And it's a habitat issue where they have to make – do other management practices. It's kind of, you know, like using an herbicide. Your weeds are going to come back unless you do other methods as well.

Tracy Miedema: Thank you.

Leslie Zuck: Sorry. That's a long answer, I know.

Tracy Miedema: No problem. Okay. Next up is Patty Lovera. Peter Holt, you're on deck.

Patty Lovera: Hi. Good afternoon. My name is Patty Lovera and I work for a consumer advocacy organization called Food and Water Watch and we are a member of the national organic coalition. So I'm going to talk very quickly about a couple of issues and then spend hopefully most of time – surprise, surprise – on aquaculture. So our members and supporters are really motivated by feeling that the credibility and the integrity of the organic standards are kept very high.

One thing they're also increasingly motivated by lately is the spread of genetically engineered crops and genetically engineered foods. They're increasingly aware that organic is at risk from contamination and the spread of using more of these and they -- they're worried about that. They don't want that to happen. And I think they want organic to speak up and try to protect themselves from it.

So I would really urge the board to make this sent to the board statement now at this meeting about the need to deal with this contamination issue and then the risk it poses to organic. On a different issue, we support the comments from Center for Food Safety and others opposing the petition to change the annotation for sulfite in wines.

On yet another issue, on the petition – on the Martek petition on DHA and ARA we support the comments of the National Organic Coalition and others to oppose that petition. This is, you know, too complicated to get into quickly but I think there's an enormous number of process issues that

are too hard to explain to consumers to make this change based on the petition as has been presented here.

And one thing I will just throw into the mix as a group that – and personally someone who spends far too much time worrying about FDA more than we do worrying about organic. We spent a lot more time on food safety and FDA. Consumers should not be reassured that something is listed as generally recognized as safe in that FDA process. That is not good enough for organic.

There are a lot of problems with that GRAS process and I'll just urge you to check out a couple of things that have written about it – that have been written about it, one last year in 2010 by the Government Accountability office that really exposed a lot of problems in that GRAS certification process. So organic needs to be better than that. That can't – that's a floor. It should not be the ceiling for how we decide what's in organic products.

Especially a product as critical as infant formula which is, you know, organic consumers and organic consuming mother's first food choice for her – her kid. That they're not going to come back from feeling that there's a problem there if they find out something they don't like about it. To spend a little bit of time on aquaculture, we did submit a very detailed comment trying to answer a lot of the questions that were asked, which were good questions, about how to you deal with these questions of what materials can you use when there is an organic standard for aquaculture. As some of you might remember, we're really concerned that the 2008 recommendation from the board which allowed wild fish meal as food and allowed the use of open net pens, that that is not where we should be starting with an organic standard.

So I think it's hard to deal with materials until we revisit that standard. And we really urge you to do that. But on the issue of materials – and I should mention there was also detailed comments submitted by the Recirculating Farms Coalition and Consumer Union was not able to be here. I know they're a consumer group but they really wanted to mention this as well – the type of operation matters. That open systems matter.

Those materials get out into the environment and we really have to have a very strong process to look at those materials and open and closed aren't the same.

Tracy Miedema: Thank you. Any questions for Patty Lovera? Thank you very much.

Patty Lovera: Okay. Thanks.

Tracy Miedema: Peter Holt is up now. James Astwood is on deck.

Peter Holt: Good afternoon. My name is Peter Holt. I am a former research immunologist with the USDA Agricultural Research Service. I retired this past July after 24 years of research on the effects of stress on immunity and resistance to disease, primarily salmonella (inaudible) in chickens. I've come here to speak to you regarding the advisability of mandating soil outdoor access as a requirement for organic egg certification.

From a welfare standpoint, this mandate is questionable. The EU has provided the excellent platform for answering this question through the widespread implementation of pasturing hens over the past decade. From the EU data, it's difficult to make the claim that outdoor access is more hen welfare friendly when the birds exhibit a higher incidence and variety of disease and twice the mortality of confined individuals.

I argue that the health of a bird or lack of is probably one of the strongest indicators of bird welfare. Science and common sense need to drive this equation, not perception and emotion. What about egg safety? SC has been a chronic egg safety problem for decades. This organism readily infects a variety of animal species, both wildlife and poultry. By allowing outdoor soil access, the hens are put into direct contact with numerous salmonella carriers – potential salmonella carriers.

The FDA final rule mandates steps to be taken to prevent indoor interaction of hens with wildlife but the outdoor interaction is probably even more risky. Further, as SC is secreted into the feces, the soil potentially become contaminated. How do you decon soil? The suggested increase time between flocks allow the soil to rest and hopefully reduce SC levels but there is no guarantee of success.

This is a risky proposition. Dioxins and PCBs probably do not strike a chord for most people like salmonella or e.coli 0157H7 but they are dangerous and consumption can lead to cancer, neurological disorders, as well as endocrine and reproductive problems. These compounds are products of manufacturing and are widespread in the environment, especially in urban centers, but also prevalent in rural areas.

Hens foraging on dioxin contaminated soils will accumulate the compounds into their eggs. Even low levels in the soil can result in significant contamination. In the EU, eggs from free range hens exhibited

higher dioxin and PCB levels compared with those from confined hens and 10 percent of the eggs exceeded the EU maximum residue level in eggs. Ten percent.

Eggs exceeding this limit must be destroyed and farm egg sales are shut down until the problem is remediated. Excuse me. Similar dioxin egg contamination was observed in Taiwan. Now what about the US? We have virtually no information on dioxin PCB contamination of US farmlands. Considering the similarities of manufacturing and farming between the US and EU, differences between the two land masses are doubtful.

We are talking human safety here. This is no fanciful "what if?" scenario. The problem has been documented already. Let's learn from the EU experience. Thank you.

Tracy Miedema: Thank you for your comments. Any questions for Peter Holt? Thank you.

Peter Holt: Mm-hmm.

Tracy Miedema: Next up is James Astwood. Alexis Baden-Mayer is on deck.

Jim Astwood: Good afternoon. I'm Jim Astwood from Martek Biosciences. I have three quick things to share with you. One is a short written document that Lorraine is circulating. The second is I've prepared a table that outlines which organism, which process, and which product is associated with the DHA and ARA products in the petition.

And the third thing I've provided to you are the three quality statements that we're required to present to European customers to comply with the European Union's rules for non-GMO status. Just to reiterate to you that our products are in fact GMO-free and non-GMO. With that said, I'm prepared to answer any additional questions now or tomorrow that the board may have.

Tracy Miedema: I know some of you are just now receiving the table so we won't be able to ask questions until we have that in front of us. That table, board members, it's on page three, to save you a minute. Okay. Any questions for James Astwood? Nick Maravell.

Nicholas Maravell: Thank you for coming again. I was reminded by one of my fellow board members but I think you answered the question when we raised the issue of non-GMO status and that applies to both DHA and ARA. Thank

you for that clarification. I had a question about the hexane in terms of the process recycles that removes the hexane as a processing and recycles the product.

We were also presented with information that said that there's about 8,400 pounds of hexane admitted into the air on an annual basis from one of your facilities. I forget – I think it might be in South Carolina. My question is what – how – what's the relationship between emitting hexane into the air and recycling the hexane?

Is this a very – is that 8,400 pounds a very small percentage, a significant percentage of the total hexane that might be used at that facility during – during the year? So I'm just trying to get a handle on how much is actually being recycled.

Jim Astwood: That's a terrific question. The short answer is that the vast majority of the material is, in fact, recycled. To remove the hexane from the product it's an evaporation process and then a distillation. The amount that escapes is very, very small. I can't give you off the top of my head the proportion but it's a very, very small fraction. And that's an EPA environment – regulated environment.

Jim Astwood: We could certainly provide a detailed answer to – tomorrow.

Nicholas Maravell: Yes, if you have it. If you--

Jim Astwood: But the impression you should have is a very small amount. I'm sorry.

Nicholas Maravell: Yes. I said that would – that would be helpful if we can make a statement that says this is the amount that's emitted. This is approximately what's used and recycled during the year and it represents whatever percentage. Okay.

Tracy Miedema: Was there a follow-up question before we go on to other board members, Nick?

Nicholas Maravell: Yeah. Well, it's on -- it's not on hexane; it's on a different aspect. But I do have another question. Okay. We're hearing about various benefits of DHA and ARA in the human diet. Does Martek advise its customers in any way about health claims or dosage levels or anything like that related to the use of the product?

Jim Astwood: It's an interesting question. What we do provide is all the scientific basis for all of the claims that are available throughout the world and certainly

we make any of that information available to our customers on a demand basis.

Nicholas Maravell: But, for example, in marketing your product you're not – are you making any statement with regard to, in my words now are not going to be FDA-type approved words, but health claims or identity claims or functional claims or anything like that? Is that part of your marketing?

Jim Astwood: What we – what we do is we provide the scientific information. We provide all the regulatory information and then the customers themselves are the one that are legally required to monitor and – and be responsible for the claims that they're making on packaging, advertising on television, advertising in magazines, and that type of thing. So we provide basic information and then our customers use that for marketing purposes.

Nicholas Maravell: Thank you.

Tracy Miedema: Thank you. Any other questions? I saw Jay Feldman. Was there – was there another hand down here? Okay. So let's start with Jay and then Steve.

Jay Feldman: Thank you. The petition mentions that high oleic sunflower oil may be added and it also – to provide the product with a consistent DHA potency. And then it says the finished oil is then packaged and stored. "DHA algal oil may also be microencapsulated to provide a product in a – in a provider form—" I'm interested in you, if you could, explaining that and then telling us how many branded products, or if you could provide a list with the branded products in which these formulations appear.

And I'd also like to know if we could get a – the – in response to Nick's question – the EPA data on the releases. When you provide that information if you could give us the reference to the EPA emissions data that – that is recorded. Thank you.

Jim Astwood: Certainly. So if I understand, I owe you two lists. On the branded products piece do I understand that you mean consumer packaged goods? Or do you mean literally Martek SKUs?

Jay Feldman: The latter, please.

Jim Astwood: Okay. That's easy to do.

Tracy Miedema: Steve DeMuri.

Steve DeMuri: Your colleague earlier stated that you're working on some alternatives to hexane extraction. Can you give us some kind of idea on how that is looking? And what kind of a timeline are you looking at to have that work completed? And what's the prognosis?

Jim Astwood: Well, I'll tell you the history and that will inform the prognosis. The history is that the company has been looking at, and others have been looking at methods to do hexane-free extractions of Crypthecodinium for probably 15 years. So that makes it very difficult for us to give you an accurate estimate. Is it two years out, three years out, five years out?

I can say with good faith that we're working diligently to make that happen but it's impossible to give you a prediction on how long it will take. It's a very, very tricky problem.

Tracy Miedema: Mac.

Robert Stone: The – you use in the – in the patent, I guess, not necessarily the right word, but you have oxidizers, stabilizers, and whatnot. Are they always the same or do you have a range of antioxidants and a range of these stabilizers that you can use depending on market forces or capabilities or customer supply chain kind of? So that we know that these other ingredients that we're wondering about, are they always exactly the same or is there a range that you can kind of work within?

Jim Astwood: Historically there has been a range but our current offerings basically are one – one set. Basically as improvements are made we use the most available – most recent improvement.

Tracy Miedema: Any other questions? Jay Feldman.

Jay Feldman: I think your colleague earlier had – or maybe it was you yesterday, had mentioned that you're looking at new processes all the time and that there may be the possibility at some point down the road of expanding on this enzymatic thing, especially when it comes to the product that is allowed by FDA. Where are you at in that process and what does the future look like for them?

Jim Astwood: Well, there's two aspects to that and it's very similar to the previous question from Steve. We have significant amount of resources working on developing enzymatic approaches for the Crypthecodinium and motoralia (sp?) organisms. It's difficult to say how long it will take but we're committed to working in that direction.

Tracy Miedema: Jay.

Jim Astwood: It looks like a follow-up question.

Jay Feldman: Okay. Just one last question on the GMO thing. Just is there anything that you guys do – maybe it's not relative to this product but perhaps others that use GMO corn as a substrate for any of the other materials that are used? Does that not related to this product or other products?

Jim Astwood: Also a very interesting question. Our products meet the European standards for certification for non-GMO and so that's the standard that we basically make our production against.

Tracy Miedema: NOSB members, I would ask if we contain our questions on the – to the materials that are being deliberated upon instead of product lines completely unrelated to matters of the NOSB. Any other questions? Thank you.

Jim Astwood: Thank you.

Tracy Miedema: Alexis Baden-Mayer. Thank you. And Brenda Book, you are on deck.

Alexis Baden-Mayer: Hello. I'm Alexis Baden-Mayer with the Organic Consumers Association representing our 300,000 members. I want to just speak immediately to a point that was raised by the last speaker about being in the EU and recognized as a non-GMO. That came from a food standards agency opinion in the UK. And I look at that opinion and I looked at the documents submitted to that board and there is no technical information.

It's about – it's the same amount of information that we have from certifiers affidavits that they got from Martek that it's non-GMO. So we just, you know, we need to delve a little bit deeper into this so that we really know for sure. Now I want to speak first about organic wine. Consumer support for the label as it currently stands is evidence by the 10,837 letters that I submitted electronically from our members.

There were additionally 400 other comments on the – that came into the NOSB from other organizations and people in support of the current labels. And I just brought another 240 petitions in support of the current labels for organic wine. The bottom line is if it's not broken, don't fix it. You know?

We've got a wide variety of sulfite-free USDA organic wines that are widely available. Sales of USDA organic wines are healthy and growing and if the labels are not changed they can continue to grow. There isn't a single company in the USDA organic category that is saying they've reached their limit and they can't expand unless they get sulfites.

The current labels support consumers' right to know. They maximize consumer choice. "Made with organic" winemakers get to use sulfites. Nobody else in organic gets to use sulfites. That's a little bit hard to justify but we're comfortable with that as long as consumers can tell the difference because the label makes it clear.

The two-tiered system incentifies us winemakers to be as organic as they can be. Winemakers can claim that they're made with 100 percent certified organic grapes and if they, in addition, are making wine without synthetic preservatives, they can get the USDA seal. Let's keep organic the gold standard.

If you get rid of synthetic preservative-free categories in organic wine, or the synthetic preservative-free category in organic wine, sulfite-free winemakers will have a very good case to make that they are more natural than organic. And there's nothing I dislike hearing more than somebody who claims they're more natural than organics. So we have to maintain this gold standard. And we have to encourage people to be both organic and sulfite-free.

And if we keep these two-tiered system that's what we're encouraging. And if we get rid of the two-tiered system then it's very likely that some winemakers will say, oh, it's more important to be sulfite-free and some winemakers will say it's more important to be organic. The bottom line is, don't ask people who are already using sulfites if they need sulfites. Ask the people who aren't using sulfites if they need sulfites.

Tracy Miedema: Thank--

Alexis Baden-Mayer: I don't have time to talk anymore about GMOs?

Tracy Miedema: Thank you, Alexis. Nope.

Alexis Baden-Mayer: Somebody want to ask me a question?

Tracy Miedema: I will call for question here now. Any? Jay Feldman.

Jay Feldman: Yeah. I have a question about the Boxer amendment and whether you can shed any light on that, and then the – I'm interested in what you are thinking about GMOs.

Alexis Baden-Mayer: I'm sorry? The Boxer amendment? This is catching me off guard – or off guard. About--

Jay Feldman: Could you address that or is that – you haven't? The Boxer amendment on – that allows sulfites in wines and what impact that really has on our whole discussion. Have you looked at that?

Alexis Baden-Mayer: You mean what changed OFPA and why we have the current system?

Jay Feldman: Yeah. And what it requires and doesn't require of us as a board in terms of the natural listing process.

Alexis Baden-Mayer: You know what? I'm – I'm not catching what you're saying.

Jay Feldman: Okay.

Alexis Baden-Mayer: Sorry.

Jay Feldman: So tell us about GMOs.

Alexis Baden-Mayer: If I may. You have my remarks and I hope you'll read them in their entirety, but obviously the worst news that members of the Organic Consumers Association could ever hear is that there's an illegally-approved non-organic substance that may be GMO processed with a neurotoxin and mixed with other non-GMO and synthetic ingredients in an infant formula that's certified USDA organic.

So I never want to be the person to deliver news like that. But there is a serious question in my mind as to whether that may be the case and what I really ask of you – this is all in your hands – I need to ask you, you know, I'm not convinced that my concerns are, you know, my concerns have not been wiped out by what we've heard from Martek yet. I really am sincerely concerned.

And I want you all to ask yourselves what convinces you. You know, I have a bunch of questions in here that you all need to answer and many of you have raised them already and I'm sure that this – I know this is what you're doing and we just need to have all of these questions answered beyond a reasonable doubt so that we can move forward.

Tracy Miedema: Thank you. Nick Maravell.

Nicholas Maravell: Yes. What would convince you, for example, that there were no excluded methods used in the production of DHA and ARA?

Alexis Baden-Mayer: Well, it would be very interesting to know, you know, what makes it – in Martek's mind what makes it GMO? What makes it non-GMO? How do they define the process? And then, given the way they define the process, what process are they using? It will be very important – you know, we can't just leave this to certifiers.

We can't say, you know, "Okay, maybe there are some things we don't know about their process. The certifiers will figure it out." We need to be very clear that there is in fact a non-GMO process. We have to understand that. Each one of you actually have to understand exactly how these products are produced without using engineering that's prohibited in organic.

And then ask the company how they separate that out for their customers. You know, organic is the only category that excludes GMOs. They don't have to do this for all of their customers and we have heard today – it's very confusing – which customers of Martek are getting what.

So we need to figure out from Martek how they separate out non-GMO versus GMO and, you know, all of the hexane extracted processes and then how they deliver these to their consumer. You know, what sort of information do they provide on each SKU and how is this delivered.

Tracy Miedema: Nick. And then John.

Nicholas Maravell: I assume that you've had a chance to review the technical review and the petition and you're suggesting that there is information beyond that that this board should consider. Is that correct?

Alexis Baden-Mayer: Well, what really did it for me was looking at the patents. Because they're – the patents for these trademarked products include everything under the sun, all the things that are excluded from organic. And we have to be really careful. It's not – we're not just approving Martek's product. We have to also be able to have a way to review whether something is GMO if it comes from another company. And that'll be the really difficult part.

As we have more, as you say, consumer demand for nutraceuticals in foods, you know, we're entering into an area of technology to which we've

barred the door. And we have to figure out how we're going to evaluate whether something is used with excluded methods or produced with methods or not.

And then that has to be applicable to this company and all the companies that will come after them. And I don't think that these issues are settled yet.

Tracy Miedema: Nick, do you have a follow-up question? Please proceed.

Nicholas Maravell: Well, we have some evidence before us from the technical review and the petition and we have asked Martek – we've double-checked on excluded methods. Now are you suggesting that perhaps the interpretation of what is an excluded method perhaps is being viewed one way by the program and perhaps another way by the petitioner? Is that – is that a possibility for you?

Alexis Baden-Mayer: Oh, that's definitely a very large concern. Also, when we say that, well, we do use some mutagenesis and traditional plant breeding is – do we actually know that that's the exact same scientific process that Martek is using to modify algae and funguses? So, you know, it's beyond me. I'm a lawyer. I don't know this stuff. But I think that these are very important questions for the board to have absolutely settled.

Tracy Miedema: Let's clear this up with the NOP right now, because this organic program does have a process for verifying whether something is GMO and let's not -- let's not guess at it and let's just hear it straight from the program. How do we verify what is being discussed here today?

Because there is a way besides all of us picking up and driving to a facility. There must be a way.

Miles McEvoy: Well, actually, that's kind of a complicated question. It's a whole system of certification that is involved in verifying that substances are produced and handled in compliance with the standards which prohibit the use of excluded methods genetically modified organisms. So it kind of depends on what substance the certifier is looking at of how they would go about verifying that it doesn't – it is not the use of an excluded method.

So, for instance, if it's a seed they would – it has to be an organic seed unless an organic seed is not commercially available. If it's an organic seed then it's by design not a genetically modified seed. If it's a non-

organic seed, then they need to have some way of verifying that it's not a genetically modified seed and that is often done through an affidavit.

In terms of inputs that are used in processed organic foods, that's generally the way that certifiers are verifying that an input has not been genetically modified is by an affidavit from the manufacturer that states that that particular substance is not genetically modified. So it really depends upon the substance that's being evaluated of how much diligence the certifier needs to go through to verify whether or not it's genetically modified or not.

For certain things that are – their source is corn or soy or cotton, then there would be – more questions would be asked than things that are not in commercially released as genetically modified products.

Tracy Miedema: A follow-up to that, Mr. Deputy Administrator. This petition was approved for our review before we received it. So the NOP approved the petition to be reviewed. And my understanding is that the program reviews some burden of evidence prior to us receiving that. And I guess, well, there's an implication being made right now that there is an unmet evidentiary burden here.

So help us understand what the legal burden is for our board when we're considering a material and for you before you pass a petition on to us.

Lisa Brines: Hi, Tracy. I'll try and answer that. Lisa Brines. The role of the NOP in terms of when a petition comes in for review by the board is we do do an initial assessment to make sure that the substance is eligible for petition, that it hasn't been reviewed by the board previously for the same use, and also that it meets the guidelines for submitting petitions so that the petition is complete in that respect.

We don't fact check all the data or information that's in the petition. That's really the role of the technical review and the function of that to verify that type of information. The incoming petition that was received did state within the petition that it was not from a genetically modified source. We wouldn't normally go past that in terms of the initial assessment by the program.

Tracy Miedema: Thank you for that. Nick, did you have any further follow-up questions? Okay. And let's do -- let's keep the pace moving along.

Nicholas Maravell: Your statement also suggests that we should be sure about the non-synthetic status. Could you comment a little bit more on – and again, I assume you've read the petition and the technical review – as to what your feeling is about the level of questioning we need to engage in on that.

Alexis Baden-Mayer: Mm-hmm. Well, the very claim that the company makes that they have produced a DHA that is – they can produce more DHA than would naturally be produced in nature from this type – the same type of algae or fungi. So how did they do it? You know, we need to get into that. And there are many different ways that it could be done. Some are legal in organic; some are not legal in organic, and those things need to be explained fully.

And that, I think, would change your opinion, obviously, on whether or not something is synthetic. But, you know, the very basis of that, that – that they have a patent on this product because it does not exist in nature. They have done something to enhance what they found in nature. It is a high DHA substance now. It is a high ARA substance now. And that probably occurred through a synthetic process.

Tracy Miedema: Nick.

Nicholas Maravell: I believe I addressed that issue to Martek already and the implication was, and board members correct me if I'm wrong here, that it was through the breeding of the organism which was a result of classic mutagenesis that allowed them to find a strain that produced a higher level than would occur in nature. And so that's what you're referring to here with regard to the synthetic nature, that this is not an organism that would occur in nature but it was bred.

Alexis Baden-Mayer: Mm-hmm.

Nicholas Maravell: Okay. I'm just clarifying. Are there any board members here that want to pick up on this line of reasoning? Okay.

Katrina Heinze: This is something I actually could speak to, not specifically but, you know, because I work with fungal cultures. And there's lots of ways that they could be selected for, lots of ways they can be bred. There's lots of things that fungi do that, say, cows don't. And I won't get into the nitty gritty detail, but there are ways to improve fungal cultures that don't exist in, you know, other organisms.

And I can't speak to algae because I know nothing about that. So I guess – I guess I feel satisfied with what they've told us. Because I know that there's lots of ways that you can improve cultures without prohibited methods.

Alexis Baden-Mayer: Well, I guess we could just give them the benefit of the doubt and--

Tracy Miedema: Just a moment, ma'am. I haven't recognized you. We're still taking – that wasn't a question.

Alexis Baden-Mayer: Oh. Excuse me.

Tracy Miedema: She was replying to Nick's asking whether there was any other board members. Any other board members that have a question? Thank you very much. I'd like to recognize, excuse me, Brenda. Sorry. I'm not quite ready for you. If you could have a seat. I'd like to recognize Mr. Deputy Administrator Miles McEvoy with an important announcement.

Miles McEvoy: Okay. Okay, is everybody ready? Got your pens ready? Okay. The secretary has made the determination for the appointees for the 2012 board, five new members to the National Organic Standards Board. And I'll just read the statement here that was sent recently. The US Department of Agriculture appointed five new members to the National Organics Standards Board today adding significant depth of experience in a wide range of perspectives to the advisory organization.

"As the board serves the critical role in the direction of the USDA National Organic Program, we are pleased to welcome these individuals chosen for their expertise and familiarity with organic issues," said Deputy Secretary Kathleen Merrigan. The following representatives, their terms will begin on January 24, 2012.

And they include in the Handler position Harold Austin. Mr. Austin is currently the director of Orchard Administration for Circle Fruit Company, an organic tree fruit grower and shipper in Washington state. He's also a member of the Washington state Department of Agriculture's organic advisory board, the Northwest Horticulture Council of Science advisory board and the Washington State University's leadership team.

He has been a leader in the organic tree fruit industry for years and has had broad exposure through the marketing segments following produce from the farm to the market. In the producer position: Carmela Beck who

present in the room here, I believe. Carmela? There you are. Welcome to the board. Ms. Beck is the National Organic Program Supervisor and National Organic Certification Grower Liaison for Driscoll's, an organic berry producer.

She is a member of the CCOF Government Advisory Council, the Organic Trade Association Mexican Task Force and Latinas in Agriculture. She brings along extensive knowledge and experience with organic certification. Her familiarity with California agriculture in particular, where much of U.S. organic produce grows, will enhance the knowledge base of the board.

In the environmentalist position, Tracy Favre. Ms. Favre is the Chief Operating Officer for Holistic Management International, an international non-profit group whose mission is to educate about how to manage land sustainably. She has 17 years of experience working with municipal and industrial clients on watershed management projects as an environmental engineering consultant. She also authors technical articles for industry journals and serves as a subject matter expert. She was here for the last two days. Some of you probably the pleasure of meeting with her.

She had to leave this morning to go back to her home in Colorado. In the Consumer Public Interest position, Jean Richardson, PhD., Professor Emerita. Dr. Richardson is Professor Emerita of Natural Resources, Environmental Studies and Geography at the University of Vermont. She is also a maple syrup producer, organic inspector and independent contractor for matters relating to rural development, agriculture and the environment.

She has served on the board of directors of the Vermont Natural Resources Council, Northwest Medical Center, and the National Wildlife Federation. She was also appointed by President Clinton to represent the United States on the NAFTA Commission for Environmental Cooperation. She brings to the board an extensive background in public policy and work in sustainable development in addition to her understanding of organic agriculture as a result of her work as an organic inspector.

The Scientist position, Andrea – which I probably – a lot of people don't know this -- Zea Sonnabend. Who also is present here somewhere. Zea? I guess she stepped out for a minute. Missed her moment in the sun but she'll have five years of her moment in the sun up in the front.

Ms. Sonnabend is the Policy Specialist and Organic Inspector Specialist for CCOF, an organic certifier based in California. She has served on the board of the Organic Materials Review Institute, the Organic Seed Alliance, the International Organic Inspectors Association, and the California Department of Agriculture Invasive Species Advisory Council.

She has extensive scientific knowledge and experience with materials used in organic production and handling. The board and prior boards certainly know Zea quite well. And formerly, she served as a technical advisor to the National Organic Standards Board from 1993 to 1995. So she's been doing this for a very long time. So congratulations to the new members. And we look forward to working with you and thank you for your time.

Tracy Miedema: Thank you, Mr. Deputy Administrator. Next up is Brenda Book. Kevin Crosby is on deck.

Brenda Book: Hi. My name is Brenda Book. I am the program manager for the Washington State Department of Agriculture's organic program. I'm also the current president of the National Association of State Organic Programs. WSDA certifies over 1,100 producers and handlers.

We're also the oldest and largest state run certification agency in the US. In addition to the services we provide as an accredited certifier, we also provide third-party review of material input for compliance with the national organic standards. Our authority for this program was established in Washington law and hold ISO guide 65 accreditation for this program.

We're one of the two organizations officially recognized in the NOP handbook as credible material review organizations. We've written comments on several recommendations and I trust the board has reviewed those in full. Today I'd like to make additional comments on two of the CACC's recommendations.

In regards to the Evaluation and Material Review Organizations, as noted in our comments back in April and again this past month, we're pleased to see this work on the national level and we welcome further oversight by USDA for our program. We have no doubt that our already accredited program will meet any future requirements by USDA and, as has been noted, an accreditation criteria in scope is a long-term solution to strengthening organic integrity.

What is needed now, though, in the short term to strengthen organic integrity is guidance for the 100 accredited certifiers that are making input material review decisions each and every day for the 30,000 NOP certified operations worldwide. As just noted in the previous comments about the GMOs, every certifier is figuring that out on their own on how to evaluate if something has GMOs in it.

There's not official guidance from the program on how we should be doing that. We also need evaluation enforcement of these material review decisions during certifier accreditation audits. Additionally, we need criteria on how review organizations become recognized by NOP and when review decisions by one certifier can be accepted by another.

And finally, we need a taskforce to assist in the development of guidance for certifiers and eventually accreditation criteria for review organizations. As was recognized by the board after the Tree Fruit Taskforce report yesterday, a taskforce of experts is extremely beneficial to bringing issues to the forefront that can help the NOSB and NOP make data-driven decisions.

We look forward to being a part of that conversation. In regards to the unannounced inspection recommendation, WSDA strongly supports the use of unannounced inspections in order to evaluate organic integrity. We have a long standing policy on conducting routine surveillance as well as risk-based unannounced inspections and a minimum five percent of our operations undergo unannounced inspections each year.

Concerns we have on the recommendation. There are currently 18 state--

Tracy Miedema: Go ahead and finish your sentence, Brenda.

Brenda Book: There's currently 18 state agencies that are accredited certifiers. In addition to having an authority under NOP we're also bound by state laws that may be in conflict with federal regulations when it comes to access pasture and collection of evidence. This needs to be considered in best practices. And I also have a couple other comments about our unannounced inspections and I welcome any questions on it.

Tracy Miedema: Tina.

Kristine Ellor: I would find that really helpful to hear if you wouldn't mind.

Brenda Book: Another issue with the recommendation is that it seems to be confused on the issue of access to property when the operator is not

present. The discussion section clearly recommends not entering the property when no –recommends not entering the property when no operator is present. Paragraph seven of the guidance states without qualification that the inspection can take place without the operator present, but paragraph eight states the inspector should not enter private property without explicit permission.

Theoretically, the operation has been given permission by applying for certification; however, authority to inspect is limited to property dedicated to production, handling, and structures. If there's no clear delineation, an inspector without an escort could stumble into an area where they're not authorized to be and be in trespass.

The proposed guidance also is in conflict with the clear requirement in the regulation for the inspector to conduct an exit interview. The exit interview is there to confirm the accuracy and completeness of inspection observations and information gathered. Without an exit interview, evidence in the form of samples or observations made while the operator is not present become a he said/she said issue and the evidence could eventually be thrown out, resulting in us not being able to follow up on a violation.

Tracy Miedema: Tina.

Kristine Ellor: I imagine we'll talk about this tomorrow. I'll just bring it up and see if you have any ideas about this. Would it be possible for, and Miles might want to weigh in on this too, for each certifying agent to work out some sort of signed disclosure or commitment that would solve that issue of trespass?

Miles McEvoy: Well, they can – you can have them sign an agreement that they allow you to enter the premises between, you know, during normal business hours but you still want to make sure that you're not violating any kind of trespass laws. So I think this is something that if the board provides their intent that we could work this out in guidance to certifiers.

It's probably going to vary depending on what part of the world you're in, in terms of what the legal ramifications are, but it's something that certainly we don’t want inspectors running into legal problems from trying to do unannounced inspections. But just signing a piece of paper I don't think is adequate to solve – to provide you with access at all times if no one is present.

Brenda Book: And that's our experience. We already have somebody sign it.

Tracy Miedema: Any other questions? Thank you very much. Kevin Crosby is on now. And just a moment, sir. William Friedman is on deck.

Kevin Crosby: Good afternoon. I wish to thank the committee for the opportunity to comment on ammonium nonanoate. I represent a small business developing products for the organic farming community. My professional career as a chemist and agronomist has been spent in a variety of roles, but always the number one problem that comes back to food production ultimately turns to weeds.

In many, many cropping situations even the most robust organic methods can fail to give adequate weed control. And certainly as organic acres increase, the problem of weed control will also increase. The challenges of a large operation are far different than a one acre farm. Increasing organic production will depend on better organic tools for the grower to provide weed control.

Regardless of method, weed control must be timely, effective, and economical. I believe ammonium nonanoate is a solution, or a tool for a problem of weed control for organic systems. Criticisms of ammonium nonanoate during the review process focused on three items. First, ammonium nonanoate is synthetic. Yes, it is processed from vegetable oil or beef tallow. The reason is simple. Free fatty acids simply do not exist in significant amounts in nature.

You cannot extract fatty acids from a commercially available source. They must be made from triglycerides such as oils or fats. I must point out that fatty acid soaps used as organic insecticides are also synthetic and come from the same kinds of sources as ammonium nonanoate. For the argument to be consistent, either ammonium nonanoate should be approved, or insecticidal soaps should be de-listed. They are the same chemistry, the same sources.

Secondly, there is the claim that ammonium nonanoate is unnecessary as there are effective alternate products. I believe this statement is incomplete at best. Products such as vinegar, lemon grass oil, propane flaming have been shown to give less than desirable weed control when used as directed. Ammonium nonanoate is useful at lower concentrations, gives very rapid timely control and is more economical to use.

The third criticism is the unknown potential for having adverse effects on the soil. Since the product will not be applied to the crop, as it is phyto-toxic to crops, but over the soil between the crop plants, this is a legitimate

concern. However, the EPA review of ammonium nonanoate for non-organic use clearly shows fatty acids are rapidly destroyed by microorganisms in the soil. Due to the ephemeral nature of the material, it is not expected to have serious affects on native microbial communities.

One final point. Ammonium nonanoate is food for microbes and rapidly converted to carbon dioxide. This means that ammonium nonanoate is part of a closed loop. Carbon dioxides is fixed by plants, converted to an oil or fat, processed to ammonium nonanoate, briefly acts as a herbicide, then converted to carbon dioxide to begin the cycle again. When all the facts are considered, I believe it's a product that has arrived at the right place at the right time.

I urge the committee to cast a decisive vote to allow ammonium nonanoate use in organic food production. Take the leap of logic and faith and move from the approved non-food use over on the fencerow, just move that last 10 feet over into the field.

Tracy Miedema: Thank you. Thank you, Dr. Crosby. Any questions? Katrina.

Katrina Heinze: Thank you. One of the key arguments against listing as I'm trying to wrap my head around this material, is that there is not, has not ever been, a broad spectrum herbicide approved for use in organic. What do you say to that?

Kevin Crosby: That's true. There – well, let me back. Concentrated vinegar is a broad spectrum herbicide used at higher concentrations.

Katrina Heinze: A synthetic.

Kevin Crosby: A synthetic. I would raise – I would – yes, that’s true. I would make the point that let's be consistent and treat ammonium nonanoate the same way we treat potassium salts or fatty acids that are used as insecticides. They're the same chemistry, produced in the same way. You hydrolyze triglycerides down to the constituent fatty acids and then make salts out of those. It's the same chemistry.

Tracy Miedema: Any other questions? Thank you very much. William Friedman, you are up now and Dave Carter is on deck. Is Dave Carter here? Okay. Katherine DiMatteo, you're on deck. Go ahead.

William Friedman: Good afternoon. I'm William Friedman. I oversee the organic product practice at Covington and Berling, a law firm in D.C. We have the largest organic products practice in the world. I'm the former Vice Chair of

this board and currently teach food and drug law at Tsing Hua University in Beijing which is China's top law school.

And I can tell you there's a lot of interest in organic in China and one of the things that I have talked to my students about is the DHA issue which is now before you all. I've represented Martek Biosciences and my firm has since 2005. The issue first came up when a certifier had approved the use of DHA in an infant formula under the synthetic vitamin category.

That complaint was filed about a year and a half after that product started being sold and the NOP looked at it, and after review and after some back and forth with me – this was not from Martek; I'd never heard of Martek at that time – it's for an infant formula company. The NOP issued a letter ruling ratifying the decision of the certifier saying it was fine to characterize DHA as a vitamin.

Since that time, DHA and ARA, the Martek products, have been allowed in organic products and have been allowed without any incident until 2010 when the program determined that they had made a mistake in the scope of the nutrient, vitamin, and mineral category. At that time they decided to allow Martek and anybody that sold these micronutrients to petition the program for listing on national list. Martek did that and any other of the other competitors or other companies that did it have since apparently exited the category.

Or are awaiting the disposition of this petition. Or, excuse me, these petitions. So really, what you have right now is not the same thing that you normally face. This is not a listing of a material that you know nothing about. It's not a listing of a material that’s never before the board or has now known how organic consumers would react to it.

This is really shifting something that is currently being allowed and used under 605B as a synthetic vitamin to 605A which is the non-synthetic, non-ag section. We agree with the recommendation of the Handling Committee. We agree with the technical review that determined that it was a non-ag product because it's an isolate of a plant material.

So we're in support of that. We're in support of the addendum that the committee issued just a few days ago that used the criteria that are already in the act and in the rules to review the other ingredients that are inside of the material. There's been a lot of misinformation about some of the aspects of this material and this product. And I wanted to try to clarify a few of those.

And then also try to address some of the concerns I know -- Mr. Maravell, you've asked a number of questions; Mr. Feldman, you have as well. And maybe talk with you all about some annotations and see if these things would address your concerns. First on the GMO. I'm, frankly, I'm a little mystified at the conversation and particularly the witness that spoke a few minutes ago about how the program knows nothing about whether something really is GMO or not.

There is a standard. Is that the full three minutes? Is up? Okay. Well, if I can take 10 seconds I'd like to offer some annotations or I can take them as questions, whichever. Because I know you all have been wondering about this and I've spoken to several of you about it in the – during the breaks.

Tracy Miedema: Please finish your thought on GMOs and then we'll move into questions.

William Friedman: Okay. On the GMOs I simply wanted to say that the program has a standard that's been applied here. The question has been asked and answered for months and repeatedly. And I think that, the question of whether there's a new need for a general policy, that's something for the future but it's not for this particular material.

Tracy Miedema: Any questions for Mr. Friedman? Let's start with Calvin and then Jay.

C. Reuben Walker: You mentioned offering some possible annotations. Could you share that?

William Friedman: Yes, I can. Well, it's clear from the conversations that you all have had and the comments that have made that there are concerns about the GMO issue. Although we feel it's answered it would be fine if you added an annotation that said DHA – right now the recommendation is "DHA from algal oil." There was a suggestion that the other – the ARA would be "ARA" from fungal oil. Those are fine generic listings that are non-proprietary.

And we think you could add an annotation that said "from a non-GMO source." With regard to hexane, although the hexane extraction is only used for the infant formula product from Martek, it is not used in the food and beverage products that would go – that currently go into organic products. We would be fine if you wanted to say that there is non-hexane extraction for food and beverage products but we would caution you to not

say for food and beverage products non-hexane extraction but make an exception for infant formula because FDA has approved the algal oil, the DHA, for infant formula and the safety profile of those products depends on the extensive clinical studies that have been done on that particular material.

So we would suggest that the annotation be "hexane-free for the food and beverage" and allow hexane extraction only for FDA-approved infant formula ingredients. The third one that we would be fine with, which has also come up, you know, the program suggested it in its memorandum, is that any agricultural product inside of the petitioned substance would be itself organic. So you've heard that there's sunflower oil inside as a stabilizer inside this product and it would be fine if you had an annotation that said "only organic sunflower oil." So we hope that addresses – it removes the hexane extraction question.

It removes the GMO question by putting straight in there that there's an annotation non-GMO. If people have trouble with understanding what that means or how that's enforced, that's en enforcement issue for the program. Happy to work with the program on that but we want it to be clear a non-GMO source for these products.

Then with the organic ingredients. You all know how organic ingredients are done. So those are three potential annotations and if you have questions about those, I'd be happy to answer them.

Tracy Miedema: Calvin, did you have a follow-up question before I call on Jay Feldman?

C. Reuben Walker: I'm good.

Tracy Miedema: Up, Jay Feldman.

Jay Feldman: Thank you. Calvin asked my question.

Tracy Miedema: Mac Stone.

Robert Stone: A couple of people has recommended that it be called "microbial oil containing DHA or ARA." Is that the same thing or does that open some other door somewhere?

William Friedman: Well, that's a great question. We address that in our comment and said we took no position on that suggestion. It was made by OTA and Dr. Theur (sp?). Our – my personal view on that as somebody who's sat on

the board and knows the rules, given that the function of what goes on the national list arises from petitions, that would in fact expand this designation from a generic material that was petitioned into a category of materials.

I don't know what those cate—what those other materials would be. And given that we have just been asked by the program to look at the other ingredients, I think you would be facing a situation where you would be putting things on the national list where you have no idea whether they're disqualifying other ingredients in those products.

So, you know, we would be okay with it because it would still encompass our product from that perspective, but I can't really see how it fits with the discussion that's being had here now and you would have no idea if they were disqualifying other ingredients.

Tracy Miedema: Any other questions for William Friedman? Thank you very much.

William Friedman: Thank you.

Tracy Miedema: Katherine DiMatteo is next. Bob Durst is on deck.

Katherine DiMatteo: Hello. Good afternoon. My name is Kathryn DeMattio. Thank you for the time and energy you give to in service of the organic community as members of the NOSB. The partners of Wolf, DeMattio, and Associates, a small consulting business, have over 100 years of combined experience in the organic sector. We have served hundreds of farms and businesses with their organic production systems and regulatory compliance, both nationally and internationally.

We have been involved in the founding of several key organic organizations including the Organic Trade Association, Organic Materials Review Institute, and the Organic Center. We are fiercely committed to continual improvement and to providing our clients and the organic sector with the tools to advance sustainable organic environmental and social practices.

written comments – and these oral comments are not specifically on behalf of any one client, but do represent the opinions of my partners based on our personal values and experiences and our work with both current and past clients. There is not enough time to restate our written comments so here are some of our overarching thoughts that stand behind our comments.

The broad authority to include on the national list synthetic inerts not classified by EPA, as inerts of toxicological concern is given in OFPA section 2118 C1 exemption of for prohibited substances BII. NOSB individual review of each inert is unnecessarily duplicative. Substances that are formulated with other ingredients included in a petition and reviewed can be and have been allowed on the national list. Both OFPA and the NOP ruled to find synthetic as a substance that is formulated or manufactured.

And then the definition goes on. I think you know it. The organic label and NOP seal are allowed on products with up to five percent non-organic, non-synthetic, and synthetic substances. Don't sacrifice the producers of the 95 percent organic ingredients by overzealous interpretation or review criteria based on personal opinion about the essentiality of the five percent substances.

We applaud the NOSB's materials review process which has been thorough from the beginning and is moving to increased rigor but please don't let the perfect be the enemy of the good. WDA appreciates the complexity of reviewing materials and applying the criteria required by OFPA and NOP. This is particularly difficult because much of the available research and scientific information on materials and their environmental and health impacts are not specific to the use of materials in or for organic.

Use of national list inputs is the last approach allowed and applied by the organic operator. Decisions on national list materials should not be used – should not be made based on an assumption that organic operators rely on allowed synthetics rather than follow the practice standards required in the NOP rule.

We urge to not take an overly prescriptive approach and be sure alternatives are widely applicable and viable before considering renewal or approval of materials.

Tracy Miedema: Thank you, Katherine.

Katherine DiMatteo: Thank you. Thank you very much. Keep up the good efforts to develop balanced pragmatic recommendations.

Tracy Miedema: Who has a question for Katherine DiMatteo?

Katherine DiMatteo: Sorry.

Tracy Miedema: Any questions? Thank you very much.

Katherine DiMatteo: Thank you.

Tracy Miedema: Bob Durst is next at the podium. Lindsay Fernandez Salvador is on deck.

Bob Durst: Thank you very much. I'm Bob Durst from Simple Organic Solutions, a consulting company in the organic field. I've also been a long-time processing inspector. My comments are going to be in favor of DHA and ARA. I want to thank the Handling Committee and the others involved in the preparation – preparing information about DHA and ARA for their very thorough examination of these two materials.

The TAP review is probably the most thorough I have seen and I have been involved in many of these over the years as a TAP reviewer starting way back when OMRI had the contract. The kind of thoroughness presented here allows us to make informed and intelligent decisions about the acceptability of materials for inclusion in the national list.

The historic acceptance of nutrients, vitamins, and minerals in organic products has always been on shaky ground as they were approved as a group with no formal review of them as individual entities nor determination as to whether they were really compatible with organic principles. With recent direction from the program we are now seeing the first of these materials being petitioned and open to scrutiny to ensure that those which are acceptable are allowed and any that are not are disallowed.

What has really disappointed me in the last few days is the rhetoric, distorted truths, and outright falsehoods that are being thrown around in opposition of these petitions. The inflammatory scare tactics being touted as a search for the truth are as bad as the fanatical political squabbling that is hamstringing our country at present.

I want to see this industry grow under the rules which we all agreed upon years ago so that I can go into the store and find a wide selection of products with the organic label so that I don’t have to compromise and accept a conventional product because it couldn’t be produced at the 100 percent label standard. Ninety-five percent organic is way more than 95 percent better than conventional.

I don't mind peeling off a few outer layers of my onions to get a good – to get to the good stuff, but to peel it until there is nothing left leaves me starving. We don't have to scrutinize things to that degree. I find the Handling Committee's recommendation for approval compelling and consistent with organic principles. I appreciate that most of the contentious issues that I've heard about were actually addressed in the TAP review and committee recommendations and deemed to not be contrary to listing these materials.

This is documented by the near-unanimous committee votes for their acceptance. I'll go over one of these contentious issues and point out where the committee got them right and why they are a non-issue and that these petitions should be approved. This has primarily to do with hexane extraction and other ingredients. The NOP regulations are clear that hexane extraction and other ingredients can be allowed in the production of 205 605A, non-agricultural, non-synthetic listed product.

Richard Theur's excellent written comment should be looked at for a more thorough explanation so I don't have to go into it here. In my years of experience in performing TAP reviews and OMRI listing reviews, we have often encountered similar situations but the rules regarding approval of materials for inclusion in 605A or B are not the same as they are for approving a certified organic item.

Those arguing otherwise seem to forget that DHA and ARA are not seeking certified organic status but inclusion on the national list to be allowed in the five percent or 30 percent of a certified product. While it might be a lofty goal to have everything qualified for the 100 percent label there has always been good reason for the 95 and 70 percent label categories because they provide for a broader spectrum of products that will never meet the 100 percent category.

As an organic consumer that is what I want to see. Thank you very much.

Tracy Miedema: Thank you, Bob. Anyone have a question for Bob Durst? Thank you very much.

Bob Durst: Thank you.

Tracy Miedema: Lindsay Fernandez Salvador.

Lindsay Fernandez-Salvador: Good afternoon, NOSB. Many people who know me quite well know that I get through difficult situations with humor so I hope I

can lighten the mood a little bit and start with some humor. My name's Lindsay Fernandez Salvador and I'm the program director at OMRI and if you could go back so that people could read that humor. Thanks.

I wanted to take my three minutes to give the board and the audience an idea of what material review is all about so that you can know and understand why OMRI wants more specific criteria for evaluations for MROs and input review right now. So I'm going to go over it and it's going to be plenty of fun, I promise.

Next. Next. Thanks. Okay. So I'm going to go around in a clockwise circle here and this is actually some – an ingredient that – or a product that is on the market that OMRI has never approved. And these are all ingredients in that product that's listed on the label. So the feather meal may contain preservatives. The colloidal phosphate might contain anti – dust suppressants and anti-caking agents. The fish solubles probably need to be stabilized with acid.

But you noticed that it's not listed as an ingredient here. The blood meal usually has anticoagulants in it, the micronutrients derived from seaweed. Who knows how they're derived and what micronutrients there are and what levels they are. Micronutrients from complex sugars – we need to know that and what complex sugars and how they got there. So there's a lot of complexity into a very simple product.

So the typical OMRI analysis of how we would understand whether or not this was an approved product or not is we would look at ingredients within ingredients for all ingredients. Then we would look at the manufacturing process of ingredients like complex sugar. How do they get to micronutrients? And then we would look at the manufacturing process and the labs for the final product.

And then we would do this, for example, for a liquid fertilizer like this one that has fish solubles and a dubious MPK. And of course don't forget the alternate formulations that are extremely common in input manufacturing. Next. Next. Back. That one there. So why is this an issue? It's because we've got certifiers all over the map doing different things. Certifier A doesn't look at ingredients within ingredients. Certifier B doesn't look at the manufacturing processes of those ingredients.

Certifier C doesn't get the labs to support the ph of fish solubles and stabilized fish manufacturers, and certifier D might just Google the label and assume all the ingredients on the ingredient list is all that's in the

product. So what this have – what does this result in? It results in certifier shopping. It results in inconsistency among certifiers. It's unfair to organic producers and input manufacturers. It has, unfortunately, led to the loss of certification due to certifier mistakes.

And it can lead to fraud. And so my point really is here that this issue is critical to organic integrity right now. So what we really want you to consider is to revise your recommendation. We think possibly -- oops. You can read that right there. And if you could go to this next one. And then help us get from here all over the map to here. Really within the same page. That's where we want to go and we want to go now. Thank you.

Tracy Miedema: Thank you, Lindsay. Do you have any questions from the NOSB? Jay Feldman.

Jay Feldman: Thank you. So let's take DHA as an example. Can we do that?

Tracy Miedema: I was hoping you weren't going to go there.

Jay Feldman: You want to talk about corn steeped liquor?

Tracy Miedema: No. I don't want to.

Jay Feldman: Okay. Well, I guess if the board were to adopt an annotation that said "extracted without solvents" what would be the process that y'all would use to look at Martek products, say, or some specific corporation's products?

Lindsay Fernandez-Salvador: Well, if you were annotate a material to go on 605 that said "may not be extracted with synthetic solvents" what OMRI would do is we would ask the manufacture to turn in their manufacturing process to us. The specific manufacturing process to their ingredient. And we would verify that, in fact, it had not been extracted with synthetic solvents. So in the other case we wouldn't ask for an affidavit. That wasn't true. We would actually ask for the manufacturing process to verify it.

Tracy Miedema: I would like to just make a point of clarification for my colleagues here so there's no confusion. I believe the annotation that was suggested a moment ago, it was not about synthetic solvents which would wipe out all forms of the DHA that were petitioned. Hence, water is the universal solvent. I know it's not a synthetic but there is – the isopropyl alcohol is – would be a synthetic solvent. So I don't think that was the annotation that was suggested a moment ago. Just to be clear.

Does anyone else have a question? Joe Dickson.

Joseph Dickson: Thank you for that very clear elucidation of a very complex problem.

Lindsay Fernandez-Salvador: Thank you.

Joseph Dickson: It's very helpful.

Lindsay Fernandez-Salvador: I like visual help.

Joseph Dickson: Yeah. Cartoons always help too. This is a really complicated issue, obviously, as your presentation illustrates. And there are some really -- there's a lot of history and a lot of great minds and a lot of technical experts working on this issue. I don't know that the CACC can put language in the recommendation to truly solve the problem between now and voting tomorrow.

But what we can do is sort of express our will and intent to identify areas to approach in deep detail on a pretty short-term basis. What – could you just give a little more detail about the language you'd like to see in the recommendation to sort of address the issues you've laid out here?

Lindsay Fernandez-Salvador: Yeah. We really think we recommend that you go back to the original memo and what the NOP asked you. I – when reviewing that memo, the NOP laid out some various categories and directions that you could move. So that would be my first suggestion. And then the second suggestion is, is that it's a two-part problem. One is that you need criteria to recognize and MRO and two, you need criteria against which an input would be reviewed.

So if you were go to back into the recommendation, split that out, get some basic criteria in there. I mean, we're not talking complicated but it just didn't get to the point that it's going to bring us to the same page. Just five or six things. ISO 65 inspections on site, procedures and policies that are published. We've turned in a long, long list of things.

Tracy Miedema: Thanks. Any other questions for Lindsay? Thanks.

Lindsay Fernandez-Salvador: Thank you.

Tracy Miedema: Oh. Mac Stone.

Robert Stone: So there's the concern that a certifier can approve farmer Joe's snake oil because he's just using it and he and his neighbor have used it

for years. How much criteria do we need to give certifiers to do small approvals within their own program not trying to go on a marketable scale?

Lindsay Fernandez-Salvador: Absolutely that's a really tough question because the same expertise that is needed for that high nitrogen liquid fertilizer off the top of your head is different for something that you need to approve leaves that are used as mulch. Right? Or limestone. But just because a certifier is also approving – or the majority of what they're approving is relatively non-complex materials, doesn't mean that they don't have the opportunity to approve complex materials.

So in all honesty, we believe that you need the criteria in order to make sure that both those ranges are being covered and evaluated appropriately on the same page.

Tracy Miedema: Any other questions? Was that a hand? Jay Feldman.

Jay Feldman: Thank you. I'm trying to figure out on this solvent issue – maybe you can help with this – there is a prohibition, is there not, under 205 105 of volatile synthetic. Can you explain how that would affect us in this decision on DHA or others?

Lindsay Fernandez-Salvador: I really actually would defer to the program. That's a legal interpretation. And I don't have a – the rule in front of me. So I wouldn't answer that right now.

Jay Feldman: Can I read it?

Lindsay Fernandez-Salvador: Yeah. But I won't comment on it. So. Yeah.

Tracy Miedema: Please restate your question for the NOP to answer.

Jay Feldman: Okay. This is 105, right? "A volatile synthetic solvent or other synthetic processing aid not allowed under 605 except that non-organic ingredients in products labeled made with specified ingredients or food groups are not subject to this requirement." So these are practices that are prohibited under paragraph E and F of 105. Does that come into play at all here? With DHA and this solvent?

Female: This has been a kind of a gray area but if you look at it closely, the 270 C, that section of regulation says that you cannot use synthetic solvents in or on organic products or in organic ingredients and that NOSB has

historically reviewed the solvent use as part of the manufacturing process for quite a few of the substances on 605.

Female: Examples would be lecithin, leaf pectin. I'm sure there's more. We, you know, so, no. It doesn't, you know, you – you know, if it's part of the review of the non-organic substance that's your, you know, you have that ability to do that.

Tracy Miedema: I'm not the expert here. I want to make sure I restate this so that I understand. You just said that synthetic solvents are allowed on materials on 605 A including materials like pectin and lecithin that are on the list right now today.

Female: If that was part of your, you know, when you reviewed the material to put it on the list you considered that – or the former NOSB considered that and decided that it was not an issue. So, yes. I mean, they may be produced. I believe lecithin is commonly extracted with hexane. So, you know, that has been considered in the past and that's been the practice. And that's, you know, a literal reading of what the rule says there so that's what we agreed.

Tracy Miedema: Thank you, Emily. This is important for us. Just reminders. What the rules are, the rules of the game here, it's one thing to call a ball or a strike but it's another thing altogether to suddenly say the game has four strikes. And sections – and our rule in 7C of part 205, 605 materials may use synthetic solvents. So we – it would be nice if we didn't flog this one all afternoon. Jay Feldman.

Jay Feldman: Thank you. So, Emily, on the flip side of this, can you give us the examples of 605 materials that have prohibited as through annotation the use of hexane or other materials that have been approved for use that are not – that would otherwise allow the use of hexane?

Female: Yeah. Natural flavors. They're on the list with no solvent extraction. And the board is also recommended, actually, on 606 to adapt the similar no synthetic colors for solvents for colors. Correct?

Tracy Miedema: Thank you very much. Katrina.

Katrina Heinze: It feels like we've wandered a bit away from public comment and into board deliberation.

Tracy Miedema: I think your feeling is spot on. Michael Cox is up next. Thank you very much, Lindsay. Will Fantle is on deck.

Michael Cox: Okay. My name is Michael Cox. I'm the president of Arkansas Egg Company in Summers, Arkansas. We're 100 percent dedicated organic egg operation with two organic production systems, one that allows for outdoor access and one that puts the focus on outdoor access. We do want the passage of the committee recommendations for poultry.

You often ask what we think about the document. We think what, you know, we think – what we think is based off of what we have in our own self-interest. I think the question is what do you think? And what do you think that organic needs to represent and what does the consumer think that organic means to them? You know, and if there's a bad apple, it would be the qualitative system that's allowed 100,000 birds in a barn and no outdoor access.

And such a wide array of different production systems that we currently have today. I don't fault the producer for trying to make a dollar over a dime. I do applaud those that have resisted the urge. But, you know, in all reality we have 240,000 organic layers. We have 43 barns. We're on 13 farms. And why? Why not three aviary barns? We currently have opportunities to double and triple our capacity.

But why would we invest in infrastructure only to compete with aviaries that produce at 30 to 50 percent less than our cost? Excuse me. You know, as we speak there are plans to bring in up to a million birds in aviary-style houses. Large aviary-style houses.

You know, in all reality why wouldn't I just build a 10-barn, million bird aviary complex and have a large feed mill that takes feed direct to the barns and, you know, use all the benefits of the efficiencies that I could create there. You know, why don't I get rid of half of my employees and do it that way? Except for Ashley.

But in all seriousness, you know, the board has a unique opportunity to create a system that is a gold standard, that consumers have faith in, that creates a level playing field. And for the producer and, in turn, a uniform quality product. Small farmers are the backbone of this movement and, you know, you have such an unfair playing field I doubt you're going to have 400 certificates for eggs in five years.

I think you'll have 90 percent of the eggs produced by 10 certificates. And I'm okay with numbers but what we need is a uniform and level playing field. Also, just quickly, I wanted to say that on outdoor access, you know, we do need the ability to keep birds inside with the doors closed with the

heat so we can properly ventilate. It's just as important as when it's cold and we close the doors and we need to turn the heaters on.

I do have some points on stocking densities and what they would cost but I'm running out of time. And lastly, I'll just say, you know, we're a mercy for animals video away from a 100,000 bird aviary barn and a PR nightmare for the organic movement. Thank you.

Tracy Miedema: Thank you very much. Any questions for Michael Cox. Wendy.

Wendy Fulwider: How much space do you have for your birds in and out? Do you have vegetation? Do you have perches and roosts for all your birds?

Michael Cox: We have perches for 20 percent of our birds and we feel that's adequate. We don't feel it's a big deal if we have go to perches for all of our birds at six inches. And we currently stock at 1.2 square feet because, you know, it would, you know, it's an unfair cost advantage if I were to stock at 1.5 for my competitions of any other. We believe that the cost would increase 15 to 20 cents.

I mean, your cost is going to increase for the building to produce that egg, you know, which is labor infrastructure cost debt service. Your cost to operate your feed, mill, your plant, your trucking is not really affected. And lastly, we do have vegetative cover. However, if we make it easier for birds to go outside I don't care if you're at 2 or 5 square feet, you're going to have issues. I would like to see the ability of rotational grazing.

Or something to try to, you know, to try to preserve the forage.

Tracy Miedema: Any other questions? Calvin. Changed his mind. Any other questions? Thank you very much.

Michael Cox: Thank you.

Tracy Miedema: Will Fantle is up next. Paul Frantellizzi is on deck. You may proceed.

Will Fantle: My name is Will Fantle. Hello, everyone. I'm the co director of the Cornucopia Institute and I just had delivered another 1,200 proxy letters that we've received since you all have been sitting here and joined this meeting. These are consumers and farmers that are pleading with you to uphold organic integrity. The claim made yesterday that Martek's DHA is recommended as essential by the World Health Organization is false.

I'm having a letter passed around from the WHO which clarifies that DHA is not recommended by that organization in infant formula. Just look at the first paragraph of that letter. And this is a recommendation that parallels the American Academy of Pediatrics and other leading organizations.

As to the FDA refuting the many adverse reaction reports from healthcare providers and parents, it must be understood all conventional formula now contains Martek's DHA and ARA. So parents have lost a basis of comparison to try out alternative products that might resolve health problems that their infants are experiencing.

I'll also note that the FDA is the same food safety body that tells consumers that GMOs are safe, that radiated is safe, artificial colorings, flavorings, synthetics are safe, BPA is safe. Our consumer trust organic foods more than the FDA. The petition that you have before you is specific to a patented multi-ingredient product which includes hexane extraction.

Now, as we learned on Tuesday, there is an organic infant formula that's out there and available that does have DHA from a natural source. So keep that in mind as you deliberate. We agree with the board chair that we need to put aside personal opinion on this matter and vote in accordance to the criteria for inclusion on the national list.

These oils are not essential. There are natural alternatives. There are environmental impacts and there have been health impacts. Consider the message we're sending – or you're sending – if this gets approved. The best way to get your ingredient in organic foods is to put it in and then petition for it because the "organic consumers are buying it" argument will trump everything else.

Lastly, I'm sorry if some of us, or some here in this room, are offended by Cornucopia pointing out the legions of corporate officials, paid lobbyists and lawyers here seeking approval for DHA. One prominent pediatrician has promoted Silk and Horizon on his website for years. White Wave has used his name and likeness in their PR, while significantly compensating him over the years.

Livestock standards, outdoor access, as we just heard, is required right now. Is that a tough new regulation? I think not. The only egg producers that may be getting knocked out are the 50,000 to 100,000 bird facilities that are currently not letting their birds outside. We agree with the calls for qualitative standards but we need firm benchmarks.

Please remember the pasture rule. It has been criticized by some at this meeting but it was overwhelmingly supported by the dairy farmers themselves. Thank you.

Tracy Miedema: Thank you. Any questions for Mr. Fantle? Jay Feldman.

Jay Feldman: Thank you. I'm trying to figure out, from your perspective, where you think organic would be making a wrong turn relative to DHA in terms of a category of use? I mean, let's say this board found that we met all the criteria. I guess you raised essentiality but safety, environmental contamination, all the issues we look at. Would you still think this wasn't compatible with organic?

Will Fantle: Our opinion is that it is not compatible with organic.

Jay Feldman: Why?

Will Fantle: Well, clearly we have 80 pages of testimony that we've submitted on this that you could examine to look for those additional reasons. We have articulated those. I have to encourage you to go and look at that testimony that we submitted several weeks ago. It's detailed, it's complete, and it outlines and lists many of the reasons that – and I'm not going to take up your time reciting those.

Tracy Miedema: Does anyone have any further questions? Barry Flamm.

Barry Flamm: Will, did you hear the proposed annotations by the petitioner?

Will Fantle: Yes.

Barry Flamm: Do you feel free to comment on those?

Will Fantle: Well, clearly, we would like to look at the precise language of what's being proposed for you to weigh but I will note one immediate reaction was the hexane would still be allowed for a solvent extraction technique for infant formula, as proposed to you, which is clearly our most vulnerable segment of the population that we'd be making that exception for.

So we want to look at the language. If we were able to get that language today we might be able to come up with some reactions overnight on that but right now I'm reluctant to provide any fuller detail than that. Thank you, Barry.

Tracy Miedema: Any other questions from the board? Thank you. Next up is Paul Frantellizzi. Elizabeth Frey is on deck.

Paul Frantellizzi: Thank you. Good afternoon. I would like to begin today by thanking the board for their service and commitment to preserving our organic heritage and supporting future category growth. It's very important to me. Good Cacao is a Boise, Idaho based chocolate company that's building its business and reputation on developing the world's finest functional chocolate.

I founded Good Cacao and some very simple core principles. And they are: All consumers have a right to full transparency from suppliers, manufacturers, and handlers. Keep a small carbon footprint and always support fair trade and sustainable initiatives. Bring the highest quality, nutrient dense, organic functional foods to the broadest set of demographics at a fair price point. And back up your products with science.

Use organic whole food ingredients as often as possible and if organic is not available, it must be GRAS-approved, non-GMO plant based and water CO2 extracted. I believe that Good Cacao is living up to these principles and algal DHA has been an integral part of our product success. Good Cacao agrees with and strongly supports the Handling Committee's unanimous recommendation to add algal oil DHA and ARA to the national list. And my conclusion is based on the following.

There's a massive amount of scientific data and supporting research that shows the health benefits of DHA/ARA consumption. The data is well documented, supported across many fields of science. The importance of DHA/ARA is most evident in infants, in children whose proper development depends on these nutrients. For the many infants who are not able to be breastfed, supplementation becomes crucial during this development period.

Algal oil is the product of a naturally occurring biological process and there's nothing in the manufacturing process to preclude the nutrients from being added to the list. DHA/ARA is widely added to food products including infant formulas for its helpful benefits. It was approved long ago as GRAS by the FDA and is considered safe in food products.

As per the technical review, DHA/ARA is naturally occurring in algae and therefore clearly meets the requirements of being non-synthetic. And as per the technical review, DHA algal oil is non-GMO and can be non-hexane extracted. Your decision is crucial to the millions of mothers who depend upon the availability of their fortified infant formulas.

And to the millions of children, my five-year-old included, who eat foods fortified with DHA/ARA and I believe to the future of our industry. We are living in an amazing time where consumers demand a return to small farms and local food systems where we can all verify corporate transparency utilizing simple social media tools and where the need for nutrient-dense foods has never been greater.

I'd like to end just by thanking the board for their serving on behalf of consumers. I know your ongoing task is an important one and daunting and I ask one last thing: That you bring science to every decision that you make during this process. Thank you.

Tracy Miedema: Thank you. And would you mind stating your name for the record?

Paul Frantellizzi: Paul Frantellizzi.

Tracy Miedema: Thank you.

Paul Frantellizzi: Thank you.

Tracy Miedema: Any questions? Jay Feldman.

Jay Feldman: Thank you. I'm curious about your reference here to nutraceuticals in food, if I'm reading this correctly, and you could envision down the road an organic chocolate bar with nutraceuticals. How would – how – what would you suggest we as a board do to objectively determine the value of these products as ingredients in organic food or any food, for that matter, but here organic food, when the agencies that we typically rely on for determinations of needs such as FDA and essential nutrients are not weighing in on these things?

GRAS obviously doesn't determine value to the diet and so forth. So how – do you have any suggestions on how we might go about doing that?

Paul Frantellizzi: Well, I can tell you from my own experience what I've done with my business is, as I stated earlier, I focus on what I believe is important for my business and that's plant-based, non-GMO and extractions for CO2 water process. If you're asking about the nutrient benefit of some of these potential ingredients moving forward, I honestly couldn’t speak to that.

What I do in my own business is I depend on my own research of the companies that I partner with, the evidence that's out in the field. I do not put any ingredients in my product that don't pass certain criteria and that is plenty of studies out that have been done over a long period of time.

Science based ingredients. I won't go anywhere near ingredients that don't cross those barriers. I can't speak to the future of the industry.

I can tell you I'm, again, pushing the envelope a bit with what I'm doing but I'm also drawing some very strong lines that come from my own experience, you know, five to seven years now in the organic industry.

Tracy Miedema: Thank you. Any other questions? Jennifer.

Jennifer Taylor: Thank you so much for coming today to talk with us. I'm trying to find out after reviewing your information, are you working with farmers that are growing the product? Are you working with farmers that are growing the product or--?

Paul Frantellizzi: Am I working with farm companies?

Jennifer Taylor: Farmers.

Paul Frantellizzi: Oh, farmers. Directly, yes. Absolutely.

Jennifer Taylor: Okay.

Paul Frantellizzi: Whether it's cacao or sugar or any other ingredient that we're dealing with.

Jennifer Taylor: Right.

Paul Frantellizzi: Yeah.

Jennifer Taylor: And so is that an organic certified production system?

Paul Frantellizzi: Oh, absolutely.

Jennifer Taylor: Okay.

Paul Frantellizzi: Yes. Any ingredient that we put into our products that can be certified USDA organic is. Absolutely.

Jennifer Taylor: Okay. Thank you.

Paul Frantellizzi: Thank you.

Tracy Miedema: And Jennifer, with your soft voice, would you please with your next comment just move your mic a little bit closer so we make sure and get it on the record? Thanks. Thank you, Mr. Frantellizzi. Any more questions? All right. We're all set here.

Paul Frantellizzi: Thank you.

Tracy Miedema: Elizabeth Fry. And Martin Han is on deck.

Elizabeth Fry: I've got some slides. Hi. My name is Elizabeth Fry and I'm with Whole Foods Market. My job with Whole Food Market is animal product standards and I've been working on animal welfare standards for over eight years. And I come not to make any specific – well, some of them are sort of specific – points, but I do – I have heard some things that I like to comment on.

Standards should inspire excellence and that's what the animal welfare standards you've been working on -- they're moving into that direction. One of the – two of the things that I've heard in the last three days have been, one, we don't want to lose any producers. And that tends to be underpinned by a desire to make the standards low enough that we don't lose any producers.

Inspire producers. The words are "incremental improvement." At Whole Foods we asked our producers to meet very stringent standards. They all had to shift in order to meet those standards. They did it. They found benefits in doing it, and they began to adjust their thoughts. I don't know a producer that isn't concerned with the health of their animals.

The health of their animals is their profit. But the interpretation of that health is important and we need to inspire them to continually improve, not just stay where they are and adjust our standards to them. The other piece of that is the inspectors. They need to be incrementally improving as well. And if inspectors need to be trained to assess animal welfare for the benefit of the animals, then so be it.

I don't think that's too much to ask. Now, the other thing that I've heard is about space and this concept has been shifting between metrics and outcome based. I want to show you something. The next slide is – this is a barn. I've been on a lot of farms over the last year. They're all egg farms so that's where I'm focusing.

But this barn is a very good farm. This is a very good farmer. But he doesn't have many birds outside but he's got well over five square feet per bird on pasture. Metrically he meets the standards. I was in a barn a couple weeks ago 500 feet long, 300 square feet of outdoor access. Organic certified. So metrics ain't all there is. The next picture, there is less than five square feet per bird yet these birds are active.

They're out there engaged, foraging, looking for stuff. They've got enrichments out there. They've got bales of hay. Those birds, it's not hard for an inspector to walk onto that farm and see that the birds are doing something other than huddling against the edge of the building. Same time of day, same temperature.

Next one. The other thing that I've heard is vegetation and vegetation tends to be – oh, god – vegetation tends to be interpreted as pasture. So the next pictures, I'll just go quick through the pictures if I may, please. Here is a lot of – more than 100 square feet per bird. The birds are underneath a house. It's pasture. The next picture, the birds are not underneath a house. They've got a mobile house but they're under trees.

They're moving about, they're doing something other than huddling. In the next picture they're on scattered rice straw. Which would not count as planted vegetation but it seems to attract them. And this picture was taken in mid-afternoon at almost 100 degrees. So what I'm saying is look at the activity of the birds. Look at their vitality. And you can tell how they're doing.

And the next picture's just for kicks.

Tracy Miedema: Thank you.

Elizabeth Fry: Oh, no. I forgot about the rose farm. Never mind. The rose farm is awesome. I'll tell you about it later. Records don't have to be complicated. And that's it. And then that's my whole show.

Tracy Miedema: Thank you very much. Any questions?

Elizabeth Fry: I had to advance.

Tracy Miedema: All right. Did I see a hand? All right. Oh, Katrina Heinze.

Katrina Heinze: Thank you for making animal welfare something that this city girl can understand.

Elizabeth Fry: You're welcome.

Tracy Miedema: Calvin.

C. Reuben Walker: Is there a question you were expecting some of us to ask you that we did not ask as it relates to outdoor access of vegetation cover?

Elizabeth Fry: Did I have a question that I thought you would ask?

C. Reuben Walker: I seen you do this. I seen you do this. It seemed like you was waiting.

Elizabeth Fry: No. I thought a picture's worth a thousand words so I figured I'd already done 20 minutes and you probably already got it all.

Tracy Miedema: Wendy.

Wendy Fulwider: Do you have a language, a sentence, something that you think would be helpful for us when we're doing our recommendation?

Elizabeth Fry: A sentence? One? Oh, outcome based is important. If you have a space recommendation, please bolster it with an outcome recommendation, or an outcome standard that is also required. Or else people are just going to go to, you know, the inspector is going to say there's this much space, there's that many birds, they meet it, fine. And gone. Are they using it? What's the outcome?

Because that's welfare. Providing the space and the birds don't use it or the animals don't use it, is not welfare.

Tracy Miedema: Thank you. Jay Feldman.

Jay Feldman: So are you suggesting a hybrid model where we have both the numbers and the outcomes?

Elizabeth Fry: If you have to have metrics, yes.

Jay Feldman: I mean, if – are you recommending metrics?

Elizabeth Fry: No. But they seem to be quite appealing to many people. But I don't think they can stand alone because of what I've shown you.

Tracy Miedema: Wendy. Last question.

Wendy Fulwider: You feel we do not need to put in a minimum space requirement?

Elizabeth Fry: Not unless there's also a requirement for the outcome. A minimum space requirement and 50 percent of the birds need to be using that space outdoors. Or a minimum of X number of birds need to be able to perch at the same time. Or something. If the metric is supporting the outcome and the outcome is clearly stated as a requirement, I don't have a problem with metrics. It's when they stand alone and become irrelevant to the animal, because the animal is where it's at.

Tracy Miedema: Thank you. Okay. Martin Hahn is up next. And Lorraine, please scroll down. Just a moment, sir. Bob Beauregard is on deck and I'll go ahead and read off a few more of the names. I think we'll take Mr. Hahn and Mr. Beauregard. We'll go to break. We are about an hour and a half off schedule.

And please let me read those names. Harriet Behar, Leah Garces, Zareb Herman, Herb Jenson, Draygon McCurrah. All of you will be after the break. Please proceed, sir.

Martin Hahn: Great. Thank you very much. My name is Martin Hahn. I'm with the law firm of Hogan and Hart—Hogan and Lovells, in Washington D.C. I'm here today on behalf of Horizon. A little bit about my background. I grew up on a farm pig farm in north central Ohio. Like good farm boys, I went to the college of agriculture, Ohio State University, specializing in food science and technology. Couldn't get a job in the agricultural industry or in organics at that time.

So I went to law school. After law school, went to Washington D.C. where I've been practicing food and drug law for the past 22 years, specializing in these such as infant formula regulation, FDA's labeling policy, as well as many of the other issues that have been touched on. I've been asked to be here today as a resource to help you navigate through some of these complicated legal issues that have in fact been raise.

As well as to focus on a few of them in my comment. I first want to commend the TAP report. I thought it did an exceptional job of taking what is a very complicated area of law and science and summarizing it in a very, very effective manner. It was somewhat intimidating for me, as having practiced so long in this area, to see how well that report was finalized.

I want to talk basically, first of all, on DHA and its essentiality. Essential under the FDA regime means different than what it does organic. FDA, they said it today, they have essential nutrients. An essential nutrient is, in fact, going to be codified in the nutritional labeling regulations which the agency had established in 1993.

FDA has not modified their daily values for essential vitamins and minerals since 1993. Just because FDA has not established a daily value for DHA, that doesn't mean it's not an important nutrient to include in the diet. You can look at the expert reviews that have been summarized in the TAP report. Look at what the Institute of Medicine in its macronutrient report

back in 2002 where it recommended that there be a daily value for the Omega fatty acid ALA and that DHA and EPA contribute 10 percent to that daily value.

Look at what the World Health Organization, look at what the European Food Safety Agency, as well as other expert bodies, have said about the importance of DHA. Use those in terms of your evaluation of what the impartial experts have said about its importance and including it in the diet. And then when you look at what typical use levels, consumption levels, are of DHA in the American diet, the typical Western diet, you will see that we fall well below those recommended use levels.

With regard to labeling, several questions have been asked today about the labeling, the statement that appeared on the Horizon product. The question is, is it a health claim? No, it is not. Under FDA's regulations a health claim has to characterize the relationship between a disease and a substance in a food. An example of a health claim would be the qualified health claim for EPA and DHA regarding reducing the risk of coronary heart disease.

It specifically mentions a disease. The statement "supports brain health" is a structure function claim, lawfully can be made without FDA pre-market authorization provided you go to the agency – or provided you have competent and reliable scientific evidence to support the claim. I hear my time is up when the bird goes off. I guess that means I am open for questions. If you have any questions about the FDA labeling process or the GRAS notification process, infant formula regulation...

I've been doing this for 22 years and would be more than happy to answer any questions you may have.

Tracy Miedema: Thank you very much. Katrina Heinze and then Jay Feldman. And then Nick.

Katrina Heinze: Are you here tomorrow as well?

Martin Hahn: I will be here tomorrow. That was an easy question.

Katrina Heinze: I know. Just a comment for the rest of the board. We might just want to have a really good, solid, healthy couple hours on this tomorrow instead of 20 minute chunks. Just my opinion.

Tracy Miedema: Jay Feldman and then Nick Maravell.

Jay Feldman: Then I'll just ask a quick question. Could you give an analysis of this letter we were handed a few minutes ago from the World Health Organization? I mean tomorrow's fine.

Martin Hahn: Look at the recommendations from the World Health Organization in terms of recognizing the value of DHA in the diet. Do they say it was an essential nutrient? No. But they did recognize it's important in the diet. Also (inaudible) to look at what the European Food Safety Agency said. They actually set recommended levels and they've authorized structure function claims, because they have to be authorized in the EU, specifically recognizing the role of DHA in supporting mental and visual function.

Those are all summarized in our comment so you can actually see that. See what they said specifically.

Tracy Miedema: For the audio record, the letter that Jay Feldman was referring to was the letter that was handed to us a few minutes ago by Will Fantle, I believe, that said FAO and WHO highlighted the importance of DHA "as a component of human milk and its role in development of the brain and retina during fetal development and the first two years of life," etc., etc. Nick Maravell.

Nicholas Maravell: You mentioned something concerning the importance of DHA and its association with EPA. And I was just wondering are we getting a little confused here in some of these claims that are being made about DHA by itself?

Martin Hahn: That's a great question because there's been so much confusion about ALA Omega 3, DHA Omega 3, and EPA Omega 3. Once again I refer you to the report that was prepared by the TAP where they talk about how DHA, unlike EPA, is in fact a structural component in the brain and in the eye. EPA is also a very important Omega 3 fatty acid but it typically is associated with the immune response. Different functional role in the body than DHA.

The reason that DHA is so important for the developing infant is because the developing fetus and infant, that's a period of life where you have the rapid brain and eye development. DHA is the most predominant fatty acid, Omega 3 fatty acid, found in the brain and the eye.

Tracy Miedema: Any further questions?

Nicholas Maravell: So you don't see any interaction, then, between supplying DHA with EPA in order to have beneficial impact from the DHA?

Martin Hahn: You know, my lawyer training has always taught me never to say a straight yes or no. So I could avoid answering the question all together or I could tell you there were some initial studies done very early on using fish oil sources that contain DHA and EPA in infant formula. When they studied those in the clinical environment, they were actually seeing adverse effects on health which was attributed to the EPA component.

Now, we think and this is a question for the scientists and the scientists can answer it, but one of the reasons that the ARA has to be included in the infant is because with the ARA present you make certain that the DHA is available and can, in fact, be incorporated into that brain and eye tissue without the adverse effects.

So I do caution you to say that you can always say that DHA and EPA can always be together. In fish sources you're going to find them both but they serve very different functional effects in the body.

Tracy Miedema: Any more questions, Nick? Okay. Thank you. I'm going to take that back, Mr. Beauregard. I think we're going to go ahead and go to break now. Thank you, Mr. Hahn.

Martin Hahn: Thank you.

Tracy Miedema: The time right now is 4:25. Let's be back at 4:40.

[BREAK]

Tracy Miedema: NOSB members, please be seated. One, two, three. NOSB members, please be seated.

NOSB members and attendees, we're at about the 20 minute mark-plus for our break. Let's do try to pull quorum together here. One two...six, seven, eight, nine. We're back in session. Lorraine, will you please scroll to the next name? Is Mr. Beauregard? Okay, thank you. So as can happen when we let our time start to drift, we're running into people's travel issues who have come so far and our delay is causing problems for them.

Tracy Miedema: So it's just one of the things that we need to be mindful of. Next up is Loretta and Sam Adderson. On deck is Harriet Behar.

Loretta Adderson: Hello. I'm Loretta Adderson and this is my husband Sam. We are from Adderson fresh produce, an exempt organic grower, and we've just

been inspected two weeks ago to complete our inspection for certified organic. We are a third generation family farm in Burke County, Keysville, Georgia. We currently have 15 acres in organic production. And we hope to have the 30 acres by 2015.

On our farm we have not used any herbicides but we would like to begin so that we can reduce the amount of labor that we spend in weeding, hoeing, and my husband on the tractor cultivating. You can see that he's on the tractor; I'm hoeing. So we would like to recommend that the OMRI Agro 7020 be approved to use as a herbicide with organic production. And I'm going to let my husband add comments.

Sam Adderson: Yes. The only herbicide that we're using on the farm right now is right hand, left hand. And attached to those hands is what we call a hoe. And I can tell you that it's pretty tough to keep up with five, 10 acres of land with grass and weed. Now, I don't care what herbicide. I don't have a specific name brand but I'm asking the board to look at and approve something that the small organic farmer such as us can use to help weed control.

If we can get something approved we can increase our production and we can lower the cost, farm cost, plus costs to the (inaudible). Thank you.

Tracy Miedema: Thank you very much. Any questions? Jennifer.

Jennifer Taylor: Hi. Good to see you. Thank you for coming.

Sam Adderson: Thank you.

Jennifer Taylor: I'd like to ask you if you're using any kind of cover crop to suppress your weeds or any kind of tillage system.

Sam Adderson: Just this past couple weeks we put in about 10 acres of rye and another five acres of oats.

Jennifer Taylor: Okay. I'm sorry. A cover crop similar to maybe buckwheat to suppress the weeds, those kinds of cover crops. That's what I'm asking.

Sam Adderson: We don't have any buckwheat in.

Loretta Adderson: Yeah. We will.

Jennifer Taylor: Okay.

Sam Adderson: Yeah. But that's something that we're looking at.

Jennifer Taylor: Okay.

Sam Adderson: And, again, it's all a matter of cost.

Jennifer Taylor: It is.

Sam Adderson: Yeah. Buckwheat's pretty expensive to use.

Jennifer Taylor: Right. It's very beneficial in so many other areas as well. Love to talk with you about it.

Sam Adderson: Yes.

Tracy Miedema: Any other questions? Calvin.

C. Reuben Walker: A quick question. I might've missed that part. What caused the interest in organics? I know in our particular culture, community, you know, it's a tough sale sometimes.

Loretta Adderson: Well, I'm on the same farm that I grew up on, okay? And when we returned in 2007 from, I guess, the time that I can recall that my dad – in working with my dad and my family, we never did use anything in, you know, we picked the bugs off for him to fish with. Okay? And he used the manure. Okay? But he put it down. Right now on the farm we do not have any animals.

Okay. But we are trying to get back into a business so that when I leave hopefully either a grandchild or someone will be interested and there will be enough money there to support them. We had to leave. I had to leave because with six brothers there just wasn't enough money for all of us. So I went away and now I'm coming back to maybe save that farm.

And that's why I'm going organic. And for the health. For the health of our children and our grandchildren and ourselves.

Sam Adderson: And also my wife is a dietician by trade and there's a lot of stuff that I don't like but I eat it anyway because that's all that's there.

Tracy Miedema: Jay Feldman.

Jay Feldman: Thank you for coming out. I'm wondering in terms of these challenges like weeds, which is huge, where do you get advice from or, you know, shared information to try different methods? Are you linked up with any organizations or land grants that are working on this?

Loretta Adderson: We are blessed. We do have a corporate extension. We live in two counties. We live in Richmond County; the farm is located in Burke County, so we have those extension services plus the University of Georgia and (Inaudible). University. So we have a lot of resources.

And we have also – we are doing a hoop house. We have just put in and they have designed an irrigation system for us to help. So we figure with more water we're going to have what? More weeds. You know, it just – it took me this – you know, I just hoed till I couldn't hoe anymore. But he kept riding on the tractor. And I said, "Let's trade." I said, "Let's trade."

He said, "Well, if you know how to harrow and plow then you can drive it." So I'm working on that.

Tracy Miedema: Any other questions? Thank you for giving testimony today.

Loretta Adderson: Thank you. Okay, thank you.

Sam Adderson: Thank you.

Tracy Miedema: Harriet Behar is next. Leah Garces is on deck.

Harriet Behar: Hello, everyone. I'm Harriet Behar with the Midwest Organic Sustainable Education Service. First I want to talk about sulfites. The "made with organic" label is reserved not just for less than 95 percent ingredients but also when commercially available organic ingredients are not used. "Made with organic" is recognized as not being at the same high standard as the organic label and the addition of sulfites clearly meets this lower standard.

Let us continue to nurture the organic wine industry without sulfites, rather than taking away the incentive to make wine without those synthetic sulfites. Transparency. I support public availability of committee minutes. There is no need to give the names of the committee members but we should know who on the committee voted for and against that proposal.

Stating the first vote in committee should not keep members from either retaining or changing their votes when the full NOSB makes their decision. Animal welfare. The outcome based standard gives the regulated entity a specific environmental outcome to achieve and then allows that entity to achieve that outcome using whatever means the entity determines to be most effective.

They state what must be accomplished, not how to accomplish it. These are those outcome based standards. And that their reasonable, attainable, and measurable. We need to start with what the best organic system should include, provide a few minimum details by species to prevent abuse and allow organic producers to innovate when providing the highest of animal welfare. On DHA.

The NOSB should review or approve the two forms of genetic DHA separately or at least clarify which formulations, processing aids, and processes are used. The NOSB should learn from these difficulties encountered when reviewing this product and require a more rigorous technical review as well to scrutinize those petitions to get more clarity necessary for generic and/or formulated products, additional ingredients and processes before the NOSB goes through this deliberative process.

Odorized propane. Add enough for routine use annotation. Even though the pest control hierarchy must be followed, this annotation would emphasize that this product should not be used unless dealing with extreme conditions. Other ingredients. The Organic Food Production Acts put forth a separate criteria for the labeling of organic foods and wholesale adoption into organic products of what is allowed in non-organic products does not meet either the spirit or the letter of the law. This proposal needs further refinement before implementation.

Genetic engineering. As the voice of the organic community, please deliver a clear sense of the board's statement to Secretary Vilsack expressing our concern caused by the presence of genetically engineered organisms and the resulting contamination they have on organic producers, consumers, and our greater environment.

Tracy Miedema: Thank you, Harriet.

Harriet Behar: Did you get all that?

Tracy Miedema: Mac has a question for you.

Robert Stone: Harriet, how do you – how will you use the information of knowing who voted how in the committee?

Harriet Behar: Well, I think that helps us understand where that sits as far as is it southern people voting for a certain thing that they needed regionally or – you know, it just gives us a kind of better idea of kind of where the pros and cons are lined out because you all bring different constituencies to the

voting process. And like I said, it shouldn't stop you from changing you mind or retaining or whatever.

Tracy Miedema: Go ahead, Mac.

Robert Stone: Does it spur you to action?

Harriet Behar: As far as lobbying those folks? I would say no more that I currently do out in the hallway. Because I see here what you, you know, where your opinions are going.

Tracy Miedema: Sounds like it would make those hallway conversations easier.

Harriet Behar: Aren't they fun?

Tracy Miedema: Calvin and then Nick.

C. Reuben Walker: You mentioned measurables.

Harriet Behar: Yes.

C. Reuben Walker: Could you elaborate on that just briefly?

Harriet Behar: Yes. I think that an outcome based standard could have that vision of what we're looking for in an organic system. And then there could be some detail that is measurable but not so much that it's a burden and stifles innovation. So I think that we could have, by species, some specific measurables just to prevent that abuse that we currently have seen over time in various areas when we haven't had that.

But we don't need to be so tied to the number set that conventional animal welfare has come from because they are dealing with a very different system than we deal with under organic.

Tracy Miedema: Did you have follow-up, Calvin?

C. Reuben Walker: Actually, I didn't but-- Moses. That's just for my own personal information. I know I get newsletters. Could you tell me something about your membership? I've never--

Harriet Behar: Sure. We are not a membership organization.

C. Reuben Walker: Okay.

Harriet Behar: We are a private, I mean private non-profit educational organization that has a mailing list of about 30,000 people. We get almost 1,000 hits

per day on our website. I run a toll-free hotline where people call me from all over the country and ask me questions. And we – our goal is to promote and enhance organic production, both at the farm level and at the processing label – level and to give producers the tools they need to farm organically successfully.

We have a little card in the back if you want to see all our other programs.

Tracy Miedema: Thank you. Nick.

Nicholas Maravell: Correct me if I didn't hear you quite right, but were you talking about other ingredients and the need to get more extensive information in our technical reviews?

Harriet Behar: The listing that I saw as the proposal, I felt because it basically allows the ingredients that are allowed in non-organic products as kind of the basic, you know, the nomenclature that you go through. You know, if it's FDA approved as GRAS, if it's required. I think that organic needs stronger review than just FDA GRAS or, you know, a requirement. That kind of thing.

And that's – I think the OFPA also requires us of that, that just because an ingredient would be allowed in non-organic food, for instance, irradiation or, I mean, these things have been brought up by other people. That doesn't mean that we in organic also accept that. So that's why I felt that that listing needed to kind of be looked at again. I know it was kind of done a little bit hurriedly. So.

Nicholas Maravell: So you were referring specifically to the committee recommendation – the addendum to the committee recommendation.

Harriet Behar: Yes. Yes. So now I think that the ingredients should follow – that any other ingredients that are in products on the national list, those should also be approved one way or another on the national list. For transparency. Okay.

Tracy Miedema: Okay. Thank you very much, Harriet. Leah Garces is up now. Zareb Herman is on deck.

Leah Garces: Hello. I'm Leah Garces and I'm from Compassion in World Farming. Thank you for this opportunity to address the committee today and I'd like to talk mostly about the animal welfare recommendations. For those of you who don't know my organization, we are headquartered in the UK. We are an international organization. We have a presence in Atlanta and that

is our US presence. Throughout our 50 year history we have been integral in banning some of the cruelest confinement systems throughout the EU including battery cages, gestation crates.

And we have been integral in providing comment on EU organic regulations and, indeed, many national organic standards around the world. So we continue to work globally on farm animal welfare. Now as an animal welfare based organization we do indeed recommend the EU organic standards but in the US we cannot recommend then as animal welfare standards at this stage. And just a very, very basic example is that permitting force molting by feed withdrawal within the standards at the moment. That is not -- we believe those should be prohibited and expressly prohibited.

They are actually banned throughout the whole of the EU for any practices, not even organic practices. As my colleague Dena Jones from Animal Welfare Institute mentioned earlier, it's not just about space. The space is very important, of course, and the requested increase to five square feet per bird is a compromise, however, and EU organic standards go far beyond that.

The standards also need to be about environmental enrichment as the woman from Whole Foods mentioned. Birds are ag—chickens are agoraphobic animals. They will not go into open spaces unless there is cover for them. They are afraid of predators, hawks – even airplanes will cause them to stay within a shed. If there is not a house – a house can be completely open and they will never go outside if there is not proper cover and vegetation for them.

And that’s very important to consider when you're talking about space. Enrichment. Outdoor enrichment is just as important as the amount of space that they're given. It's also meeting behavioral needs such as water for bathing and for swimming for ducks and geese. That is also important. And it must also be about prohibiting inhumane practices.

I've already mentioned the forced molting by feed withdrawal, but also routine beak trimming and continuous tethering and especially I find concerning electric prodding, especially for downed animals. Even once. That should not be permitted through organic standards and it's not what people would expect. So I've submitted something with more details and I respectfully urge you to adopt the minority opinion in some of the other things that I have mentioned today.

Thank you for the efforts you've made to date. I know that it's a huge job that you're going through right now. And I am looking at a small part of your very big effort. So appreciate the efforts and I appreciate the opportunity to make comment today. Thank you.

Tracy Miedema: You're welcome. Any questions? Calvin.

C. Reuben Walker: What are your views on farrowing crates?

Leah Garces: In what – in –

C. Reuben Walker: For pigs.

Leah Garces: Well, we've worked hard to ban any confinement system throughout the EU so we would not be in favor of that.

Tracy Miedema: Any other questions? Thank you very much.

Leah Garces: Thank you.

Tracy Miedema: Zareb Herman is up, Bob Beauregard is on deck.

Zareb Herman: Good afternoon. My name is Zareb Herman. I'm a nutritionist with the Hain Celestial Group. I worked previously as a research biochemist for the Agricultural Research Service part of USDA. At UC Berkeley I did my graduate research under Dr. Janet King, one of the world's leading experts in maternal and infant nutrition.

I'm addressing the board on the petitions for DHA and ARA. By the way, my company sells organic infant formula. Regarding the scientific evidence, dozens of peer reviewed scientific studies have demonstrated the health benefits of DHA and ARA. DHA has been identified as essential by the European Food Safety Authority and by the prestigious panel of experts commissioned by the UN Food and Agriculture Organization.

In the FAO report for the age group 0 to 24 months, they stated that DHA plays a "critical role in retinal and brain development" and they rated the scientific evidence as "convincing," their highest rating. Regarding essential nutrients, many nutrients that are essential to human health such as amino acids, choline, DHA and ARA, do not have established daily values by the FDA and they're not even mentioned in 21 CFR 101.9.

These nutrients are permitted in infant formula and are widely used. I think everyone would agree that infant formula should most closely match the nutrients found in breast milk which contains DHA and ARA. Finally, I

have a question for the board. If any of you had a baby that could not be breast fed, would you want your baby's formula to contain every nutrient needed to provide for the optimal development of its brain, eyes, and other body systems? I think you would all say yes.

If so, I don't see how any of you could vote no and thereby deny other babies DHA and ARA in their infant formula. Now, the effects of a "no" vote on DHA and ARA would be that we could not sell our organic infant formula with DHA and ARA. Now, since the DHA and ARA that approved by FDA for this infant formula are hexane extracted, we would support an annotation allowing hexane extraction for FDA approved infant formula ingredients.

There was a claim made earlier today about a different – about infant formula with a different so-called natural source of DHA. This claim is not accurate and I can clarify that if you want. Finally a "no" vote will largely destroy a huge segment of the organic industry and will harm vulnerable babies who rely on formula as a sole source of nutrition. I urge the board to please approve these two petitions. Thank you.

Tracy Miedema: Question? Nick Maravell.

Nicholas Maravell: Yes, I would appreciate your clearing up that fact that – we did hear a claim that there is a natural source of DHA in an infant formula. Please give us your views on that.

Zareb Herman: Yeah. The company in question sells organic toddler formula, not organic infant formula. It's a very different age group. And when the company was contacted they indicated that they do not add any form of DHA to their products.

Nicholas Maravell: Maybe not. You're saying company says they don't add DHA to their products?

Zareb Herman: That's what they said in an email.

Nicholas Maravell: Okay. I'm not sure where to go with that.

Tracy Miedema: Did you feel like your question was answered?

Nicholas Maravell: Well, I'm not sure what to believe anymore was my comment. I mean, I'm really – I'm trying to become educated here and we have one person saying one thing and then you're saying you went to check it out and not only is it – you're saying that's true with regard to their infant

formula or just regard to any product that they're offering for toddlers or infants?

Zareb Herman: Well, yeah. They just stated formula. They didn't say infant formula, but when we investigated the company in question the only products we could find were toddler formulas. Different age group.

Nicholas Maravell: Right. And just out of curiosity, I assume toddler formula does not require special FDA approval?

Zareb Herman: It does not require the scrutiny that infant formula does for its ages 0 to 12 months .

Nicholas Maravell: All right. Thank you.

Tracy Miedema: Any other questions? Thank you, Zareb. Next up is Mr. Bob Beauregard. Matthew O'Hayer is on deck.

Bob Beauregard: Good afternoon. My name is Bob Beauregard. I'm the general manager of the Country and Egg Farm in Hubbardston, Massachusetts. We've got about just under 80,000 birds in 12 buildings. So. We as organic egg producers appreciate the opportunity provided by the USDA and NOP to comment on the recommendations suggested by the National Organic Standards Board to improve organic regulations.

We understand that the public and stakeholders are afforded this right to comment and suggest changes to the recommendations based on several factors. However, raw emotion, misconception, and incorrect information from so-called consumer advocates or governmental watchdogs soliciting donations at the end of the form letters and then sending them to members seeking their support should have little influence on the number of comments received and counted.

The weight of all comments used for consideration in changing recommendations should be based on knowledge, science, and the experience of the industry providing clarity to relative issues. Having said that, the recommendations as written should be withdrawn. It is obvious that the Livestock Committee has written some of these recommendations based on pure emotion and has not considered the unintended consequences of the recommendations for rulemaking.

For example, science based facts from the EU and UK. There's been a reemergence of disease from the past and high mortality due to free ranging poultry in the past 10 or 15 years in natural and organic systems.

We should learn from other shortcomings and not create our own. To the knowledge of the industry's professional educators and poultry extension providers.

Stocking rates of 1.5 square feet in and 2 square feet outside minimum would require beak trimming to prevent outbreaks of cannibalism. Removing the tools creates a welfare issue. Disease is not something we can maintain. It can't be seen, heard, or smelled. When you get a taste of it, it's sad and producers do everything in their power to prevent it from happening again.

Again, removing the tools of prevention is not the answer. With that being said, we currently have an OSP that demonstrates and provides prevention to some extent. We understand that all producers, organic, natural, and commercial are at risk at any time. Porches are a prevention method that we designed in 2001 for all the concerns we had at that time.

Since then, our concerns have been demonstrated realistically by others' experience and demise in the UK, EU, and here in the US. Our concern goes deeper and we certainly do not want the organic egg industry pointed out as questionable when it comes to food safety.

I know that my time is up, I guess, and I would – I would ask you to please finish reading this. I mean, there's some important points. I guess the other thing that I really wanted to mention was that we really want to thank the Livestock Committee for the work that they do on this. It's been five meetings, you know, and I agree with the outcome based standards. We think that we can get somewhere with this. We really do.

And I think if you read the rest of this and really think about possibly that two-tier approach and really let the consumer decide – Wendy, you've done an excellent job with this and we really do appreciate it. We just – where we are, we really have this major problem and--

Tracy Miedema: Thank you, Mr. Beauregard. Any questions? Wendy.

Wendy Fulwider: What is your reference to a two-tier approach?

Bob Beauregard: The reference would be that it would be a label issue. It would be a label. You just do it on the label and really let the consumer decide. Obviously, it's not in everybody's – we agree that producers can and do use a free range system, and god bless them for that. However, where we are and where we were established when we started this and developed

basically this company on the premise of porches that were approved, and now the change would basically put us out of business.

We just couldn't do it. You know, so the compromise, you know, that was made by the board in 2002, I just think needs to be looked at again. And, you know, if it has to be a two-tiered approach to that, then so be it. And then the consumer could really make that decision on what they want to purchase.

Tracy Miedema: Any other questions? Joe Dickson.

Joseph Dickson: So on the two-tiered system, I imagine you're advocating one that allowed for both porches and fully outdoor systems.

Bob Beauregard: Exactly.

Joseph Dickson: With a label claim. What exactly would the label say? Or do you have any ideas there?

Bob Beauregard: Well, I mean, I think it may be – whether it's -- it would say "access to the outdoors", okay, on porches or winter garden or whatever you want to put – call it. Or "access to the outdoors on soil-based pasture." And the consumer would then have that choice. I mean, I'm sold out. I don't have enough eggs. So obviously the consumers are buying our eggs. Now some may say maybe they're hoodwinked, you know.

I mean – and that's not what I believe because we have done surveys with our customers. We put newsletters in our cartons and 96 percent of our customers agree with us because of where we are and what we do. We're on the Boston watershed. We would pollute the Boston water supply. And the local regulators will not allow us to do that as well. So it really puts us in a position to be put out of business. And that's obviously not what we want.

Tracy Miedema: Any other questions? Calvin.

C. Reuben Walker: As relates to form letters, as relates to the livestock stakeholders, I find that it was form letters advocating more space and it was form – just – there was quite a few form letters advocating no outdoor access. The question I have with – are you saying that if you had more space you would be able to put the birds on the outside?

Bob Beauregard: Well, we, and I think that Ms. Bass mentioned it earlier today, if the porch system was allowed, we would certainly make that space much

bigger. And the chickens can and do practice what was labeled as not a natural but a normal behavior. We watch them do it. I would certainly increase that space on the outside of the buildings but I can't do it until it's an approved system.

I mean, it's been -- we've already spent millions of dollars, you know, making this facility based on the regulation from 2002. So that's what we did, thinking that, you know, this is how we were going to produce organically. And now, again, our farm in Hubbardston, Massachusetts, would not be able to do this. But we could do it on porches and give them a lot more space. You know, we're willing to do that with an approval.

Tracy Miedema: Calvin.

C. Reuben Walker: Could you give me – give us an estimate as what percent of your birds use the porches in a given day?

Bob Beauregard: What I can tell you is this. The space that they right now is approximately somewhere between 10 and 12 percent from building to building. There's 12 buildings, okay? We would be willing to significantly increase that and put it on both sides of the barn. We'd be willing to put, as Liz Fry suggested, some sort of vegetation out there for them to pick through. And, you know, we do that already. You know, we put some bales of hay out there.

You know, we do what we can to encourage that access to those porches. And, I mean, I have pictures – I didn't submit them – but in the summertime they are all – all these porches are shaded by trees. They go out there freely. And then the biggest part of that is I really feel that I can provide the prevention that is required by the FDA. They came and inspected our farm. They said this will work with us.

Bob Beauregard: And, you know, that's really all we're looking for.

Tracy Miedema: Thank you, Mr. Beauregard.

Bob Beauregard: We just – we just want to produce--

Tracy Miedema: Thank you. Any other questions? Thanks, sir. Okay. We have Matthew O'Hayer next. Alexis Randolph is on deck. Alexis, are you here? Okay, thanks.

Matthew O'Hayer: Good afternoon. My name's Matt O'Hayer. I'm the owner of Vital Farms located in Austin, Texas. We do pasture raised organic eggs. Our

birds live outdoors on pasture with indoor access instead of the other way around. Our birds are moved onto fresh pasture every week or 10 days or so and they consume about 20 square feet of pasture, just consume it, each week.

Our birds are not tipped because we don't feel they need to be tipped because they don't attack each other because they have plenty of things to do on pasture. Last week I think was another chance to see a wake up call when the "Mercy for Animals" video came out and the reaction that took place in McDonald's and consumers all over the country and the public outcry. I think that the organic egg industry in the United States is harboring a dirty little secret.

And that secret is that most of the birds – my guess is probably 90 percent – do not have access to outdoors and that is not what the consumer thinks they're getting. So I think someone earlier today – we're one 60 minute segment away from catastrophe in this industry right now. If the consumer knew that what "free range" meant.

There are labels out there that say free range where birds live indoors with no outdoor access. There are labels out there that say "free roaming" which the consumer assumes means they're outdoors, which means they're free roaming around an indoor confined space with about a foot or a foot and a half per bird. If the consumer really knew this, they would be outraged, I believe, and that the fallout would be tremendous for the organic egg industry.

And that proactive action is needed on the part of the board at this point to make this happen. Otherwise, we're going to be reacting down the road.

Tracy Miedema: Thank you sir. Any questions? Cole (Inaudible).

Colehour Bondera: Matt, I just wonder if you could talk for another little bit about what the specificities would be of the required outdoor. If you have any suggestions or comments on that?

Matthew O'Hayer: We offer between 100 and 400 square feet per birds outdoors. I think that'd be perfect. Just kidding. You know, I can't. I think the concept that the birds are not allowed outside at all is ridiculous and that's the case for a lot of farms. On the other hand, there is a wide range of different programs out there today. Our program is very specific. We have specific requirements for our farmers; 100 square feet, frequent rotation.

They can't go back to their old pasture for 60 days so we let the pasture rest. We're very specific on that and I'm hoping no one else does that because we want that portion of the market. But in general from an animal welfare standpoint, birds need to be outside. Farm animals belong outside. I mean, that's where they belong. They're animals. The only animals that I know that live inside are cockroaches, I think. And that's...

Tracy Miedema: Thank you. Any other questions? Thank you, sir. Okay. Alexis Randolph is up now. Jeremy Shapely is on deck. Jeremy Shapely, you here? Thank you. Please proceed, Alexis.

Alexis Randolph: Okay. Good afternoon. My name is Alexis Randolph and I represent QAI, an organic certification agency. QAI submitted written comments on silicon dioxide and the bottom line is that we're concerned about applying commercial availability to materials on 205 605 for the first time. We support innovative alternatives entering the market place but the regulation as written is for commercial availability in organic form. Not natural, not non-synthetic.

If you use one of those other terms in the annotation, we don't believe there's a regulatory link to the commercial available criteria of quality, quantity, and form for enforcement. If you use organic alternatives in the annotation, then we are equally concerned that there's only one source of an organic alternative. And we are unsure of our legal liability in forcing our clients to utilize that particular source.

Furthermore, you heard testimony from John Ashby earlier, and I've spoken to other clients who would be willing to do the research and development for testing alternatives. However, we don't believe every operator should be subject to the burden of commercial availability R&D when the NOSB already knows that the alternative does not work for every application, including anti-caking.

This requirement would be particularly burdensome for startup companies who do not have the resources simply to find out the alternative is not suitable. Just briefly, QAI also supports the recommendation on material review organizations. Regarding unannounced inspections, we currently perform risk based and complaint based unannounced inspections; however, we do not support our inspectors entering property without representation from the company being present.

We also agree with other comments that some non-organic food system inspection experience should count toward the minimal qualifications. We

also appreciate – we also would appreciate clarification from the program if unannounced inspections will be allow to substitute for the annual inspection. Thank you.

Tracy Miedema: That you very much, Alexis. Any questions? John Foster.

John Foster: All right. Thank you. How, if not by this means, how do we move the needle and encourage agricultural or preferably organic alternatives to items on 605 right now? How do we do it if not this way?

Alexis Randolph: I think it's a larger issue, that the board needs to step back and take a look at the entire list a whole, and address a potential commercial availability clause for the whole list of 605 as opposed to material by material. And make those regulatory links so that certifiers have reasonable means of enforcement to encourage our clients. If you look just really briefly – if you think about the agricultural products and commercial availability being out there already, it's a lot easier to substitute on ag product for another ag product.

When you're thinking about non-agricultural products and the complexity behind the manufacturing of those products, you start to get into very difficult substitutions where the form is automatically different and so perhaps form isn't a reasonable commercial availability quality to be looking at, as a certifier.

Tracy Miedema: Thank you. Any other questions? Jay Feldman.

Jay Feldman: Thank you. Do you have any specific knowledge about the efficacy of this product? Or you're reflecting the views of your client on this. I'm trying to get a sense of how we measure the effectiveness or efficacy of the rice alternative in this context. Have you done any independent evaluation on per use basis?

Alexis Randolph: I have not and I'm speaking on behalf of my clients, either. I'm basing my comments on review of the technical report and the committee's own comments about where the material worked or did not work.

Tracy Miedema: Go ahead. Jay.

Jay Feldman: I'm so sorry. I misinterpreted that. I thought you mentioned something about a client of yours uses – I apologize.

Alexis Randolph: I was just bringing up the point of the difficulty and the unnecessary burden of having clients do go – jump through hoops for a certifier to prove commercial availability and that the product doesn't work when we already know it doesn't work in some applications. It's an unnecessary burden to put on the clients.

Tracy Miedema: Any other questions? Thank you.

Alexis Randolph: Thank you.

Tracy Miedema: Jeremy Shapely is up at the podium now and Richard Siegel is on deck.

Jeremy Shipley: My name is Jeremy Shipley. I'm a wine importer and a wine wholesaler. I do all different types of wine: conventional wine, made with organically grown grape wine, and no added sulfite wine. I'm against the petition to allow synthetic sulfur into the 100 percent organic wine category for the following reasons. Firstly and most importantly, it's not needed in the manufacturing of, really, of any type of wine.

And the consumers are asking for no added sulfite wine more than other and there's a global explosion in the no sulfur added category. As a salesperson selling all types of wine, wine made from organically grown grapes and conventional wine and no added sulfite wine, I get asked daily by retailers about no added sulfite wine or low sulfite wine because there is a large misconception in the market about what these wines are.

And the only reason for that is consumers are asking stores, even the smallest stores that I deal with in the country on a daily basis about wines without sulfur. The USDA logo is the only easily recognizable way that most consumers can identify what they're looking for when they're buying without sulfites – when they're trying to find wines without synthetic preservatives in them and they've learned to trust the USDA logo to allow exactly what consumers don't want in their wine to be added by changing these regulations well, in my opinion, greatly harm the industry, causing complete confusion and distrust of the USDA organic logo.

Hence, consumers will shy away and they will look at third party sources of information for guidance which are always highly corruptible strictly for business purposes. The USDA organic logo has become the gold standard globally of trust and integrity of our organic food of choice.

Some of my suppliers who sell no added sulfite wines are now being asked to supply their European corporate retail chains with product with the USDA organic logo on it for the specific reason that even the European and the UK consumers have learned to trust the USDA organic logo over their own EU certifying logos. Which has caused the USDA organic logo to be a globally in demand logo, probably more so than any other logo that we know of.

And this is giving the US a world leadership role in the production of organic food. If we lose this lead due to regulation changes that weakened our standards, we'll be left selling Harley Davidsons and Air Force drones. The growth that I'm seeing in the production of the no added sulfite organic category is a globally controlled explosion and the only thing controlling the explosion is the speed of organic certification.

As you can see from my printout on page 2, the numbers are there are showing increases from 2010 to 2011 of upper 20s percentage increase in produced product in bottle. And I'm predicting that there's going to be an increase in 2011 to 12 of about 40 percent which is a phenomenal figure, even in current oil and gas industry.

I have suppliers that are world leaders in the no added category and they have contracts with multiple European chain suppliers where they're selling over 1,000 cases a week of no added sulfite wine under contract. They can't get new acreage certified organic fast enough to keep up with the demand. Hence, I'm getting shorted here in the US and they can't even grow into new markets because they're out-selling this under their contracts already.

Tracy Miedema: Thank you, Mr. Shapely. Jay Feldman.

Jay Feldman: You sell all kinds of wine?

Jeremy Shipley: Conventional wine, all types.

Jay Feldman: Okay. So why do you care?

Jeremy Shipley: Because consumers care. I mean, this is what my consumers are asking for. I sell more no added sulfite wine than anything else. If I walk into a store and I tell them that I'm a wine importer or sales rep they say, thank you, we're not interested, our category is full right now. Come back in February. We're not buying. And then I tell them that I have no added sulfite and they go, okay, whoa. Pull them out, put them on the counter.

Show us what you got. For that reason and that reason alone. And the reason they're asking me is consumers are asking them. And it's just about every store I go into or I've been into in this country, in any state, the smallest town, they sell no added sulfite wine and they've got four or five brands in there and they want more. And that's my sole reason for caring about it.

Tracy Miedema: Thank you very much. Any other questions? Joe Dickson and then Jennifer Taylor.

Joseph Dickson: So in your chart on page two here, you're showing that you're over your increase in production of no added sulfite wines and it shows an increase of 26 percent or almost 27 percent. Do you have any idea what that same figure is for the made with category with added sulfites?

Jeremy Shipley: I don't. No. I wish I did. I don't track--

Joseph Dickson: Okay. Thank you.

Jeremy Shipley: These figures are actually very difficult to get. You know, nobody tracks them and none of the countries that I import wine from, the governments don't track them. But strangely enough, just due to my request in South Africa, the South African government as of Monday this week is now tracking global production of vineyards under acreage and production and export. So there's huge changes that are happening in this industry right now.

Tracy Miedema: Jennifer.

Jennifer Taylor: Thank you. Can you explain again please what the customers and the public expect from the organic label?

Jeremy Shipley: That's kind of difficult to say. I mean, in my opinion, most people that look at the USDA organic logo, they want zero chemicals. And, you know, I have a lot of confusion in the wine market when I'm in a store like a Whole Foods store doing a demo and I tell customers you want to try some organic wine. They immediately look at me and go but isn't everything in here organic? You know, then I have to start the whole education.

Well, no, not quite. You know, so it's really about the education that I and all these other suppliers and everybody in the organic industry have done for the last 20, 30 years. People know what the USDA logo means: no synthetic chemicals. And, you know, some of them, there are certain

amounts that are allowed in but the rules are getting tighter and people know that. People understand that the USDA logo means no chemicals.

And anybody I've talked to that doesn't have a clue about wine, the first thing they think is USDA means no chemicals.

Tracy Miedema: Any other questions? Thank you very much.

Jeremy Shipley: Thank you.

Tracy Miedema: Richard Siegel is up next. While you're getting settled, I'd like to go ahead and tally the number of witnesses we still will be taking testimony from the rest of the day. Lorraine, would you mind counting those up?

Richard Siegel: Ready?

Tracy Miedema: Almost. We're going to hear from Lorraine first. Okay. So we have 10 more witnesses. That's one hour that we've budgeted at six minutes apiece. So it's about 5:40 right now, just to kind of do a process check here for everyone. And also I just – while we're pausing I would like to recognize our audio staff that's working very diligently. We have Ben in the blue shirt and Reggie in the black shirt over there. Thank you, fellows.

Tracy Miedema: Dick, we're ready for you.

Richard Siegel: All right. Sure. Thank you. Good afternoon. My name is Richard Siegel. I practice law in Washington D.C. My specialty is the National Organic Program and I am very happy to appear before this board again. I will be very sorry to see the distinguished members of the board who are retiring after this meeting. I will really miss that whole graduating class. Today I'm representing the petitioners seeking a change in the sulfur dioxide annotation.

The petitioners passionately believe that the best wine is made from 100 percent organic grapes, whether that wine is made with sulfites added or is made with no sulfites added. Now one of our petitioners could not be here because of illness but he had prepared a statement and I'm going to read briefly from his statement.

This is a gentleman, is Mr. Paul Dolan. He is an organic biodynamic farmer, wine grape grower, and fourth generation winemaker in Mendocino County. This statement, I'm going to quote from it rather than use more of my own words because it really shows the aspirations that these petitioners have for organic wine grapes.

Here's what Mr. Dolan wrote in his statement. "My awakening began – came about 25 years ago. As a young winemaker I can remember being in our sauvignon blanc vineyard about this time of year tasting the fruit to determine if it was ready for harvest. Tasting the fruit off one vine, it still had all the fruit and melon characteristics I'd expect. And then, walking just 10 feet to other row, tasting another berry on another vine, I found that flat and insipid.

As a winemaker I would have great hopes for the wine but ended up being disappointed as the wine went into our everyday table wine. Three years after this vineyard was converted to organic, the grapes went into our top level sauvignon blanc. From this experience I had two realizations. One, I could make better wines if I farmed them organically.

And second, I realized the chemicals I was using were killing the microbial life of the soil." "Everything thing," Mr. Dolan continues, "Everything from that point on shifted for me and started to – I started to convert one vineyard after another to organic and today my vineyards are certified organic and biodynamic.

I have had the opportunity to convert over 2,500 acres to organic. I recently purchased another 50 acres of conventional vineyard to convert." "Additionally," he closes, "it became clear to me that in order to enroll other winemakers in the possibility of growing organic fruit, there would need to be an option for the use of sulfites." Yesterday we had a winemaker from Missoula, Montana – two years – about two days ago. Andy Sponseller. He said sulfites were the final insurance policy for winemakers.

Tracy Miedema: Mr. Siegel.

Richard Siegel: This is why they're widely used and why they're permitted in wine under the OFPA.

Tracy Miedema: Thank you, Mr. Siegel. That’s the three minutes.

Richard Siegel: All right. I'll be happy to answer questions.

Tracy Miedema: Any questions for Richard Siegel? Thank you very much.

Richard Siegel: I gave up some of my time just to read Mr. Dolan's words because they were more eloquent than the words I was going to have. Thank you.

Tracy Miedema: You're welcome. Next up is Cheryl Van Dyne. Al Clark is on deck.

Cheryl Van Dyne: Thank you very much. Can you hear me okay? Thank you very much for letting us speak. I'm representing J.M. Huber. We are a manufacturer of silica, silicon dioxide, and I want to go quickly through the slides. There's an old saying one picture is worth 1,000 words. So since our time is limited I'm going to show you some of the results that we've had.

What we're going to – what we've done is we've compared – if we could go to the next slide. We've compared silicon dioxide to the ribus, ground up rice hulls. And their advertisement is and their petition is that it's a one-for-one replacement. Our industry, not just J.M. Huber, has done some work on this over the last couple of years and we have done some –

Have provided for you some examples of the lack of the flow, if you will, in certain products. So on the left is a control and it's tomato soup. The second one is Nu-Flow at 1.5 percent and the third one is Nu-Flow at three percent and the last one is silicon dioxide at 1.5. And tomato soup and any product like that, that needs to flow so that it can be distributed in water or in a production environment is not going to be able to flow as well with the smaller amounts of the ribus.

Could you go to the next slide, please? And we -- here's some – we used an aperture to show the flow. On the right side is the conditioned flowing. In the second is the three percent condition with Nu-Flow and on the left is the conditioned – unconditioned soup powder. Next slide. This is just a picture of each. The silicon dioxide is 100 percent silicon dioxide and on the left is the Nu-Flow which is about 17 to 21 percent silicon dioxide, silica.

And the rest is the inert matter that’s in the product. Next slide. And this is an evaluation, just data, if you will, that shows the caking evaluation. The next slide, please. This is a little hard to see but this is macadamia nuts and it's another food product. And on the left, (inaudible). On the right is Nu-Flow. The second to the right is Nu-Flow, the left is the supinate which is a form of silicon dioxide.

And then on the far is the uncontrolled. Next slide. And one of the concerns that we have is that what does it do in a beverage or what does it do where you have liquid? And two things. One is you need it to go through the system, either as part of an anti-caking agent, or you need it to have clear suspension properties. And this shows the comparison of the two. Next slide.

Cheryl Van Dyne: And, again, there's – this was in an defoamer application and they've added defoamer to the ribus advertisement specification and this shows that there is a little bit of sediment there. Okay.

Tracy Miedema: Thank you. Any questions from the board? Jay Feldman.

Jay Feldman: Are you suggesting across the board that the alternative isn't effective or are you suggesting that there could be an annotation that is restricted to those uses that are ineffective?

Cheryl Van Dyne: Well, I'm not suggesting that there be a restriction on ribus; I'm just providing information that there was a petition to de-list silicon dioxide and I'm providing information that says that it might not be a one-for-one alternative for organic protection. That what we've shown in our lab studies is that there's a lot of inert matter in the ribus ground up rice hulls that can affect the performance of the – of the anti-caking agent or defoamer in the manufacturing process.

So we believe that silicon dioxide should remain on the list. And that's okay for ribus to be there. I mean, it's a perfectly good alternative. It's organically available.

Tracy Miedema: Any other questions? Jay.

Jay Feldman: Yeah. To clarify. I may have misspoken. The petition is to remove silicon dioxide. So the question is whether your information could be used to limit silicon dioxide in ways that ensure the industry that there is an alternative out there? In case the Nu-Flow.

Cheryl Van Dyne: Yes.

Jay Feldman: The question is are there ways other than what's been proposed by the Handling Committee, are there ways that this board could restrict silicon dioxide so we could meet our statutory responsibility to find alternatives that are not synthetic.

Cheryl Van Dyne: Well, I think that the biggest concern that our industry has, and it's (sounds like) SASSY, which is the silicon dioxide group and then the DITO which is the Defoamers Institute Industry trade association, we're very concerned that the ribus is being promoted as a one-for-one replacement.

There are many applications where the ribus wouldn't be suitable. So I guess my concern is that the silicon dioxide is approved as a food

additive, a defoamer under the 21 CFR for uses in foods and feeding products. And I've provided this information to the board as well.

I don't see where you would want to restrict it because your market in organic production is so wide.

Tracy Miedema: Katrina.

Cheryl Van Dyne: Yes. Katrina.

Katrina Heinze: Thanks for your testimony today. So in response to the petition, the Handling Committee recommended an annotation that would limit the use of silicon dioxide to places where the handlers could demonstrate that the non-synthetic alternative didn't work. Can you live with that?

Cheryl Van Dyne: Yes. I think if silicon dioxide is left on the list and it is up to the customer to make the choice of which they use, if silicon dioxide is on the list and there aren't restrictions other than saying – other than what you've said then I think that we'd be all right with that. Yeah.

Tracy Miedema: How does our certifier feel about that? I'm curious. Just quick. That's okay, Mac. I won't put you on the spot. Any other questions? Thank you.

Cheryl Van Dyne: Okay.

Tracy Miedema: Next up is Al Clark. Anne Petersman is on deck. Al Clark, are you here? Ann Petersman, you're up. Carmela Beck is on deck.

Anne Petersman: Hello. I'm Annie Petersman. I'm from northern Kentucky and I'm a chemist. And I'm asking you to allow ammonium nonanoate for use as a tool in weed control. I've been listening for a couple days and there's some questions that I heard that I think I might be able to answer. The ammonium nonanoate material, it's a fatty acid soap. There are 12 university studies out there documenting its strong performance over existing weed control tools.

Farmers who test it say that it works and it's a tool that they would like to have. Economically it's better. It's cheaper per acre than existing materials. If the controversy is concerned about waterways, you know, the EPA already has – it states on the label that it cannot be used in adjacent – adjacent to waterways. Somebody yesterday compared this product to Roundup and Roundup is glyphosate. And glyphosate's not naturally occurring and ammonium nonanoate is.

And glyphosate, in – when people use that as a herbicide, they have inert packages that have amine ethoxylates, alkyl polyglycosides and other suspect chemicals. Do you know what the inert package is for the ammonium nonanoate? It's water. I mean, this material is a natural occurring soap and water. It's only being asked to be used on burn down for planting, for use between orchard rows, and for hooded sprayers.

The Crop Committee questioned the need for additional weed controls. Yesterday in discussions on the priorities research framework it was stated that one of the criteria that was going to be research topics was going to be called was nebulous. And that's where the specific research was hard to identify but the organic agriculture need was clear.

And you know what? The example they gave – the example was weed control. That's all – that was from the committee. Last, the question's been brought up a couple times about synthetics. This isn't an issue. Soap is an allowable synthetic under the 1990 OFPA. Organic farming absolutely does not allow for toxic, pervasive pesticides, be they synthetic or non-synthetic. You can't use them.

This substance is natural, it biodegrades super fast, and it basically comes from nature and returns to nature as micronutrients. The synthetics are acceptable alternative when the need's really not filled by the current weed control methods.

Tracy Miedema: Thank you, ma'am.

Anne Petersman: Just one question is how many people here use hand soap? Organic hand soap? Have bought organic hand soap. That's the same chemistry. If you're using organic – if you're using organic hand soap or have used it, that's the same chemistry. And it's a needed tool for organic acreage to grow that and the farmers are asking for it. Thank you.

Tracy Miedema: Thank you. Any questions? Thank you very much.

Anne Petersman: Thank you.

Tracy Miedema: Carmela Beck is up now and Shirley Daughtry is on deck. Ms. Beck, congratulations.

Carmela Beck: Thank you. Can you hear me? Okay. Thank you very much. It's going to be a great honor. I look forward to working with all of you. So good afternoon. I thank the NOSB for considering my comments and for your commitment to the organic industry. My name is Carmela Beck and

I'm an organic program manager at Driscoll, Strawberry Associates headquartered in Watsonville, California. We're an international distributor of conventional and organic berries.

I'm here today on behalf of the more than 50 independent organic growers that I work with in California who grow organic strawberries, raspberries, blackberries, and blueberries for Driscolls. I'm advocating for the continued allowance of pheromones for mating disruption and for the approval of odorized propane in rodent control devices.

First, in the Watsonville and Salina area of California our growers are dependent upon pheromone mating disruption twist ties for control of the light brown apple moth. These particular growers are located in quarantined areas with state control and eradication policies in place that disallow the movement of LBAM outside the quarantine boundaries.

Some of our growers have been prevented from shipping fruit because inspectors have found a single LBAM in a clamshell. There are some BT and (sounds like) spinecides to berry products available, however, pheromones are the most efficient preventative tool in our toolkit. Our growers would experience huge yield and economic losses if pheromones were not allowed for use in organic production. Secondly, we'd like to request the approval for the use of odorized propane in rodent control devices as an effective physical tool to reduce rodent populations.

Alone, hunting and trapping of rodents are ineffective alternatives. Growers would still be responsible to implement other cultural practices, including use of rotations and repellents. Proper use of the equipment and proper documentation of the procedures and circumstances for you should be carefully detailed and the grower organic system plan.

It's important to note that these devices would obviously not be used where endangered species would be at risk. This concludes my comments. Thank you for your consideration.

Tracy Miedema: Thank you. Any questions for Carmela Beck? John Foster.

John Foster: Do you have a ballpark guess as to the economic damage from burrowing rodents in strawberries, particularly? Just a ballpark. I mean, how much cost do you incur as a function of other control methods or crop loss or what not?

Carmela Beck: I don't have that information.

John Foster: Ballpark. Okay.

Carmela Beck: No ballpark. But I can get it for you.

John Foster: And I imagine we'll have the opportunity for that. Yes. That's good. Thank you.

Carmela Beck: Yeah. Sorry about that.

Tracy Miedema: Any other questions? All right. Thanks.

Carmela Beck: Thank you.

Tracy Miedema: Shirley Daughtry is on deck. And Hailey Barrett – sorry. Shirley Daughtry is up, yes. Hailey Barrett is up next. Please proceed, ma'am. Did I say that wrong? Sorry, ma'am. I think I confused things here. Please state your name for the record.

Shirley Daughtry: Well, I think everything has been said. And it's certainly been an education for me. And I do want to thank all of you for choosing Savannah, our city, to have your meeting. Wow. We're just so honored to have you. And I hope you have enjoyed your visit. And thank you for your transparency. I don't know of any other committee like this and we really appreciate that. I am Shirley Daughtry and I am owner and manager of Heritage Organic Farms.

We were the first farm certified organic in the state of Georgia. So we've been at this a long time. And have been advocates of it, not just doing the farming but trying to convince everybody else to do it also organically. My concern today is in maintaining the integrity of the USDA organic label. I think most of what I would say others have said this too. That that's really what why we're here today.

Before the USDA involvement in the organic program, we really just struggled to even get our foot in the door. No one in this area of the country even knew what organics was. And then after the USDA became involved with their certification and labeling, we saw a huge surge in organics. People trusted that label. And I see that trust now beginning to crumble and it really disturbs me because we have worked so hard to convince everybody that if you see a USDA organic label, it is organic.

And now they are beginning to doubt that. Now after attending these sessions I can sort of see why maybe. I'm really surprised at the number of synthetic products and processes even being on the agenda to be

approved – to be approved by the organic board for labeling organic. This seems to be to me a bit dishonest since organic means non-synthetic and all natural. Reasons being given that I'm hearing are like "well, there's no natural alternative."

Well, there never will be a natural alternative if we take away the incentive for the development of one. Another: "Oh, well, it's a good tool for farmers." Well, so is Roundup. I don't see any excuse to water down organics in any way. When the door is opened for exceptions it's when we begin to lose credibility. Someone mentioned that a certain change would be good because it would provide the board with more flexibility.

I don't really feel like you need more flexibility in your decision making. I feel like you need less flexibility.

Tracy Miedema: Thank you, Ms. Daughtry.

Shirley Daughtry: To simply – just let me finish this sentence.

Tracy Miedema: Sure. Sure, go right ahead.

Shirley Daughtry: To simplify your job: if the proposal is synthetic just say no. If it's organic, just say yes. A simple yes, no. That's what we need from you. Thank you very much.

Tracy Miedema: Thank you, Ms. Daughtry. I will say that every member of this board and the National Organic Program enjoyed some of your produce last night at a restaurant. So familiar with your excellent produce farming.

Shirley Daughtry: Thank you.

Tracy Miedema: Any questions? Thank you very much.

Shirley Daughtry: Thank you.

Tracy Miedema: Hailey Barrett is up next. And Joan Stanton is on deck. Hailey Barrett? Joan Stanton. Okay. We're up to – please state your name for the record.

Joan Stanton: Yep. Good afternoon. My name is Joan Stanton. Can you hear me? I live quite close to here in Rincon, Georgia. I'm a consumer. I buy food with the USDA's organic seal precisely to avoid synthetic and genetically altered ingredients in my diet and also because I believe animals should be treated humanely, which results in better quality food. I'd like to briefly address two issues today no fancy presentation, just heartfelt thoughts.

First, organic is a simple yes or no issue. Something either is organic or it's not organic. This is one of those things where there are no shades of gray and lobbying should not make a difference. Organic is and should remain just that. I repeat: Organic is and should remain just that. No synthetic preservatives in wine. No genetically modified ingredients and synthetic additives in milk and infant formula. No watering down of the animal welfare standards.

A diet of organic food has allowed me, a person with not one but two autoimmune diseases, to live a relatively normal and symptom-free life. Our children and their children deserve the same opportunity. You, ladies and gentlemen, the National Organic Standards Board, have the opportunity here this week to make organics the true gold standard, not only in terms of food but also in terms of animal husbandry.

I urge you to take that opportunity and make the organic label something to be even more proud of. I strongly believe that any representative to the NOSB with a conflict of interest in any particular subject being voted on this week should not be allowed to vote on that subject. And I repeat. Organic is and should remain just that.

My second subject is GMOs. If GMOs are such a good thing, why are they not being labeled and proudly marketed as such? I'm particularly troubled by the potential for harm GMOs pose to organics through cross-pollination. For example, if GE alfalfa is allowed to be freely grown in this country then organic alfalfa will become contaminated by cross-pollination. And it's a when, not an if.

And then the USA will no longer be able to export any dairy products to Europe which doesn't accept GMOs. Once the genie's out of the bottle on this one, there will be no getting it back in if we change our minds later. My biggest worry is that GMOs could destroy organics forever. Not just the short-term future, but for ever. We don’t own this planet. We're just stewards for the next generation. So please let us be good stewards.

Tracy Miedema: Thank you, ma'am. Any questions? Thank you very much. Next up on our list today is Marty Mesh. We see someone in the waiting seat here.

Marty Mesh: (Inaudible).

Tracy Miedema: Hold – just let me check in here real quick, Marty. Lorraine, how many speakers do we have left now? The gentleman that was just sitting beside you; is he giving testimony?

Marty Mesh: He gave me his drugs.

Tracy Miedema: Marty, your three minutes are starting right now.

Marty Mesh: I'm not ready yet. Hang on. I got my own watch today. Ready? I'll sit – you can start the clock in a little bit. All right. My name is Marty Mesh, the executive director of Florida Organic Growers, our certification program, quality certification services. I started growing organically in 1972, on a larger scale in 1976. So I've had the pleasure of helping grow the organic community and industry for about 40 years.

How strange and fitting that I'm the last voice that some of you will ever hear as board members in public comments. So let me thank Steve, Tracy, Tina, and Katrina for the work, the wisdom, the civil discourse, and the contribution to growing organic agriculture. In the market.

Of course, I also want to – I also think it's fitting that the meeting is here in the South where okra grows organically and plentiful and well and that all that is needed to make certified organic IQF okra is maybe a company who's willing to offer a fair contract and work – and to work with growers. I still haven't received any phone calls, emails, or communications. Unless Katrina comes to visit me in the future, this may be the last official okra update in public comments.

Unless other companies try to do silly things as well. I mentioned civil discourse and I continue to be saddened by the deteriorating tones of discussion which reflect poorly on our community and industry. For the sake of time and on a personal level, as an organic consumer I support personally Bob Durst's comments and Katherine's words – used the words I was going to say in not letting the perfect be the enemy of the very good.

Many of the NGOs want to correctly hold up organic agriculture as the answer to several of the global problems, yet we seem to be – we seem to see our own community do more damage to helping grow more organic acres than some of those who would consciously try to undermine the future of organics. I worry about taking the few tools away from farmers and industry when so few are available.

And part of the certification process should be to justify any use of off farm inputs. I find the pendulum has swung so far that now a second generation organic farmer, a friend of mine's son, are starting to say to their friends, if you don't absolutely have to be certified, don't do it. And that is sad to see.

I want to support the sulfur dioxides – the sulfites – keeping sulfites out of organic wine.

Phil recapped the history of it well, except he said it was transparent. The Boxer amendment was in the dead of night, my California colleagues. But, anyway, I'd like to – in closing, I'd like to read one small paragraph on the organic farmer who isn't able to be here but he's a second-generation organic farmer and his son is on the farm as well.

"I want to let you know I received a sample of" – he grows both organic and conventional. "I want to let you know I received a sample of ammonium nonanoate, a selective – a non-selective herbicide from OMRI, oleochemicals. I applied the product in a small test and found it to be superior to any OMRI approved herbicide that I've ever used. The product deserves support at the NOSB meeting in Savannah.

"We all hear that one of the most difficult aspects of organic farming is weed control. Ask any organic grower what is your number one pest problem, the answer most likely will be weeds. I find this to be the case on my farm. I don't know if you will have an opportunity to give comment, but if you do, please support the effort to approve its' use." If you'd like more information--

Tracy Miedema: Last sentence, Marty.

Marty Mesh: "Sincerely, John Volmer, certified organic farmer, North Carolina."

Tracy Miedema: Thank you very much. Katrina.

Marty Mesh: Katrina. Ask me.

Katrina Heinze: Marty, I am honored that you gave up a minute of your three minutes to rib me for my last meeting. Thank you very much. I'll be around in Albuquerque so you can give me some more.

Marty Mesh: Yeah.

Tracy Miedema: Any other questions for Marty Mesh?

Marty Mesh: Campbell's? Anything?

Steve DeMuri: Well, if you persist. I just want to know who you're going to kick around now that Katrina and I are leaving the board.

Marty Mesh: Yeah. Well, there's two -- there's two California agri, you know, agricultural people coming so fear no evil that there will be other folks in the south to make sure that they stay in line.

Tracy Miedema: I see one more name on our list today. And Lorraine, the signups are absolutely closed after Mr. Herbert Jenson. Okay.

Herbert Jenson: Thank you very much for the opportunity to provide a comment on organic egg production and aviary housing. My name is Herbert Jenson. I'm a graduate of the University of Guelph in Canada and I worked as a poultry extension person for the Department of Agriculture. I'd just like to give an overview of the alternative housing in Europe as I'm originally from Europe and a lot of contact there.

In Europe, the alternative housing system started in the '80s and it is in a much further trenched state than the USA at the moment. The first alternative housing of commercial layers was the floor system with nests and a slatted area along each side of the nest and the scratch area. As the aviary system was perfected, it became commercial viable and the demand for eggs organic or cage free increased the production of eggs in alternative system and the EEC has completely shifted to aviary type systems.

The KAT regulations are alternative housing regulations governs the production of organic and cage free eggs. Aviary system production is a must now in EEC as large production units are required for the high demand of organic and cage free production. And also to keep the cost production for organic, cage free as low as possible, which is especially important for organic egg production as less hens per square feet of living area can be housed compared to cage free egg production.

Aviary systems consist of a maximum of three tiers of which the middle has a nest system, the top and bottom tiers have a manure belt system which makes it possible to dry the manure and remove the manure two times a week or more. The manure belt system prevents fly problems as the manure is too dry for larvae to develop.

Also, the ammonia emission from the manure is greatly reduced due to the drying of the manure which helps the environment as acidity is reduce. A major factor for aviary production in the EEC is the animal welfare regulations as the hens have to be able to express their inherited natural behavior.

On top of the aviary system, perches are placed which the hens used to rest during nighttime hours and mimics the hen's natural inherited behavior in the wild. In the wild the hens will perch in trees during nighttime hours in order to avoid being attacked by predators. (Inaudible) lighting is being simulated in aviary systems which gives the signal to the hens to move up the aviary system for a night's rest. And during daylight hours natural light is provided for the hens.

The tiers in the aviary system makes it possible for the hens to express their natural behavior, as they can jump or fly between the different tiers and between the rows of aviaries in the house. The hens are able to move freely through the whole pen area. The hens can exhibit in their scratching behavior in the litter area on the floor of an aviary house or in the winter garden which is located outside the aviary house and has a roof over it.

Herbert Jenson: The birds are the highlights of the European development of aviary systems...

Tracy Miedema: Sir.

Herbert Jenson: ...which are now the norm...

Tracy Miedema: Wrap up, please.

Herbert Jenson: ...for the organic and cage free egg production. Thank you for the opportunity to pent – to present a few of aviary systems for the European – from the European experience.

Tracy Miedema: Thank you very much. Any questions for Mr. Jensen? Hearing none, thank you for being here. We are at the end of our day – our third day. Our fourth day is dedicated to final deliberations and voting. Board members, there have been many changes to recommendations discussed. Please refer to the message Lorraine sent us for process. Let's make sure any significant changes we have to anything needs to be voted on in committee.

What we bring to the full board are voted on committee recommendations and we can accept friendly amendments and such during the voting process, but committees need to come to consensus and bring their recommendations to the full board. So it may be a late night for some folks. We'll see how it goes. And then we are – we will resume tomorrow morning at 8:00 a.m. and begin with the Crops Committee. Thank you and good night.

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