UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURE MARKETING SERVICE (AMS)
NATIONAL ORGANIC PROGRAM (NOP)
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MEETING OF THE NATIONAL ORGANIC STANDARDS BOARD (NOSB)
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MONDAY
APRIL 9, 2013
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The National Organic Standards Board convened at 8:00 a.m. at the Hilton Portland & Executive Tower, 921 Southwest 6th Avenue, Portland, Oregon, Mac Stone, Chairperson, presiding.

MEMBERS PRESENT
MAC STONE, Chairperson
HAROLD AUSTIN

CARMELA BECK
COLEHOUR BONDERA
JOSEPH DICKSON
TRACY FAVRE
JAY FELDMAN
JOHN FOSTER
WENDY FULWIDER

NICHOLAS MARAVELL
JEAN RICHARDSON
ZEA SONNABEND
JENNIFER TAYLOR
FRANCIS THICKE
CALVIN WALKER

STAFF PRESENT

MILES McEVOY, Deputy Administrator, National Organic Program

MICHELLE ARSENAULT, Advisory Board Specialist

MELISSA BAILEY, Director, Standards Division, National Organic Program

LISA BRINES, Standards Division, National Organic Program

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P-R-O-C-E-E-D-I-N-G-S

8:01 a.m.

CHAIRPERSON STONE: I'd like to have everyone's attention. I'd like to go ahead and get the spring meeting of the NOSB in order. We have a very aggressive agenda, so we're going to be quite diligent at trying to stay on time out of respect for those of you with public comment. We want to get as much as we can from you as we go forward.

First, I want to thank the Board for the opportunity to serve as a chair. It's very rewarding to have the opportunity to such diligent and dynamic brain trusts that we work with. I thank the audience and thank all of you all for taking your time and your hard-earned money to be here. It's very important, your written comments, your interest and attention to detail. We take it very seriously.

Since the written comment period closed, this group of people has had a lot of

very intense conversation based upon your all's input. And, again, we look forward to public in-person input, both from the podium and in the hallway and at dinner, etcetera. So we highly value your all's input.

Remind you to please turn your cell phones off, including Board members. We do have a policy. Cell phones that go off get to buy the first round, depending on how many rounds there are.

So at this time, we have one new Board member, Francis Thicke, over here. But I think Colehour will start to my left. If you introduce yourself, a little bit about your background, what committees you serve on, and we'll work around the table.

MEMBER BONDERA: Okay. Thank you very much, Mac, and thank you all of you being here to help us move forward. My name is Colehour Bondera. I am a very small-scale farmer in the state of Hawaii. I am not at work right now because that's my work is

farming.

So I serve on -- I was going to give a number, and I can't recall the number, so I'll just list them. I serve on the Livestock Subcommittee. I am chair of the Policy Development Subcommittee. And I serve on the Crop Subcommittee, as well as the Ad Hoc GMO Subcommittee. And I think that that's that. Thank you.

MEMBER FAVRE: My name is Tracy Favre. I am currently chair of the Livestock Subcommittee. I also serve on Materials and Handling Committees and the CACS Subcommittee. I spent 18 years as an environmental engineer and, most recently, the last four years, in sustainable ag, training farmers on sustainable management practices. And I'm happy to be here.

MEMBER BECK: Good morning. My name is Carmela Beck, and I work at Driscoll Strawberries Associates based out of Watsonville, California. I've been there the

past six years. I manage the organic certification program for our independent growers. I sit on the Crops, the Handling, and the Compliance, Accreditation, and Certification Subcommittees. And it's also a pleasure to be here. Thank you.

MEMBER SONNABEND: Good morning. My name is Zea Sonnabend from Watsonville, California. I am in the scientist seat. I work for California Certified Organic Farmers as a policy specialist and a farm inspector for California's certification services. I have a small farm, Fruitilicious Farm, where we grow apples and other fruit. And I serve on the review panel and I'm one of the co-founders of Organic Materials Review Institute.

MEMBER FELDMAN: Good morning. I'm Jay Feldman. I serve on the Crops, Materials, Policy Development, Ad Hoc GMO, and the Inerts Working Group. I'm the executive director of Beyond Pesticides in Washington

D.C. I've been doing that since 1981, where we work with farmers, consumers, environmentalists to reverse some of the environmental and public health problems we suffer from in chemical intensive agriculture, such as autism, learning disabilities, intersexed fish, cancer, hormone disruption, and a whole host of environmental contamination issues related to water quality and food safety. So we have an intense and I personally have an intense desire to grow organic with public trust and integrity to ensure that organic becomes the mainstream form of agriculture in this country. Thank you.

MEMBER RICHARDSON: Good morning. I'm Jean Richardson from Vermont. I'm a consumer public policy representative. I serve on Accreditation, Livestock, GMO Ad Hoc, GMO Vaccine Working Group, and Handling. I am an organic maple syrup producer, and we're boiling, probably right now as we speak, and

I'm missing out on that, but my kids are doing it. I've farmed a whole range of animals organically in the past. Again, my kids are doing that now. And I'm an organic inspector.

MEMBER DIXON: Good morning. My name is Joe Dixon, and I am from Austin, Texas. I occupy the retailers seat on the Board. I am currently the quality standards coordinator at Whole Foods Market. I work as part of a group there that sets the company standards on the products we sell and works on issues of food policy and food integrity and organic certification. I serve on the Livestock Committee, the Materials Subcommittee, the Handling Subcommittee, and the Compliance, Accreditation, and Certification Committee.

MR. FOSTER: My name is John Foster. I'm just starting my fourth year on the Board here. I'm in one of the two handler positions. I live in Santa Cruz, California. I'm the director of compliance for quality

food safety and organic integrity at Earthbound Farm. I chair the Handling Committee. I'm on Crops, CACS, Policy, Executive. I think that's it. As usual, very, very happy to be here and happy to take part in a great process.

CHAIRPERSON STONE: My name is Mac Stone on the certifier seat. Currently, again, honored to be Chair of the Board. I farm with my wife and her family organic in Kentucky, serve on CACS and Livestock this term.

MEMBER WALKER: Good morning. My name is Calvin Walker. I'm a native of Louisiana. I serve on the Certification, Policy, Livestock, Materials, and GMO Ad Hoc. My real job is program leader for animal science, plant science, and agriculture economics at Southern University in Baton Rouge. And I have a host of other interests recently, dealing with oil and gas and land development. Thank you.

MEMBER FULWIDER: I am Wendy Fulwider, and I am on the Board as a producer. I am currently on the Livestock and Materials Committees. I work at Crop Cooperative as their animal care specialist. I own a certified organic farm in Wisconsin, and this fall my son will be an organic dairy producer. Thank you.

MEMBER AUSTIN: Good morning. My name is Harold Austin. I'm the director of orchard administration with Zirkle Fruit Company, a grower. We produce apples, pears, cherries, blueberries, wine grapes, both conventionally and 42 percent of our total production now is transitioned and is certified as organic in Eastern Washington. And I serve also on Washington State Department of Ag's Organic Advisory Board. I'm the Vice Chair of the Handling Committee. I sit on the CACS Committee, and I'm also on the Crops Committee, as well.

MEMBER TAYLOR: Good morning. I'm

Jennifer Taylor from Florida A&M University. I'm from Tallahassee, Florida, and I am coordinator of small farm programs at Florida A&M University. I serve on the Materials Committee as Vice Chair, the Policy Development Committee, and I am Chair of the GMO Ad Hoc Subcommittee. I represent public interest and consumer interest on the Board.

MEMBER MARAVELL: My name is Nick Maravell. I'm a producer representative. For over three decades, I've been an organic farmer: crops, livestock, farm processing, etcetera. I serve on the Crops Committee, the Livestock Committee, the Handling Committee, and the Policy Committee, and the Ad Hoc Committee or the Ad Hoc -- I don't know. Whatever it is. The GMO Vaccine Committee, vaccines made with excluded methods, working group.

MEMBER THICKE: I'm Francis Thicke. I'm an organic grass-based dairy farmer from Iowa. We process our milk on the

farm and market it all locally. I'm also a soil scientist by training, and I worked at USDA in Washington in the past as a national program leader for soil science for the extension service. I'm on the Crops Committee and the Livestock and the GMO Ad Hoc, and I serve on the environmental position here on the Board.

CHAIRPERSON STONE: All right. Thank you very much. If we move on around, and, Miles, just introduce yourself and work through the program here.

MR. MCEVOY: Good morning. Miles McEvoy, deputy administrator for USDA's National Organic Program. It's great to be here. I just want to recognize all the service, the countless hours that the Board has put in over the last six months to come up with these proposals. The work that the Board does is really essential to the success of the organic industry and organic agriculture, and you guys deserve a lot of praise for the work

that you've done. Thanks.

MS. BAILEY: Good morning, everybody. My name is Melissa Bailey. I serve as director for the Standards Division at the National Organic Program at USDA. Great to be here. Glad to see everybody's faces again. Our work in the Standards Division, we work with all of the Board members on their issues. In particular, I've worked with Nick and Jean on the Vaccines Made with Excluded Methods Working Group, as well as on the GM Ad Hoc Committee. But myself and the whole Standards team interfaces with these folks on a daily basis on all of their subcommittee calls, so, hopefully, that's been helpful.

The Standards Division is also responsible for all the rulemaking work that goes on, much of the guidance development, and things related to that. So I look forward to a great meeting.

DR. BRINES: Good morning. My

name is Lisa Brines. I also work in the Standards Division of the National Organic Program as the national list manager. I also work closely with members of the Board, particularly the Materials Subcommittee and also the Inerts Working Group. Thanks.

MS. ARSENAULT: Good morning. My name is Michelle Arsenault. I'm in charge of all the logistics for the Board. I'm the Advisory Board specialist. If you have any questions, please come ask me. And I've been in this position just over a year now. I just celebrated my year anniversary, and I want to reiterate what I said at the last meeting that this is the hardest working bunch of people I've ever worked with, very dedicated, very passionate. I talk to them more than I talk to my family. We have weekly conference calls, many weekly conference calls, and they call in from vacation, they call in from their offices, they call in while they're on the road traveling to do inspections, they call in

from every bridge in Louisiana. And so it's a great group of people. I love my job. And welcome. I hope we have a good meeting.

CHAIRPERSON STONE: Thank you. And Michelle does way more than that. She keeps us with so much on our behalf so that we can concentrate on the issue at hand and the mechanics. We depend on her so very much, not just logistics of the meetings but the documents and the work plan, et cetera. So, Michelle, I want to give a real shout out to you and appreciate so much all the work that you do.

I know there are several former Board members in the audience. If you would raise your hand and stand so others may see you. I just want to appreciate all that you've done to make our job what it is. We want to honor the work that you've done getting us to this point. So thank you all for being here, and I'm sure each of us will lean on you at some point in the next few days

for advice.

At this time, I've asked Jean if she would say a note, say a word, kind of set the tone for this spring meeting. Jean?

MEMBER RICHARDSON: Mike asked me to find some sort of quotation that would set the tone for the meeting, as he said. So I found a short "Prayer for Spring" by Robert Frost, who was a farmer and a poet laureate in Vermont. "Oh, give us pleasure in the flowers today and give us not to think so far away as the uncertain harvest. Keep us here all simply in the springing of the year. Give us pleasure in the orchard white, like nothing else by day, like ghosts by night. And make us happy in the happy bees, the swarm dilating round the perfect trees. And make us happy in the darting bird that suddenly above the bees is heard, the meteor that thrusts in with needle bill and off a blossom in mid air stands still."

CHAIRPERSON STONE: Thank you,

Jean. That was very nice. So work through a little logistics here we wrestled with. We've gone to a three-day meeting. There's some budgetary considerations in that decision. We have an extremely tight schedule. Michelle worked with Executive Committee and individuals and changed it, hourly it seemed like, a couple of weeks ago.

So, again, we want to respect everyone's time. We want to have time for open and lively debate and discussion. So just be considerate when it's coming to the podium, et cetera, and the Board members are going to respect that, as well.

We did address some special requests because of people's travel schedules, etcetera. So, again, I want to thank Michelle and the Board members. Because we value your input, we did make those special considerations to give each of you all opportunity to address the Board.

We have the agenda before us. I

ask the Board members is there any amendments or adjustments to the agenda that you recommend? Seeing none, I'll take that as approval of the agenda.

So this is our opportunity -- working with this Board, we often disagree without being disagreeable. And I think it's really a valuable sort of approach that we have. We're very passionate about our views. So I just want to remind us, as a group, that we may not have full agreement in the voting process, but I would hope that we go away with 100-percent acceptance of the decisions that are made here and advance the industry in a united front. I think it can be very valuable.

As far as the public comment, in order to get Michelle, we had 150 and some odd people to sign up. We worked it through. So the Board made a decision that last meeting we went to a four-minute public presentation, and we had three minutes, I think, for questions.

This agenda is based on five minutes per person, but we left the presentation at four minutes because hearing you all is what's important.

So the Board is going to be sitting on their hands a little bit in the questioning. If you don't get a question, it's not that we didn't appreciate or want to follow-up with you. We're sort of managing the time so that everyone will have access.

We just wanted you to know the Board unanimously felt like the four-minute presentation to give you all more time than us to ask questions. So we're a little anxious about how that's going to work, so we're sort of, we'll work through that. We're willing to stay a little longer if we need to to work through all of the decision-making that we have before us.

If you weren't here in the fall, Michelle has found us the stoplight. So when you come to the podium, you have four minutes.

When you see the little yellow light, then it goes to red. I ask you to respect the red light so that you can see -- the yellow light will let you know that you better finish up out of respect to your fellow audience members to have their same four minutes.

In the vein of continuous improvement, which is the overarching aspect of the Organic Program -- yes, ma'am?

MS. ARSENAULT: I just want to say one thing about when the red light goes off there's also a very loud obnoxious beep, so you'll know.

CHAIRPERSON STONE: And Michelle is sitting right next to you, by the way. In the vein of continuous improvement, this agenda, this Board is drilling down further for those Board members that came before us and made some very tough decisions. Now we're in a position at this stage of maturity, we're in our 11th year, I guess, Miles, as a program, that we're drilling down a little

deeper. So how we go about further refining the process and the products that we produce, just glad to have the opportunity in how we do that with the times and restraints that hinder us all in doing what we exactly would like to do.

There's been some public comment and constant debate among the Board members, if you will, on this declaration of interest. Each of us, as we went around, we declared what group we represent. So there's an inherent interest that we have. There's not an inherent conflict of interest. There's an inherent interest that we bring to our position at the Board.

So the Board discusses this when we develop our work plan, which we will post on Thursday, be further refined in committee a little bit. But we want you to know very transparently this is what our work plan is. Each subcommittee works with the subcommittee chair, works with Executive Committee if they

declare a certain interest or potential conflict. So we, as a board, discuss this and come to an agreement of where an individual Board member stands on a given material or a given discussion.

We also have, because we're a FACA board under the USDA, have strict administrative policy that we work under. And the program sort of has oversight to that and can help guide us if there's some debate in our decision-making as a board. I just wanted you to know that the Board makes its own decision and the program has our back, so to speak.

Miles will talk in a few minutes about a Sound and Sensible. Again, as the program matures into its 11th year, we are looking at ways to be welcoming and inviting and make sure we gain as many new operations, handling and farming operations. So I think you'll be excited about some of the work that not just the folks at the table but Miles has

a staff of about 30 people in D.C. and around the country that just work equally as hard as Michelle does in their respective areas and, again, making this a more inviting program for all of us because of their hard work.

At this time, I'll ask Calvin, as Secretary, we need to approve or accept the minutes of the previous two meetings.

MEMBER WALKER: Thank you, Mac. First, we'll do a little housecleaning and we will ask the Board to approve the May of 2012 transcript of our biannual meeting in New Mexico, as well as the voting record. And I believe we'll do this by voice vote, as opposed to an individual vote, if that's okay with everyone.

CHAIRPERSON STONE: So you all received those transcripts. Is there any clarifications? Okay. All in favor, say aye.

(Chorus of ayes.)

MEMBER WALKER: The next one will be the October 2012 Providence, Rhode Island

transcript and voting record.

CHAIRPERSON STONE: Any clarifications, questions? All in favor, say aye.

(Chorus of ayes.)

CHAIRPERSON STONE: Very good. Thank you. Good. Thank you, Calvin. So, last, I just want to make sure, some of you may not be able to stay until Thursday but to let everyone know that I'll be fortunate to be hosting this meeting in the land of the last two national championship basketball teams in Louisville in the fall. So welcome you to, invite you to Louisville in October. It's a beautiful time to be there, so we look forward to hosting the meeting in Louisville in October.

With that, I'll turn it over to Miles. Thank you, Miles.

MR. MCEVOY: All right. Just getting set up here. Okay. We're going to start with a celebration of Portland here,

just to get everybody in the right mood. We have a little clip from the Portlandia series here. It's both a celebration of Portlandia and the very difficult decisions that you have to do here at the NOSB. So let's let it roll here.

(Whereupon, the following video was presented.)

FEMALE SPEAKER 1: Thank you for buying me that bag the other day.

MALE SPEAKER: Come on. It's more for me than you.

FEMALE SPEAKER 1: God, you have beautiful eyes.

MALE SPEAKER: Everyone tells me that.

FEMALE SPEAKER 1: I'm the only one that told you that.

MALE SPEAKER: No, I don't mean, like, in a flirting way. But people, when I was kid, like, you've got great eyes, and it's like I'm just a guy.

FEMALE SPEAKER 1: You're my guy.

MALE SPEAKER: I am your guy.

FEMALE SPEAKER 2: Hey, guys.

FEMALE SPEAKER 1: Hello.

MALE SPEAKER: Hi, hello.

FEMALE SPEAKER 2: My name is Dana. I'll be taking care of you today. If you have any questions about the menu, please let me know.

FEMALE SPEAKER 1: I guess I do have a question about the chicken. If you could just tell us a little bit more about it.

FEMALE SPEAKER 2: The chicken is a heritage breed, woodland-raised chicken that's been fed a diet of sheep's milk, soy, and hazelnuts.

MALE SPEAKER: This is local?

FEMALE SPEAKER 2: Yes, absolutely.

MALE SPEAKER: I'm going to ask you just one more time: and it's local?

FEMALE SPEAKER 2: It is.

FEMALE SPEAKER 1: Is that USDA organic or Oregon organic or Portland organic?

FEMALE SPEAKER 2: It's just all across the board organic.

MALE SPEAKER: Hazelnuts? Those are local?

FEMALE SPEAKER 1: How big is the area where the chickens are able to roam free?

MALE SPEAKER: I'm sorry to interrupt. I have exactly the same question.

FEMALE SPEAKER 2: Four acres. Give me just a second. I'll be right back, okay?

FEMALE SPEAKER 2: Okay.

FEMALE SPEAKER 1: We're doing the right thing.

MALE SPEAKER: I'm too apologetic.

FEMALE SPEAKER 1: You are.

MALE SPEAKER: I drove way too slow here today, didn't I?

FEMALE SPEAKER 1: No.

MALE SPEAKER: I am so weird at

the gas pedal. The thing that just moves the whole vehicle forward and I --

FEMALE SPEAKER 2: All right. So here is the chicken you'll be enjoying tonight.

MALE SPEAKER: This is fantastic.

FEMALE SPEAKER 2: Absolutely. His name was Collin. Here are his papers, okay?

MALE SPEAKER: This is great. He looks like a happy little guy who runs around. A lot of friends, other chickens as friends, putting his little wing around another one, kind of, like, palling around?

FEMALE SPEAKER 2: I don't know that I can speak to that level of intimate knowledge about him. They do a lot to make sure that their chickens are very happy.

FEMALE SPEAKER 1: When you say "they," I mean, who are these people raising Collin?

FEMALE SPEAKER 2: It's a farm

that's located about 30 miles south of Portland.

MALE SPEAKER: And, and, and, and, and, and you feel like you have a good relationship with this farm?

FEMALE SPEAKER 2: We do.

MALE SPEAKER: But it's not some guy on a yacht who lives in Miami and --

FEMALE SPEAKER 2: Oh, goodness, no.

MALE SPEAKER: - who's just saying that he's organic?

FEMALE SPEAKER 1: It just tears at the core of my being the idea of someone just cashing in on a trend, like organic.

FEMALE SPEAKER 2: No. I know the type. No.

MALE SPEAKER: I'll tell you what. We're going to go check it out, if you don't mind, just if you could just hold our seats. Yes, we'll be right back. We just want to make sure.

FEMALE SPEAKER 1: Thank you so much Dana.

FEMALE SPEAKER 2: Sure, sure.

(Whereupon, the video presentation was ended.)

MR. MCEVOY: Okay. Welcome to Portland. Okay. So as usual, there's a lot to talk about, and the theme of this is Sound and Sensible, but I'm going to give an update on a number of things going on at the USDA National Organic Program in response to some of the things that we've been doing to implement the National Organic Standards Board recommendations.

First of all, I'd like to start with why organic, why are we all here? There's lots of important reasons to support organic agriculture: environmentally-sound farming systems, biodiversity, less toxic inputs. I was in the orchards yesterday and remembering when I was young and would pick fruit in the fall in the orchards. At that

point, with a young family, there were, I think, two organic orchards in Washington state. And so, of course, we weren't working on the organic ones. We were working on the conventional ones, and they would spray things. And at that young age, I didn't know what the hell they were spraying, but it certainly made me very uncomfortable, having two young children in the orchard. And the growth in organic agriculture has just been great to reduce the amount of toxic pesticides that have been used on so many acres around the country, especially in apple production. So it's really a testament to the good work of the organic agriculture community.

Animal welfare, another really important concept in organics that's part of the standards. And then the economic development opportunities, the rural development. There's 500,000 jobs in organic agriculture in the U.S. and more and more every year, lots of opportunity for young and

beginning farmers to get into organic agriculture.

Next, why is certification important? So this is the keystone of the whole process, to make sure that those organic claims are verified. Certification allows the use of the USDA organic seal in that organic claim. It empowers those consumers to choose between production methods. So by identifying organic, they can, by the label, they can choose the production methods that they support. It's also a gateway to various USDA services in terms of crop insurance and EQIP funding. It verifies that products meet national organic standards; protects consumers to make sure that when they buy organic they are getting organically-produced and processed products, no matter if it's grown locally or coming in from overseas; and it establishes a level playing field for farmers, processors, and marketers so that they have a fair competition.

So there's been ten years, a little over ten years of USDA Organic Program. We currently have 85 accredited certifying agents, 25,000 certified operations across 133 countries, so it's a global program, lots of farmers involved, not just in the U.S. but across the globe, to supply products in the organic arena. It's a lot of work for the certifiers and the accreditation agencies and everyone to oversee since it has that global scope. Thirty-one billion dollars in U.S. organic sales in 2011, and tens of thousands of inspections, reviews, and certification decisions that are made every year, so lots of judgments, lots of determinations are made by certifying agents on the farms, on the processors, on the whole process.

Just a little bit about the NOP budget. For fiscal year 2013, we have a 5.1 percent reduction from fiscal year '12. So everybody in D.C. and the federal government is undergoing some very difficult budget

times, so that is difficult for us, as well. We have about one NOP staff person to oversee about $1 billion in sales, so it's a pretty good return on investment. But it's a lot to do with a very small staff.

With the non-passage of the farm bill, there's no national organic certification cost share program for this year. That's kind of a bummer. We have strained resources. And what our question is at the National Organic Program is how do we maintain and support a sustainable program and staff? In the whole spirit of organic agriculture, we also have to take care of the people that are involved in doing the work. And I have an amazing staff that make me look good that do a lot of work on behalf of organic agriculture, but they have an incredible workload. They work very long hours and you've really got to be careful to take care of them, to retain them, and stay away from burnout and have realistic

expectations of what we can accomplish.

All right. On to National Organic Standards Boards, some feedback or progress reports on implementation of our recommendations and some other matters. First of all, on nanotechnology, in October 2010, the NOSB recommended, made a recommendation on engineered nano materials. We responded to the NOSB that we understand that the NOSB considers that nano materials to be synthetic and that they're prohibited under the organic regulations. In December 2010, we responded to the recommendation and said that it would be difficult to identify and verify the absence of nano materials in organic products and that NOP needed more information about how nano materials are defined, regulated, and used in agricultural products.

So we have been involved in a number of efforts to respond to the recommendations. Some of the things that we've done based on this recommendation, in

April of 2011 we began participating in the White House Emerging Technologies Interagency Policy Coordination Committee. That's quite an acronym there, ETIPC. That reviews policies and provides to other agencies, like FDA and EPA, on nanotechnology issues as they relate to organic regulations.

In November, we briefed these representatives that serve on the ETIPC on the NOSB recommendation on nano materials, and we requested information from them, including any definitions that are currently being used that we could synthesize to inform the Board on the activities on nano materials and nanotechnology at the federal level. We're currently synthesizing that information and will be providing an overview, a summary of that, to the Board later this year.

Conflict of interest that Mac mentioned. Just recently, on March 29th, we sent a memo to the Board on conflict of interest guidelines memo. It addresses how to

recognize and report conflicts of interest. It reaffirms that NOSB members are representatives, that they're appointed to speak for the interest of a particular group. So that's the whole way that the Board has been set up is to have representatives that have interests. You're supposed to have interests, and you're supposed to representative those interests as you work on the Board.

The memo provides guidelines and examples of standards of conduct and procedures for assessing and declaring conflicts. In terms of standards of conflict, it outlines some of the various expectations that the Board members don't accept improper gifts, that you don't use your Board appointments for private gain, that you use government property and time properly, that you don't engage in partisan political activities while you're engaged in Board activities.

In terms of acceptable interests versus conflicts of interest, you have interests, there are acceptable interests. An interest of a Board member that's acceptable is one that is done on behalf of a represented group and the member receives no disproportionate benefit. That's the real key here is this concept of disproportionate benefit.

A conflict of interest is where a member of the Board would have an interest that directly and disproportionately benefits the member, could impair the objectivity in representing the group's interests, or could create an unfair competitive advantage. So the memo goes into some detail on that.

The procedure on conflict of interest is NOSB members identify interests on the various proposals that they're working on. Those interests that directly and disproportionately benefit a member lead to recusal from voting on that proposal at the

meeting. The recusals will be announced at the meeting at each subcommittee session, so this will be covered during the course of the meeting at the beginning of each subcommittee session.

And in terms of just an overview of the interests that have been represented to the program, there's no expectation for any recusals on the current proposals that are in front of the Board for this meeting. They have interests but no disproportionate interests, and they are expected to represent their interest groups.

The Board also has a public communications proposal that would establish a year-round public communication tool so the public can submit comments to the NOSB and the NOP at any time of the year. The NOP supports this proposal as a tool for encouraging openness and transparency. If the proposal passes, we will identify an appropriate tool and develop an implementation plan to launch

it. And would plan and launch that public communications mechanism closely. We will coordinate closely with the Board if you pass that proposal.

Moving on to aquaculture. We have a team that's working on developing a proposed rule on aquaculture. It's under development. They are currently working on the explanatory text, how we are addressing the NOSB recommendation, the intent of the regulation, how it will be implemented and enforced, and it's a complicated process. So it's still going to take a while before we have a proposed rule that's published. First, we have to finish the work, and then it has to go through clearance. And because of the many agencies that are involved in aquaculture, the interagency clearance could take some time. We are hoping to have a proposed aquaculture rule out by the end of the year, but you know how things go. Sometimes it takes longer than we think.

There's been a lot of new guidance and policies that have come out over the last six months. We have a new guidance on the use of kelp in organic livestock feed. Kelp is on 205.606. It's identified as an agricultural ingredient that must be organic, unless it's not available in organic form. And so the new guidance says that kelp in livestock feed must be certified organic after March 4th, 2014.

We have new guidance on seeds, annual seedlings and planting stock in organic crop production. This is partially implementing NOSB recommendations on organic seeds and commercial availability of organic seeds. It describes equivalent variety and commercial availability requirements, and it outlines substances and types of treatments that are allowed and what needs to be verified by the certifying agent.

We also have new guidance on evaluating allowed ingredients in sources of vitamins and minerals in livestock feed. It

clarifies the permitted ingredients in livestock feed, addresses how to review feed supplements and additives for compliance.

We have a new policy memo on cell fusion techniques that are used in seed production. It clarifies which techniques used in seed fusion are considered an excluded method and prohibited, and that policy memo is consistent with the view of cell fusion in organic agriculture that Canada, the European commission, and Codex have, as well.

We have just recently published draft guidance for comment, so this is open for public comment, both on classification materials and materials for organic crop production. These are, especially the classification materials, is an NOSB series of recommendations that we're now putting into guidance. That's in three parts. There's the draft guidance on classification of materials itself and then two decision trees, one synthetic/non-synthetic and one

agricultural/non-agricultural decision tree. So we look forward to all the public's comments on the classification of materials.

We also have draft guidance published on materials for organic crop production, which has an overview of materials for organic crop production that are allowed and then prohibited materials. This is, basically, analogous to the OMRI generic materials list, and we'll be working on additional materials for organic livestock production in the future.

Comments are due by June 3rd. And this particular draft guidance is addressed for NOSB recommendations on classification.

We also have new instructions on responding to results from pesticide residue testing. In January, we provided initial overview of this at the annual certifier training, and we published this new instruction on March 4th. The goal is to ensure certifiers interpret and respond to

pesticide residue testing results in a consistent manner and facilitate compliance with the new residue testing rule that was effective on January 1st.

We also have a report that was just issued on biotech test methods. Last year, the OIG recommended that NOP conduct a study of testing methods that may be used to detect the presence of genetically-modified materials in organic livestock feed. So this report summarizes the current guidance that is available to certifiers and producers regarding the sampling and testing for GM material. It describes testing methods that are currently used to test organic livestock feed products for the presence of GM, and it discusses sampling methods that can be used to back up that testing technology. So this is a very good resource for certifiers to use if they're doing GM testing as part of their residue testing program.

We also have a new report on a

modernized organic database. We currently post a searchable list of certified organic operations once a year. A more modernized system is needed to provide up-to-date information about certified organic operations across the supply chain. This would help for a lot of different reasons, for better access to information, better marketing information, but also for compliance and enforcement to understand who's doing what.

The needs assessment and business requirements analysis report describes the primary needs that would guide the technology design and development efforts for a modernized certified organic operations database. So it really outlines the specifics of what we need in this modernized database. It's a great report. The only problem is that we can't move on this particular project unless we get funding for doing this work. It would cost money that we do not have. But there's great information there.

Just wanted to briefly go over our request for the NOSB to review other ingredients. We requested that the NOSB clarify what other ingredients are allowed in non-agricultural substances that are listed under 205.605.

The NOSB, in our memo to the Board, the NOSB needs to develop a comprehensive recommendation on other ingredients in 205.605 substances. This is what we requested the Board to do in November 2011.

In the meantime, the NOSB should include references to other ingredients in the background on their recommendations. Any recommended restrictions should be part of the recommended annotation.

And then clarification from the NOSB regarding the allowance or restriction of other ingredients will provide consistency to the organic trade, consumers, and certifiers, as the NOP codifies these recommendations into

regulations. So we really appreciate the work that's done on other ingredients and look forward to the discussions on that particular topic, as we work towards clarifying what other ingredients, ancillary substances, are allowed in processed organic food products under 605 and 606.

We are going to formalize a memo to the Board on the National List petition guidelines and procedures. The current petition process was finalized in 2007. It was a Federal Register notice. And then there's also the petition process that's in the National Organics Standards Board Policy and Procedures Manual.

What we're requesting the Board to do is to look at the annotation changes and removals and to revise that to ensure that there's sufficient information is provided, that the petition process in the Policies and Procedures Manual is updated to reflect current practices, because it's not currently

aligned with current practices. We're requesting that the petition process should be revised so that confidential business information is not accepted as part of the petition and that the petition process should be updated to ensure timely technical report requests and approval of those technical reports.

So we've sent this information to the Board. We'll be following it up with an official memo that will go on to the correspondence page on the NOP website in the near future.

Just a little update on the Organic Literacy Initiative, which was launched in September of 2012. This was the initiative to connect organic producers and handlers with USDA programs. There's a lot of USDA programs that support organic agriculture. The NOP is just one of many. We have an organic 101 and 201 training module to explain the basics of organics. And as of

March 2013, over 10,000 USDA employees have completed the training. So this is a really great outreach tool that we've implemented, really trying to get field offices around the country to better understand organic agriculture so that they can support the continued success and growth of organic agriculture.

Okay. So a lot of things, we've gotten a lot of things done, and we have a few more things that we have to do. So in terms of focus areas for the somewhat near future, National List rulemaking. We have Sunset 2013. We'll have a proposed and final rule out very shortly. We have a sodium nitrate proposed rule that will be out this year. That's past due, as you all know. The sodium nitrate sunsetted or expired in October of last year, and so we're behind on that particular rulemaking docket. We have a new listings proposed rule that will be coming out shortly.

In terms of practice standards, we're working on origin of livestock, pet food, aquaculture, and apiculture. And Melissa assures me that all four of these will be out later this year. No, but we've actually made a lot of progress on all four of these practices standards, and there's a good chance that they could be out later this year. Yes. And she says, "I think so." At least some of them is what she said. Okay.

Other focus areas: guidance documents; grower groups; inspector qualifications; handling unpackaged organic products which is an NOSB recommendation that we're working on implementing; biodiversity; and materials for organic livestock production. Other focus areas are continuing to verify international trade partnerships; increasing international market access, in particular we're looking at an equivalency arrangement with Japan; and reducing the certification burden on diversified direct

marketing operations, which I'm going to talk about with the Sound and Sensible part.

So let's just move right into Sound and Sensible: How to Maintain Organic Integrity in a Sound and Sensible manner. So we've been working on this now since, really I think the real starting point was when Bonnie from MOSA was the last speaker at the Providence NOSB meeting, and she's retiring from certification work, going back to being an organic farmer, and just is overwhelmed by the paperwork that she has to fill out to maintain her certification. So it was a very compelling argument that maybe we need to re-look at this whole certification process to make sure that we're focusing on the right parts, verifying organic production but doing it in a way that's not overly burdensome to operators.

So the current landscape. We have ten years of implementation of the National Organic Program. We've really created a very

complex regulatory scheme. It's a very strict process-based oversight from farm to market. Lots of different elements are components and can make it very complicated and burdensome to operators to comply with.

Some of the issues. An inconsistent certification process. We noted this during our accreditation audits. That's gotten better over the last few years, but there's still not complete consistency between certifiers. Maybe some of that is good. There's a focus on record keeping and a corresponding burden. The expense of certification. That's not just the direct expenses of the fees, but it's also the time involved in maintaining the records and being inspected. And we also know that there are many farms that comply with the organic standards, but they avoid certification for various reasons. They don't need it for their marketing purposes. They try to do work-arounds. But there are many farms that comply

with the basic requirements but avoid getting certified.

So what we're trying to do is move it to a more sound and sensible process. So we have this little chart here where we're trying to stay out of the red. We kind of describe our current state as the blue in the upper left where we have a good process, but it's a bit burdensome and paperwork-intensive. It addresses all the factors involved in organic integrity, but it really needs some streamlining. But what we want to do is avoid going into the red. We don't want to streamline the process and lose integrity, so we're looking to move to the right, to the green, an efficient certification process that focuses on the key elements to preserve organic integrity. Okay. It sounds good.

So the goal is to make organic certification affordable, accessible, and attainable for all operations. What we mean by affordable is reasonable fees for all sizes

of operations and reasonable compliance costs because it's not the direct costs, it's the other costs, as well. Accessible to certifiers and technical assistants so that those things are available locally. In some areas of the country, there's great resources available. In other parts of the country, not so much. And then attainable so that operators can understand what the standards are. If they understand it, they're more likely to be able to comply. Using plain language with reasonable record-keeping requirements.

So we have some current initiatives that we have been working with. We have a business process survey working with Vela Environmental, that they're looking at some of the key certification barriers for small businesses and identifying ways to reduce the paperwork burden. The NOSB is working on this with their Continuous Improvement Initiative, how to certify the

process rather than the paperwork. There's been good discussion from the certifiers group. And then we've got many different ideas from certifying agents to help us work towards a more sound and sensible process.

We've come up with sound and sensible principles. We'd like the Board to take a look at these sound and sensible principles and look to see is this a way that we should move forward on certification and the whole organic certification process.

So those principles include five things: efficient processes, eliminating the bureaucratic processes that do not contribute to organic integrity. We want to keep those processes that do lead to organic integrity but eliminate those bureaocratic processes that do not contribute to integrity. Streamlining the record-keeping to ensure that records support organic integrity and are not a barrier to farms and businesses to maintaining compliance. We don't want to make

it so complex that people can't comply. Having practical plans that support simple organic system plans that capture organic practices. Fair and focused enforcement. Focus our enforcement efforts on willful egregious violations and handle minor violations in a way that leads to compliance. Publicize how enforcement protects the organic market. And then integrity first, so maybe that should be number one, but focusing on factors that impact organic integrity the most, building consumer confidence that organic products meet defined standards from farm to market.

So those are the principles that we've been working with at the program level, and it really has changed the way that we make decisions on enforcement cases and in our accreditation process.

So one of the things that we've done so far is, on the penalty matrix, we got a lot of feedback from certifiers about the

penalty matrix. We took another look at the penalty matrix, and we saw that it was really record-keeping focused. We published it last September to provide guidance to certifiers on penalties for various types of violations. It was done in the spirit of progressive corrective action, but it does overly focus on paperwork.

So in the spirit of sound and sensible, we are reworking or revising the penalty matrix. And we have archived the penalty matrix, taken it off of the active list, and will update that penalty matrix in the future when we finish the revisions.

The second thing that we're doing is retraining our auditors. The auditors are the ones that go out and audit the certifying agents to determine that they're meeting the accreditation and certification criteria. We've noted that there's some variability in terms of how auditors have done the audits over the last few years. So we have a week

long training in early May for all NOP auditors, both the ones that work out of the grading and verification division and the ones that work directly for the National Organic Program.

Some of the topics that we'll be covering are organic system plans, updates, and notification; what is an adequate record; how can certifiers and inspectors provide technical assistance; five steps to certification; what are the requirements around organic certificates; and grower groups; as well as many other topics.

We're also working on some new and revised instructions. We have new instructions on technical assistance that was just published yesterday. We're working on a new instruction for organic system plans, organic system plan updates and notifications, and then also on performance evaluations and program reviews. And then revisions to the penalty matrix, five steps to certification,

organic certificates, and records. So lots of things going on in this realm of accreditation and certification and more resources for certifiers.

In terms of the technical assistance, in 205.501(a)(8), it requires certifiers to provide sufficient information to operations to enable them to comply with the regulations. So certifiers are compelled by the regulations to provide information to farmers, producers, and handlers about the regulations. They're supposed to answer questions, provide help, basically, to the operation so that they can comply.

On the other hand, 501(a)(11)(4) prohibits inspectors from consulting. So what we did in this technical assistance instruction is try to make that distinction. Yes, you have to provide information, you have to educate the operations, you have to answer questions. But you can't provide them with specific advice to overcome barriers to

certification.

So we clarify that in the technical instruction. We'll be deepening that understanding of that instruction with webinars in the future. The instruction does provide some examples.

So this tries to make the distinction that technical assistance is broad in general information, educational in form, and it's available to everyone, including the general public, whereas consulting is specific advice directed to an individual operation and not publically available. So technical assistance is allowed and encouraged. Consulting is not allowed by a certifier or an inspector.

We also are working on new instructions on organic system plans, organic system plan updates, and notification. We are distinguishing between organic system plan updates and notifications. So an organic system plan is something that an organic

operator, producer, and handler needs to have to get their certification started. On an annual basis, once a year, they need to update that plan to keep it current.

And then they're also required to notify the certifier for specific situations but only for specific information. In the case of pesticide drift, they have to immediately notify the certifier. For the application of a prohibited substance, they have to immediately notify the certifier. And then there's this other part that says any change that would affect compliance.

And so in this new instruction, what we will do is to go into more detail of what are those types of changes that would affect compliance that require immediate notification versus those things that don't require immediate notification that you just update at your next annual update and trying to reduce that burden on the certified operation. So only things that are really

important need to be notified.

Okay. So, overall, the key message is to certifiers or that certifying agents must ensure organic integrity while setting sensible limits on paperwork. They need to obtain enough information to verify compliance but to minimize the amount of documentation required for certification. So it's that balancing act of doing enough but not too much.

But they still, we still want to reemphasize that they have to do enough. I mean, one of the things that we find during accreditation audits is that some certifiers are not doing enough and they need to up their game a little bit. So it's not just that they have to reduce the record-keeping requirements. They have to meet that sound principle to start with.

So, in summary, sound and sensible, we say that certification should be sound, verifying and enforcing compliance, and

taking action on non-compliances. Certifiers must take action on non-compliances when there are things that need to be improved that are violations. Those things need to be addressed. But it also needs to be done in a sensible way, reasonable records that verify compliance and educating clients on what the requirements are.

And then also, in this whole concept of sound and sensible, we're recommending to the Board that NOSB recommendations should embrace this concept, that your recommendations should be sound, maintaining and upholding organic principles of biodiversity, continuous improvement, biological pest management, soil building, all those various principles of organic. But they also should be sensible, really reasonable for producers and handlers so that they can actually be successful in organic agriculture and the recommendations that you make are not overly burdensome on the organic operators.

No undue burdens on small businesses. That's something that we, as a program, always have to do in our rulemaking is make sure that we don't have any undue burdens on small businesses. So really think about that as you're working on your recommendations and that they're implementable -- I think that's a word, implementable -- and enforceable so that we can actually enforce the recommendations that you put forward.

Okay. So thank you very much, and any questions or comments?

CHAIRPERSON STONE: Any questions for Miles? Zea?

(Off mic comments.)

MR. MCEVOY: Yes, it's on our website. We can send you the link.

MEMBER SONNABEND: And what?

MR. MCEVOY: We can send you the link for that.

CHAIRPERSON STONE: All right. Any other questions for Miles? Thank you,

Miles. And on behalf of my brothers and sisters in the certification world, I think, often, people do not appreciate how diligent and how much effort individual staff people at the certification agencies do to verify the integrity of all of their clients. And this Sound and Sensible is a way for them to be more relaxed and helpful in maintaining that without, with maintaining the regulation but also in a way that is very user friendly and welcoming. So we appreciate all the work the Program has put into working through the accreditation of them and helping them become comfortable with a more sound and sensible process. So thank you very much.

Okay. We're going to jump right into the public comment period. Michelle, again, we have the -- I see the green light. She has to restart it, the timing. There will be the on-deck circle, which will be kind of over Michelle's right shoulder there.

So first up we have Mr. Will

Fantle, and Don Finley is on deck.

MR. FANTLE: All right. My name is Will Fantle. I'm the co-director of the Cornucopia Institute. I've got some sad news. We're now experiencing a net loss of organic farmers in this country in certain parts of this great nation of ours. The Rocky Mountain states, the Midwest, USDA numbers indicated a decline in organic farmers last year.

Ethical organic producers, generally family farmers, cannot compete with massive imports of dubious pedigree from China, India, and former Soviet Bloc countries. Ethical farmers can't compete with large-scale fraud and factory farms with upwards of 10,000 cows or a million laying hens. This is why consumers, in part, have switched to organics for, to try to avoid these types of things.

Cornucopia continues to be concerned with improprieties in the execution of the Organic Foods Production Act of 1990,

known as OFPA. For example, identities of authors in technical reviews are being kept secret, contrary to the rule in credible scientific publications. In a recent crop of TRs, still our staff was able to identify one scientist who authored the TR, and I wish I was making this up, and also wrote the petition for the corporation involved.

Pretending to enforce conflict of interest oversight while letting companies aggressively lobby to ed or retain materials on the National List and allowing employees of these very same corporations who sit on this board to vote in favor of the interest of their corporate employers is a betrayal of ethics in this industry. There's no shame in acknowledging a conflict of interest and recusing yourself to preserve the integrity of this process that we're all part of.

The NOP needs to go back to -- the next slide, please. The NOP needs to go back to letting the NOSB set its agenda. Here's

the law. This is what OFPA says. It's quite clear. The staff director, in other words Mr. McEvoy's position, is codified in law to be appointed by not the Secretary of Agriculture but by the NOSB itself. This should be followed. It's, perhaps, quite likely that Mr. McEvoy would still occupy the position he's in. He's capable and he understands the ins and outs of organics, but the NOSB should be his boss and they should be setting the agenda for this board.

Priorities for new materials that industry wants, like aquaculture, might no longer be Board priorities. Instead, the attention of this board might very well be focused on the review of inert ingredients or animal welfare standards for poultry and other livestock.

If this was the case, maybe major league accusations of fraud, investigations still languishing since 2010, would be handled on an expeditious basis because the staff

director would serve at the pleasure of the NOSB and the activities of the NOP would be directly accountable to this board.

Case in point. I want to draw your attention to a complaint that we have filed with a large egg-laying operation in California. Two years ago this was filed. It's still languishing. The poultry operation freely acknowledges that the birds have no access to the outdoors and look at how they're selling their eggs.

Two final points. The pre-meeting agenda of the NOSB needs to be public. Don't try to cut days out of the public agenda. And we want to commend, finally, the current NOSB for materially improved oversight of synthetic materials that took place at the last meeting. Thank you.

CHAIRPERSON STONE: Thank you, Will. Are there any questions for Will? All right. Thank you. We've received your written comments. They're very well done as

well. Thank you very much.

Don Finley is on and Cam Wilson on deck. Don? Is Don here? So Cam Wilson is up, I guess. Thank you much. Which puts Steve Walker on deck.

MR. WILSON: My name is Cam Wilson from the company Neudorff, and I'm here to talk about inerts. Dear NOSB, we ask for a clear schedule outlining when each inerts group will be reviewed so resources can be properly planned. Small companies like Neudorff work on set budgets each year, as do you. And without enough lead time, petitioning inerts becomes a serious financial burden to us. We are very concerned about these costs. We cannot afford the same cost, like large companies that have recently entered the organic pesticide market. When will this schedule be available?

We ask for a clear, simple to understand criteria as to how inerts will be evaluated, allowed, or disallowed. The

evaluation should be based on exposure to humans, animals, and the environment, and based on typical usage levels, not the pure substance. Do you agree?

If reformulating of our products is required, we need at least three to five years for the development and EPA approval process. We ask for the evaluation to be done by experts in chemical toxicology evaluation, as they have the most experience in this area and whose opinion is currently used by the EPA. Is this the plan?

Finally, we'd like the NOSB to consider that the evaluation of the inerts, the petition, and the attendance of meetings will be a financial burden to smaller companies like Neudorff and will ultimately put the destiny of organic farming in the hands of big ag. Is this fair for our company to carry the cost to petition and defend an inert when it can be used by any company for formulating purposes? Please consider

subsidizing an evaluation process. Without your support, U.S. organic farmers may be left with fewer ways to control pests, which will put them at an unfair advantage to imported organic food. Thank you. Any questions?

CHAIRPERSON STONE: Thank you, Cam. Any questions? Good. Zea?

MEMBER SONNABEND: Not a question as much as a comment, and you'll hear our presentation on this, I believe, on Thursday if you'll stay. You will not be required to petition for individual inerts. There will be a Federal Register Notice where you can turn in your inerts to the Department, if they're not already on the published list but it will not be the same requirements as a full petition.

MR. WILSON: Okay. Thanks very much, Zea. Anyone else? Okay.

CHAIRPERSON STONE: All right. Thank you, Cam.

MR. WILSON: Thank you very much.

CHAIRPERSON STONE: Steve Walker and Lianna Hoodes on deck.

MR. WALKER: Good morning. I'm Steve Walker. I'm here representing MOSA. We're an accredited certifier of about 1,500 operations, primarily in the upper Midwest. We've submitted written comments addressing nine meeting agenda items. I'm going to try to give summaries on our thoughts on all of those here, and then I'd like to tie them together with a word.

First, the Materials Subcommittee items. MOSA supports the limited scope technical reviews proposal as a sound, sensible, and efficient approach to review work. Checking threshold issues for deal breakers is a wise use of resources.

We also suggest that criteria be considered for similar limited scope reviews for petitions for National List Sections 605 and 606. That might involve citing other parts of OFPA, Sections 6517.

Regarding confidential business information in petitions, MOSA supports recommendation number two that CBI be allowed but with clear stakeholder responsibilities. Also, when the NOSB reviews CBI, any resulting recommendation must be transparent enough so certifiers know how to rule on our subsequent brand name product reviews.

We also suggest that any confidentiality agreements have clear parameters and an organized maintenance system to avoid liabilities. And we believe clarification is needed for defining production aids as used in OFPA 6517. Such clarification should give examples of what's covered and what's not covered by the production aids term.

In the GMO Ad Hoc Subcommittee discussion documents on GMOs and seed purity and on excluded methods terminology, we find logistical barriers to certifiers' ability to verify non-GMO status. These include a

rapidly-changing technological landscape, lack of disclosure regarding methods used, the expertise required to distinguish between excluded methods types and inability to gather information from back in supply chains. It's not currently clear whether it's possible to establish a method for ensuring genetic purity. We think current NOSB research priorities should consider adding exploration of seed GM issues.

In the Vaccine Working Group's interim report, we see similar challenges with changing technology, lack of disclosure, and verifying supply chains. Any expectation of verifying vaccines made with excluded methods will need a clear and practical framework of how to determine compliance. Also, even with a stricter rule regarding GM vaccine use, exceptions may be needed for critical vaccines that are only available from GM sources.

We don't usually comment on position materials, but we did comment on

oxytetracycline. We recommend consideration of grower input and extending the date beyond 2016 to allow enough time for the development of equivalent fire blight control alternatives. Most producers agree that this material is against the spirit of organics, and we find its use is rare but still critical in maintaining the economic viability of the U.S. organic tree fruit market.

MOSA supports the Handling Subcommittee proposal on other ingredients. We find this to be clear, enforceable, sound, and sensible. Our comments echo those put forth by the Accredited Certifiers Association. The proposal's definition of other ingredients is helpful in framing the discussion. Any NOP instruction or guidance should include a similar clear definition.

And, last, we also support the CACS proposal on calculating percentages. It brings clarity to our work and gets into some finer details than have been presented in NOP

training materials.

Lots of comments here, but I think there's a bow that ties them altogether. The word is balance. It's our perennial challenge. We must balance consumer expectation of a strong standard with practical, sensible, and achievable verification that keeps organic operators in mind.

CHAIRPERSON STONE: Very good timing. Appreciate everyone's respect to that. Questions for Steve, a certifier? All right. Thank you very much. I'm sure people will discuss it with you as we move through the week. Thanks, Steve. Lianna Hoodes and Tatiani Molini is on deck.

MS. HOODES: Good morning. I'm Lianna Hoodes with the National Organic Coalition. NOC is a national alliance of organizations working to assure that organic integrity is maintained, consumers' confidence is preserved, and that policies are fair,

equitable, and encourage diversity of participation and access.

Our coalition brings together differing interests that all have a stake in the future of organic: the farmer growing the food in the regulated system, the consumer buying organic because it represents specific values that they want to purchase, the businesses that get those agricultural products to the marketplace, and environmentalists who see organic as the alternative, providing a clean and healthy environment.

That push to meet consumer expectations can be both a gift and a curse. Success of this label in the marketplace has helped to bring major gains in moving our food system towards health and sustainability, yet it can be an issue when the expectation of purity and natural meets the reality and practice of farming and the fact that a wholistic systems approach is about process,

not about the final product.

But we can lay claim to the food system that is constantly working to get health, environment, and sustainability better. It's often your job, as the NOSB, to bridge that divide and bring transparency to the face of the label, hashing out those differences in the larger community, as well as you hold the torch high to the public, both to the organic consumers and those who aren't buying organic. They know what organic is from your statements.

So on your agenda, keep up the momentum on reviewing inerts. Removing toxic inerts from organic is exactly why we're about continuous improvement.

Tetracycline. NOC remains neutral on the issue of an extension of use, but we have very strong concerns about the discussion in the subcommittee recommendation because it minimizes the concerns about antibiotic use in organic and misses the point that no

antibiotic use must be a central tenet of organic production. This has, obviously, struck a nerve throughout the community. There appears to be polarized positions: farmer versus consumer pitched battle.

We don't believe there's that much disagreement. Some of the problems from the marketing of organic products that have been fairly specific in their claims that "organic standards prohibit the use of pesticides, antibiotics, and hormones." That's from a label. Consumers have been shocked and disappointed to hear that antibiotics were in their organic. And truth be told, other materials which were supposed to sunset have just not been coming off the National List. So consumers want and need assurances that antibiotics are absolutely coming off.

The farmers have an agricultural problem. Until recently, there have been no inputs, other than antibiotics, to combat fire blight in apples and pears. The new tools are

just a couple of years away from being usable in all field conditions.

The message in the majority recommendation implies that, while antibiotics will eventually be out, the amounts used in organic aren't really that bad. Unfortunately, in the larger science of antibiotics in our food supply and environment, quantity and residues are not the issue. Any use of antibiotics creates some resistance and end use is incompatible with organic. The NOSB recommendation needs to clearly lead the way with that message, lay out an absolute expiration and lay out specific oversight steps in a directed annotation. Also, from the top, from NOP down, how does that oversight work?

I'm going to skip to other ingredients. NOSB already has a policy for all ingredients. They must be organic or they must be on the National List, and they must be reviewed using OFPA criteria.

Thank you very much for all of your work, and we hope our comments have helped you.

CHAIRPERSON STONE: Thank you, Lianna. Appreciate that. Jay?

MEMBER FELDMAN: Hey, Lianna. Thank you for your comments. How do you respond to the argument that the program and the NOSB would be overwhelmed if it had to review all the other ingredients?

MS. HOODES: That's difficult. I watch you be overwhelmed. I mean, you have a lot on deck. But, first of all, it's the law. And, secondly, I take a little lesson from inerts. Is there a way, with inerts that look like they were huge numbers and it's been widdled down to what? A hundred twenty-five or so. So through some more investigation of other ingredients, are there ways to batch them together in their review and make it more manageable? I just don't see a legal way around not reviewing every ingredient.

CHAIRPERSON STONE: Thank you. Yes, we're trying to figure that out, so appreciate your input on that. Yes, Nick?

MEMBER MARAVELL: Lianna, what would -- let me give you the topic first. On the issue of tetracycline, you made a statement that you think that there should be some recognition of a hard and fast ending date. How do you see the NOSB expressing a hard and fast ending date?

MS. HOODES: There are two pieces of that. Specifically, on tetracycline, you need to have an expiration date, either 2014 or some other. It needs to be firm. Can you guarantee there aren't going to be antibiotics from whatever that point forward is? Can you guarantee that there isn't going to be another petition? No. What you can do is make a public statement that's very clear that takes us into the future, that says that antibiotics don't belong in organic because of the principles of health and environment. And

that's -- so in addition to your hard and fast end time, you're stating, for organic, for all time, that it just is not a part of organic. It's not a regulatory or a legal statement. It is a principle statement so that, when other boards are faced with a petition, they have really strong absolute guidance. They've heard it from the community and they've heard it from the Board.

CHAIRPERSON STONE: Great. Thank you for that. Okay. Tatiani here? Not seeing her. Deborah Gauthier? Gauthier? Deborah? No Deborah. If you get here, we'll work you back in. Genevieve Perry? Genevieve? No. Going once, going twice. Piotr Swider? Piotr? Going, two, three. Denna Miller? These are signed up under the citizen category. Good. We've got some time for questions, I see. James Garcia? And if there's some confusion, we'll work them back in somehow. James Garcia? No? More questions. Michelle Devlaeminck?

Michelle noticed that there was some confusion on some sign-ups that, in her email, she had some issues that we thought we had worked through but apparently not so much. Jeanine Marshall? And they signed up for very specific topics here.

Carmen Artigus? Let me get further down here. Kyla, Kyla Smith, you're up. So Michelle will work if these people show up. So if you think, if your sign-up time was later in the day, you can readjust your watch and get ready sooner, like 30 minutes sooner. Thanks, Kyla.

MS. SMITH: Okay. Good morning. My name is Kyla Smith. I'm the certification program director for Pennsylvania Certified Organic. PCO is an NOP-accredited non-profit certifying agency that certifies about 700 operations in the Mid-Atlantic region.

I'd like to comment on PCO's support of the Crops Subcommittee's recommendation to extend the expiration date

of tetracycline to October 21st, 2016 to ensure that enough research and education on alternatives is available to organic apple and pear producers. Most of the apple and pear producers we certify either use this material or have it on hand to use if models indicate a severe infection is probable.

Please consider the following points as you deliberate tetracycline. Research has been underway at the request of NOSB and NOP, but proven alternative practices are not yet available for producers in all geographic regions. The Board must consider that even after alternatives are demonstrated to be effective, it will take additional time for producers to be educated on the alternatives and for the alternatives to become commercially available.

Researchers and educators will not have time to complete these steps by a 2014 expiration date, as supported by the minority position, and will even be a challenge to

accomplish by 2016. A more realistic time line to end the use of antibiotics in organic apple and pear production would be 2017, which would allow current research projects and field testing to culminate and for this knowledge to disseminated to producers in order to be implemented in true on-farm situations.

The sunset process established in the Organic Foods Production Act seemed to be appropriate in 1990 and has continued to work for more than 20 years. When materials are taken out of this process, especially before there are commercially-viable alternatives for producers, it creates unnecessary burdens on stakeholders across the organic community.

PCO supports the resolution presented by the subcommittee that commits the organic community to phase out this material, provided that the step-down is in a gradual fashion and allows operators to transition their production practices to use alternative

methods to controlling fire blight. The use of tetracycline as a disease-control material is already controlled by the regulations. Certifiers are ensuring that antibiotics are only used when other methods in the organic system plans are ineffective. We will continue to uphold these regulations while encouraging more alternatives are tested by producers as they become available until the phase-out is fully implemented.

I would also like to provide some comments regarding the Handling Subcommittee's recommendation on other ingredients. PCO strongly supports this recommendation. We would like to reiterate the importance for including prohibitions and/or other restrictions on other ingredients in the annotation or have this included in guidance from the NOP, such as what's provided in the recent draft guidance published by the NOP regarding materials for organic crop production. This would allow consistency and

efficiency among certifiers, as we would be able to look to the regulations for guidance from the NOP, as opposed to digging through previous TRs and/or NOSB recommendations in order to find these other ingredients.

Additionally, we'd like to encourage the other ingredients be annotated categorically. This will also lead to consistency among certifiers and other material review organizations which will see the gamut of these other ingredients in reviewing brand name materials.

Lastly, we support the segregation of non-food substances onto their own list. These non-food substances do not make up any part of the composition of the organic food product and, in the case of several of these materials, do not ever come into contact with food. It would be logical to review these materials according to baseline criteria that are relevant to their use.

Thank you so much for all of your

time and hard work.

CHAIRPERSON STONE: Thank you, Kyla. Questions? Yes, Jay?

MEMBER FELDMAN: Thank you for your comments. Has PCO evaluated the potential adverse effects of using antibiotics in apple and pear production?

MS. SMITH: Meaning?

MEMBER FELDMAN: Well, your testimony is about the need. That's what I heard mostly. Have you guys looked at --

MS. SMITH: How many producers would leave?

MEMBER FELDMAN: Well, the adverse effects on public health possibly of the chemicals used.

MS. SMITH: We believe that there is, yes, certainly a public health issue in using antibiotics. We don't believe that it is aligned with organic principles. But we believe that, you know, you can't just, as Liz discussed at the NOC meeting yesterday,

somebody is trying to learn how to walk, rip the crutches right out of them before they have, you know, viable alternatives to help them.

MEMBER FELDMAN: Even given the history of the NOSB as it attempts to remove the material over the last decade?

MS. SMITH: Yes.

MEMBER FELDMAN: Thank you.

CHAIRPERSON STONE: Nick?

MEMBER MARAVELL: Kyla, the PCO, Pennsylvania Certified Organic, certifies a lot of operators in Pennsylvania and the surrounding areas. Do you have any information on, roughly, how many apple and pear growers you have? And then my second question is are you aware of what the current status is of research that would be appropriate to your region of the country with regard to control of fire blight in apple and pear production?

MS. SMITH: Sure. We certify only

15, so we have a small pony in the race. I don't know how much research has been done. I think most of it has been done in the West Coast. I do know that one grower that we certify is a research test plot at Penn State, but I'm not familiar with the research that they have, you know, done so far on their test plot.

CHAIRPERSON STONE: Great. Thank you, Kayla. Oh, Joe, thank you.

MEMBER DIXON: Of your 15 apple and pear growers, do you have a sense from that community, if we were to keep the 2014 deadline, what would their response be?

MS. SMITH: I'd say a third of them have indicated that they would go out automatically. Most have indicated that it would depend on the year and, if it was a bad year, then they would likely decide to go out of organic production because they would want to save their orchard. I have a quote from one of our growers, when asked if he would

continue with his organic production, and he said, "Yes, but I may eventually go out of business. Since I only plan to grow certified organic, my trees would probably die. When the correct weather conditions occurred during bloom, the disease would build in the orchard until, eventually, all the trees would be dead."

CHAIRPERSON STONE: Thank you, Kyla. You'll be here the rest of the week for comment?

MS. SMITH: Yes, sir.

CHAIRPERSON STONE: Thank you very much. Okay. Jake, you're up. And let me run through the list that have not signed in. So, Gwendolyn, you might get your notes ready. Is Ineska Antolos here? Virginia Clinton? These next few people didn't sign in that registered that they were here. Debra Sanders? Brian Baker? Very good, Brian. Nancy Parham? Okay. So, Brian, you're up and Gwendolyn after that. I mean, Brian, you're on deck and

Gwendolyn after that. Thank you. Jake, thank you.

MR. LEWIN: All right. Thank you. My name is Jake Lewin. I'm the chief certification officer for CCOF Certification Services. We certify more than 2,500 operations to the NOP standards. That's more than any other certifier in the world. We appreciate the efforts and dedication of the NOSB, particularly the CACS and the NOP, to both develop reasonable policies and also address unnecessary barriers to certification and paperwork issues.

We strongly encourage the NOSB to support the NOP's Sound and Sensible Initiative and to integrate its principles and approach in your work. Sound and Sensible can and does apply to NOSB recommendations. Please continually ask yourself if what you're proposing is affordable, accessible, and attainable.

Perfect examples of balancing

competing needs are both the CACS items on percentage calculations and other ingredients. These are great starts towards reasonable standards that protect organic label while not binding ourselves, certifiers and the Program or operations, in unattainable paperwork hurdles. The percentage calculation document is very reasonable.

The most onerous suggestions in the previous other ingredients proposal have been removed. This makes the approach reasonable and achievable at the regulatory practices and certification levels. By comparison, the approach in situation with tetracycline is the opposite.

To be clear, we support the elimination of antibiotics in organic production. We support the majority position to extend the expiration date not because it makes sense but because it's the best bad option.

A more reasonable deadline that

respects the length of time to actually farm apples and develop and register alternatives, particularly in California, is far more appropriate. Specifically, any material, such as Previsto, which achieves EPA registration, will have to go through a long registration process in California. We fear this time line does not support that.

At a more fundamental level, we ask the NOSB to respect the sunset process and review materials and appropriate time frames. Constant and irregular expiration dates are disruptive to us as a community and create ongoing conflict.

Further, artificial deadlines created without regard to the science or agronomic realities is creating mistrust in the community and apathy among the farm community. We need look no further than the eloquent comments submitted by Jim Koan of Almar Orchards. In it, he expresses the frustration with the Board and the process.

We believe that many, if not most, of our growers feel that the process is a political circus that is ignoring them and, therefore, they're not making their voices heard. That is not a recipe for engagement, much less continued organic certification.

As a certifier, we depend on strong standards, clear rules, and reasonable processes. The current approach is frequently not delivering this.

The NOP's 2013 Certified Entities List just came out and shows that organic operations in the U.S. grew by only about 25 operations. The list basically went from 17,000 to 17,025. This stagnation is a serious issue and a result we've never seen before. Implementing policies and processes that don't reverse this trend are a real problem, and we would ask you to consider this and to approach these situations in a different manner so that this trend can be reversed. Thank you.

CHAIRPERSON STONE: Thank you, Jay. Questions? John?

MEMBER FOSTER: So do you feel, back to the sound and sensible thing, do you feel like those kinds of impediments that sound and sensible practices are trying to address, do you feel like that is the main driver of slower numbers, 17,000 to 17,025, or what other factor, what other features are there that are driving that in your certification experience?

MR. LEWIN: In our experience, when economics are easy, many barriers can be overcome fairly easily. When economics are tight, when times are hard, additional barriers, additional barriers around cost, around paperwork, around process, around regulatory process become insurmountable far more easily. And from my perspective, a lot of the barriers that were tolerated before become intolerable as the economic situation becomes tougher for operations. Essentially,

things we've done in the past don't work as well when things are tighter.

CHAIRPERSON STONE: Nick?

MEMBER MARAVELL: Yes, Jake. I'm going to pose, essentially, the same question to you that I did to Kayla. What are, roughly, the numbers of apple and pear growers you have in your universe, which is an extensive universe? And if you could comment on where you see the status and the level of research support to provide alternative methods and materials to control fire flight.

MR. LEWIN: Well, with regard to the numbers, we certify 142 apple growers, 69 pear growers, 25 Asian pear growers, representing about 2,280 acres of pome fruit. So significant number of operations, primarily in western states.

With regards to the research, the victory here is that everybody, the community, there's some consensus about removal of these materials and, finally, the research is being

done. A tremendous amount of excellent research is being done and research dollars have finally come in. Unfortunately, the time lines for research and commercialization of viable alternatives which may even benefit conventional production simply don't operate on the time lines being proposed by this board.

MEMBER MARAVELL: And so what is your suggestion as an appropriate time line, if you can make such a suggestion?

MR. LEWIN: At least respect the normal sunset, normal sunset time lines. What I would rather occur is to look at the results of the research and the time lines for commercialization and the Board to make that decision.

CHAIRPERSON STONE: Calvin?

MEMBER WALKER: Jake, I believe you probably have already answered it, but you mentioned the best of a bad option. And my question was what would you consider a best of

a good option, but I think you probably just answered it with Nick.

MR. LEWIN: I would rather see a date that you, as a board, can defend based on the evidence, as opposed to a date that's based on some kind of compromise.

CHAIRPERSON STONE: Jean?

MEMBER RICHARDSON: Jake, as one of the consumer reps, I obviously have an enormous concern that, by allowing the tetracycline or antibiotic applications to go forward, that there will be residues of tetracycline in harvested fruit. So looking at the risks and the benefits of continuing the tetracycline, as opposed to eliminating it right away, based on your work with CCOF, help me to understand the risks and benefits of following the recommendation the way the majority is proposing it.

MR. LEWIN: I am not intimately familiar with the data on residues. It's my understanding that these materials are

generally applied during bloom, which, from my way of thinking, would not lead to residues typically. Similarly, certifiers have tremendous latitude to do testing and could do such testing if that was a concern. My concern, actually, would be more around the increased use of other materials and residues from other materials on apples as a result of these 2,200 acres going to conventional production.

MEMBER RICHARDSON: So let's just assume, if I may, Mr. Chair, so let's assume I'm going to choose between conventional production with all the inputs that go in there and the organic production which includes the antibiotic. Do you have sort of a sense of the risks and benefits to the consumer consuming the inputs from the conventional apples, as opposed to the limited inputs, including tetracycline, to the --

MR. LEWIN: As a consumer myself, I would rather purchase the organic apple and

I would rather live next door to the organic apple orchard, particularly considering that antibiotics are used in conventional control of fire blight. We're the ones that are going to solve this over time for the industry as a whole.

CHAIRPERSON STONE: And Harold to finish this out.

MEMBER AUSTIN: Jake, thanks. With the grower base that you guys work with and certify, the antibiotics that are used, the tetracycline specifically, for fire blight control, is this a prophylactic approach in use of application that they're just, carte blanche, using the material or what's the basis that the applications are being used on? I mean, is every acre getting it, or is this based off of the need and conditions?

MR. LEWIN: Well, firstly, I've been on very, very few operations that use materials willy nilly. Materials are always costly. They're always the last resort. No,

certain commodities are more susceptible. Certain areas are slightly more susceptible. Certain weather patterns create -- to say that we certify 2,200 acres of pome fruit is not to say that 2,200 acres will receive tetracycline applications. Some will during certain conditions at certain times. It's simply not a standard application measure.

CHAIRPERSON STONE: Okay. Thanks, Harold. Jake, thank you very much.

MR. LEWIN: All right. Thank you very much.

CHAIRPERSON STONE: And you'll be here a few days, I'm sure. Brian Baker is up, Gwendolyn on deck, and then Trudy Bialic after Gwendolyn.

MR. BAKER: All right. Thank you. I'd like to comment on three areas, wearing maybe three or four different hats. First, I would like to speak on behalf of the International Federation of Organic Agriculture Movements regarding the use of

excluded methods and seed purity. Second, I would like to discuss the use of antibiotics in organic production. And, third, I'd like to make a general comment on the materials review process.

IFOAM's mission is to lead and unit the organic world. I'm speaking as a standards committee member of IFOAM. IFOAM views genetic engineering and the related technologies as entirely incompatible with organic principles. In response to the February 6th discussion paper, we acknowledged some gray areas, but there is a global consensus emerging on these issues. And the organic community feels there's no place for genetic engineering in organic production and handling.

IFOAM proposes that the NOSB and NOP define genetic engineering in a way that's consistent with IFOAM, Codex Alimentarius, the European Union, other recognized international standards. So as we move forward, the USDA

organic means the same thing. We're all on the same page around the world.

The term "excluded methods" is considered confusing jargon outside of the United States. IFOAM respectfully requests the NOSB recommend that the USDA adopt the plain English term "generic engineering" to describe the technologies make it clear what is prohibited and that that definition should be consistent with Codex, IFOAM, and the EU.

What is decided in the U.S. has consequences throughout the world. Consistent with the principle of care, IFOAM has taken a precautionary approach as to the adoption of novel biotechnologies. IFOAM asks the NOSB and USDA do the same. To do otherwise risks the credibility of the USDA organic label, both domestically and in the global market. This holds true for the seed purity issue where sourcing uncontaminated seed in certain crops, particularly cotton, is a global issue.

On the tetracycline, this is

speaking as an individual really, I was the certifier representative when the petition was submitted back in 1995 and have a long history of this debate. Organic farmers throughout the world, including in the Pacific Northwest and British Columbia in the Northeast and Ontario and Quebec are producing apples and pears without the use of antibiotics in similar climates under similar conditions. The alternatives exist and are being used successfully outside the United States, so as long as the antibiotics are allowed manufacturers of alternatives are in a catch-22. They're not going to ramp up production and capacity to meet the market need unless they're sure the market is there.

So when I was on the NOSB an doing technical reviews in the 90s, the assumption was that the sunset process would be more robust and that, as organic continuously improved, substances would come off as easily as they went on. That's not proven to be the

case. So as the NOSB should be aware, once you put something on, it's real hard to get it off.

Accelerated sunsets have a dubious history, at best. You look at DL-Methionine. That has -- okay.

CHAIRPERSON STONE: Good. Thank you, Brian. Questions? Harold?

MEMBER AUSTIN: Brian, thanks. You mentioned that, outside of the U.S., there's other products that are currently being used and registered for use for fire blight control. Could you name what those are?

MR. BAKER: Well, there's one, Blossom Protect. It's aureobasidium pullulans. That's being used in Austria and Germany, other parts of the European Union, and showing results comparable to what's being achieved with antibiotics. That's one example, but it's really an integrated approach. There's no one silver bullet. It's

sanitation. It's selection of resistant varieties. It's long-term strategy. It's relying on a number of different techniques and not just relying on a single input.

CHAIRPERSON STONE: Nick?

MEMBER MARAVELL: Yes, Brian. I appreciate your comments. You said that there were apple and pear producers, East Coast, Canada, West Coast, Midwest, that were able to produce organic tree fruit without the use of antibiotics. And then you also have admitted that there are other producers who are, indeed, using the antibiotics in organic production. I'm just wondering if you have enough knowledge or, you know, personal observation to give us what you feel might be some of the characteristics of the farms, or the orchards, rather, that are not using the antibiotic. Do they have a different characteristic than the operations that are using the antibiotic?

MR. BAKER: Well, I mean, that's a

good question. And the ones that are not using antibiotics more often are outside of the U.S., so they've never had that option to rely upon. A lot of producers don't use antibiotics as a general rule. They could be -- I think it's somewhat scale dependent and that there appears to be more with larger-scale operations, less likely with small-scale operations, less likely with operations where apples and pears are not the main cash crop but it's part of a system where they're marketing more than tree fruit. Just casual observations. I don't have hard statistics to back that up.

CHAIRPERSON STONE: John?

MEMBER FOSTER: How are those other materials reviewed in the EU, and what's the relationship between the primary reviewer and certifiers who approve them as part of what's analogous, I assume, to an OSP?

MR. BAKER: Well, these are considered microorganisms or biological

controls. And on the European Union annex has microbiological products similar to, for example, bacillus thuringiensis or Beauveria bassiana. So they fall into that same category.

The certification agents and the competent authorities, you know, evaluate against the annex. Of course, the European Union does not follow the same standard for inert ingredients or formulated products that is followed by the USDA organic program. So there's -- yes, those generic products are permitted. The formulated products follow.

CHAIRPERSON STONE: Jay?

MEMBER FELDMAN: Brian, you talked about incentivizing transition by sort of suggesting that the Board sometimes has to make difficult decisions that seem onerous or potentially adversely affecting economic position of a particular grower group. Are there historical examples that might be similar to this one in which the Board,

because of public health reasons or because of consumer concern reasons, sort of gets out in front of where the industry would prefer to go, given its reliance on a particular material or process or practice?

MR. BAKER: Well, I mean, that's a good one. As I said before, once substances go on the National List, it's really difficult to take them off. And the precedents, more often, are the case where the NOSB has acted with caution and has not put things on the National List, forcing the producers to develop alternatives. And I think that's been true for, you know, you can go back and comb through, for example, with treated seed and the petitions to allow EBDC fungicides was rejected: thyram, ziram. Organic farmers came up with alternative treatments. The seed industry came up with alternative treatments. There were, of course, seed companies and certain commodities where seed was just difficult to find untreated and it was an

extra burden on those farmers. But, eventually, the untreated seed and seed treated with materials permitted by the USDA organic program came to the market.

CHAIRPERSON STONE: Nick, if you'll wrap this up.

MEMBER MARAVELL: Brian, I don't know if you'll be able to address this, but, in looking at the use of tetracycline, I'm just wondering, in other countries, are there back-up or emergency situations where an organic producer would be permitted to use an antibiotic, perhaps not being able to market the resulting fruit as organic but being able to maintain certification going forward into a future year? Is there any, have you seen any evidence of that type of provision in other countries?

MR. BAKER: Not really. I mean, the countries where the fire blight pressure is the heaviest, there really has not been that turning to antibiotics. When there is a

bad outbreak, it's more often they'll resort to other bactericides, other fungicides. And, again, the withdrawal from the market is always an option. It's used much less as an option. I think in Europe people tend to stay in the organic certification longer because it's much harder to move land in and out of organic production under European Union regulations, so they take a hit for a bad year and then they come back the next after pruning heavily and trying to get as much of the infection out as possible.

CHAIRPERSON STONE: Thank you very much. Gwendolyn, we're going to take a break after Gwendolyn. I wouldn't dare -- she's been pacing back there. I wouldn't take the break now. She's ready to go. So, Board members, we don't want to get spoiled here. We found a little time and, obviously, I want to run with the expertise at the podium. Gwendolyn?

MS. WYARD: Great. Hello. My

name is Gwendolyn Wyard, and I'm the regulatory director of organic standards and food safety for the Organic Trade Association, representing over 6,000 members across 48 states. My comments today will address oxytetracycline and other ingredients. You have our written comments on six other topics, as well as our two-page summary.

OTA agrees that antibiotics should be completely phased out of organic production, and we support all efforts to develop effective alternatives. There are two take-home messages we hope were effectively delivered in our written comments. The first is that the organic industry is acutely aware of the concerns surrounding the use of antibiotics, and I think we all agree for the need for an alternative.

The crux of the issue is to get from point A, which is now validated field results of new alternative materials, to point B, which is widespread availability and

adoption by organic growers. There's too much to lose if we can't adopt alternative practices while retaining organic acreage.

Researchers and orchardists have committed years of research into developing alternatives, and efforts have recently accelerated due to significant USDA funding. Excellent progress is being made, and the prospect that we're actually within a three- to five-year time frame of securing a non-antibiotic program is monumental.

This brings me to my second take-home message. The 2014 deadline falls short of critical research that will validate newly developed materials. And 2016 will likely cut short the time needed for grower education and experience. Many growers have not tried the new and emerging alternatives and are concerned about the risk of catastrophic disease in the absence of proven alternatives. When faced with a high-risk fire blight situation, growers will be forced to exit

organic production. If we truly want to end the use of antibiotics and retain organic acreage, growers must have alternatives and they must be confident that they will work. Otherwise, we'll effectively increase the use of antibiotics, along with the use of other pesticides, because of the loss of organic acreage.

OTA supports a hard deadline of 2017 because, unlike 2016, it's tied to a fact-based research-supported time frame. Of course, we'll support a 2016 deadline over a 2014 deadline. But as a matter of principle, we need to stop creating deadlines as a course of political compromise. They do nothing but set us up to fail.

The 2014 extension and now the petition for another extension are not the result of complacency. We were slow to start, but researchers are now working as fast as they can and they're turning out successful results. It would be a travesty to

prematurely pull the plug and set back such great progress.

I'll conclude by saying that we urge NOSB to give organic apple and pear growers the time needed to trial and to implement the new and emerging materials into their existing preventative control systems. We have to look closely at the implications and understand that we have an incredible opportunity. If we can succeed with the large-scale adoption of a non-antibiotic program in organic orchards, conventional orchards will also adopt these alternative techniques. We're seeing it happen already. From our viewpoint, this is the road to truly ending the use of antibiotics in all of agriculture.

A few take-home messages from our written comments on other ingredients. Historically, NOSB has reviewed other ingredients contained within a substance and they have addressed them through the use of

annotations. We have not, however, had a clear written policy or documented procedure, and that has led to inconsistency at the NOSB level and perhaps even more so at the ACA and MRO level. Improvements are needed. Therefore, we generally support the Handling Committee's proposal with a few minor revisions, as suggested in our written comments.

And, finally, as stated in the proposal, there are about 13 substances on 605 and 606 that require the use of other ingredients. We have a great deal to learn, and the review ahead of us will be challenging and complex. But we believe it's manageable; and with this policy and procedure in place, we will take what is already the most rigorous material review program in the world and make it that much better. Thank you.

CHAIRPERSON STONE: Thank you, Gwendolyn. You're close, but Steve still has you on the timing of the button there. So

we're thinking of a prize for who gets it the closest. You're second right now.

MS. WYARD: Can I try again?

CHAIRPERSON STONE: Questions for Gwendolyn? John?

MEMBER FOSTER: Could you kind of capture quickly what differences you see now versus when the original 2014 deadline was set?

MS. WYARD: Sure, yes. I think the big difference between now and 2014 is the progress in the development of alternative materials. If growers have alternative materials, then they will, in fact, use those materials, but we've got to get -- 2014 was not based on the availability of materials. As soon as that 2014 deadline was set, that petition was in, we knew at the time we couldn't meet that deadline because the alternatives were not there. So that did, in fact, you know, it lit a fire, and we've made incredible progress and it's exciting to see

what's out there.

So I think the big difference is that we really have these tools. They're new. There's one very critical one that hasn't been registered yet. Hopefully, it will be registered this year. But Blossom Protect was just registered by EPA in 2012, so there's a lot of growers out there that I think would be absolutely willing to use these other materials but they need to learn how to use them. They need to be confident that they're going to work. The risk is too great. It's not, they're not going to decide to just risk their orchards without knowing and being confident that these materials work.

MEMBER FOSTER: Okay. Thanks. And nice use of lit a fire. That's really good. It's clever.

MS. WYARD: Thank you. It was for you, John.

CHAIRPERSON STONE: Nick? Gwendolyn, you're still up. Thanks. We've

got a couple of questions yet.

MEMBER MARAVELL: Gee, Gwen. I'd like to ask two questions. One is you made the statement that effective use of non-antibiotic control of fire blight could spur that practice in the conventional market. And I was just wondering if that's based on something solid? My impression, and I'll just give you my impression, is that things like alternative practices, non-antibiotic practices, may, indeed, end up being more expensive than antibiotic use. So I didn't know if you had any information on that, and then I'll ask my second question.

MS. WYARD: I had the opportunity to visit the trial orchards in Corvallis since that's where I'm from. I visited with Ken Johnson and walked the orchards, and he did say that, you know, we're already seeing conventional growers adopting the use of Blossom Protect because antibiotics, that's running them, that's their highest bill right

now. And so they're looking for other materials to supplement the use of the antibiotics to get that cost down.

You know, when I started looking into this about six months ago, you know, there was no way that OTA would come up to a podium and promote, request an extension for antibiotics unless we were absolutely confident that there was real progress being made. So the experience that I went through in working with Ken Johnson and discussing this with David Granatstein was a really amazing process, and one thing that I went through, and you'll see, I handed around the organic report, it ended up resulting, it inspired a thematic publication that we put together, the cover story being "Organic Tree Fruit: A Success Story," because David told me a couple of stories and, hopefully, David will talk more about this tomorrow, but a couple of specific stories where the adoption of biological controls were adopted by the

conventional where we did, in fact, see this progression happen from adoption at the organic front and adoption from the conventional.

So we're already seeing it happen with Blossom Protect, I think Provista. You'll hear more about that product tomorrow. The combination of those two together, in addition, of course, to all the other cultural, biological, mechanical practices, you know, I think it's a win/win situation.

The costs, I think the costs and, again, the panel, I appreciate that question being asked to them as far as what the direct cost is, but my understanding is that it can be comparable or less, so it would be a no-brainer because of the need, the desire. Change happens at the marketplace. Nobody loves antibiotics. This request that we're seeing here is going to happen across conventional agriculture if we have those materials available. I think that's the key.

MEMBER MARAVELL: My second question was you're advocating an extension through 2017. That would be one year beyond the current Committee recommendation. What specifically would you see happening, in your mind, during that additional year?

MS. WYARD: Yes, I think that is the critical year for grower outreach. The OREI project will conclude in 2015. Compiling the results of that project, looking at the new materials, using the new model, putting together, basically, a publication with those results, and then also we're looking at funding a grower publication extension document that would go out to all the growers showing them the results of the OREI project, giving them the time to trial and implement these new materials.

So I'd be the first to say that it may take longer. We don't feel like there's room for another extension because we have had an extension and then another extension. I

think it's unfortunate how that happened. I think we do feel like there needs to be a hard date to respond to consumers, but I think that it's going to be doable for many. There will be risks. Again, it's not a question of if, it's when.

There will be risks, there will be loss. But I think that, in terms of the bell curve and being able to shift as many certified operators over as possible, I think we can capture the most with a 2017 deadline. But the key with that one year, it doesn't sound like much but I think it's a critical year of grower outreach and education.

CHAIRPERSON STONE: Jean?

MEMBER RICHARDSON: Gwendolyn, I think, I believe that it was about 1957 that fire blight arrived in Europe and the Europeans have a zero tolerance towards antibiotics for controlling it. If they've managed to control it for this length of time, why can't we do without it in the Northwest?

MS. WYARD: Right. I hope you ask that question to experts tomorrow, as well, that can talk more about the differences, the climate differences between Europe and the United States because I don't have all that background information. But, you know, we have grown up with the use of tetracycline and streptomycin. That's a key part of what's going on. It's been allowed since the implementation of 2002. It was allowed in the private standards. So that's been a tool in the toolbox, so we haven't learned to do it otherwise. Now is our opportunity to learn to do it in a different manner. We've always had that material.

CHAIRPERSON STONE: Harold?

MEMBER AUSTIN: Gwen, your bell curve comment that you made just a moment ago talking about the impact that the extension would have going back out to 2017, what do you feel with the various stakeholder groups that you work with that are a part of OTA and that

you come in contact with, what would the impact be if we were to allow the existing expiration date of 2014 stay in place, rather than the proposal that we have, not going out to `17 but the proposal we have at `16? What would you see that variation or that impact be, the difference between that, to the organic stakeholders as a whole?

MS. WYARD: Okay. I want to make sure I understand this correctly. The difference between a 2016 and a 2017 or the 2014?

MEMBER AUSTIN: The `14. If we were to allow the expiration date to take place as it's on the books right now of October 21st, 2014, rather than going to either -- right now, I'm just looking at the proposal, 2016.

MS. WYARD: So I'm not exactly prepared with numbers, in terms of number of acres and dollar costs, but I know that will be presented. I think the difference, if 2014

is the deadline, growers will not have confidence in the use of the alternative material. So going back to, you know, at least speaking in the Northwest and Washington, the survey that was conducted, 93 percent of those growers said that they would exit organic production. So you can take 93 percent of growers, and then you can extrapolate and figure out, you know, what the market stats are for the amount of organic produce or apples and pears that are coming out of Washington.

Ninety-three percent is huge. Ninety-three percent of the growers were to exit organic certification, it speaks for itself.

MEMBER AUSTIN: A follow-up on that. Would there be a disparency between the commodities, between apples and pears? Because we have heard some indications that the research has lagged a little bit on pear production for the research for fire blight

control versus what the inputs being put into the apple. So would you see a difference in the amount of acreage taken out or a percentage of acreage taken out of pears versus apples?

MS. WYARD: I think so. I think there's a real concern, and I appreciate you bringing that up. I think we are particularly, we talk a lot about the Northwest because that's a lot of where the research is being conducted, that's a lot of where the information is coming out of. And we talk a lot about apples and maybe not as much about pears, at least in the discussions that I've been hearing about. I don't think that the pear growers, particularly pear growers down in California, they are not as aware of the new and emerging materials and they are not going to have, necessarily, the exposure in the timely fashion that we are in the Northwest simply because of the outreach that's already happening. I mean, I know that

Ken Johnson and other researchers, they're already out in the field, going out to all the conferences. People are aware that these materials are out there. They know this issue is happening, but I don't think we can say the same around the country. And I think that there are conditions, particularly in California for pears, where the materials that we have available may not work as well for pears as they do for apples.

CHAIRPERSON STONE: Jay, if you'd wrap this up for us.

MEMBER FELDMAN: I'll try. Thanks, Gwendolyn. As you know, the Board, the NOSB has responsibility to balance not only need, to address not only need but also hazard and consumer expectations. In the context of this decision-making, we're hearing a lot of comments like yours that there is a tremendous need out there, and I suspect throughout the rest of this meeting we'll hear that multiple, multiple times.

I'm wondering, as a trade association and given the interface that you have with the consuming population, in light of your mission to represent the growers and the community producers, have you looked and what have you concluded? Have you looked at the literature on the urgency associated with the bacterial resistance, and have you considered the impact associated with consumer expectation and impacts on long-term integrity or perception of integrity on behalf of the consumer population? And how have you factored that into your positions, given that your oral statements didn't address these two issues, as far as I heard. I might have missed it, but these two issues at all and I didn't see it either in your public comments, written comments, as well. So I appreciate you addressing that.

MS. WYARD: Thank you, Jay. Yes, we absolutely share the concerns. We didn't put anything in our comments because we really

didn't want to spend any of our breath defending or saying anything good about antibiotics. We want to see their use end. And we believe that if we give the time needed, which is not very much time, we will, in fact, decrease the use of antibiotics, where if we pull the plug too soon we will increase the use of antibiotics because of the number of growers that will exit organic production and not only increase the use of antibiotics but also pesticides. To say that they can no longer be allowed in 2014 in organic production is no guarantee that it's going to decrease or end the use of antibiotics because those growers may very well, based on the data that we see, go to conventional production.

So for, you know, to consider where we're at right now, with such success on the horizon, we hear, based on everything that we're looking at, that this, that you have to look at what you lose and what you gain. And

we very well could increase the use of antibiotics by putting a deadline at 2014.

MEMBER FELDMAN: I appreciate that perspective. I guess my concern, and this goes to the other part of my question, the consumer issue, is how do you measure, as a trade association, the impact on overall public perception of the integrity of organic and what it stands for and what the label means and future growth of the market, given public perception of our resistance perhaps or perceived resistance to seriously address the urgency of the public health issue that we're facing now, not next year, not two years, three years, or four years but right now?

MS. WYARD: Yes, yes, that is a tough situation, and it's unfortunate that we are where we're at, that there has been so much public media about these extensions because there's misinformation about why these extensions have occurred. I think that's why we -- I can see where keeping it in the sunset

cycle would be preferred, but we also see the concerns in how that hasn't necessarily happened. The reason we are committed to 2016 - 2017 as a deadline because we absolutely hear and see the concern from the consumers and we have to commit to that deadline.

MEMBER FELDMAN: Thank you.

CHAIRPERSON STONE: Thanks, Gwendolyn.

MS. WYARD: Yes, thank you very much.

CHAIRPERSON STONE: So, Board members, the gavel will fall at 10:30 to restart this session. And, Trudy Bialic, if you will also be ready at 10:30. Thank you.

(Whereupon, the above-entitled matter went off the record at 10:18 a.m. and resumed at 10:30 a.m.)

CHAIRPERSON STONE: Can the Board members take their seats? We gained a little time in the schedule, but we want to use the extra time. I know the networking and talking

amongst yourselves is a critical part of this process, but, out of respect, I'd like to get back in session.

So a couple of comments. We're running about 45 minutes ahead, so if you're signed up for public comment you can kind of scootch it up about 45 minutes or so. We may, in fact, if we can maintain that leeway, we may, in fact, adjust the agenda a little bit at this point. I want to ask if two people that are signed up for policy comments tomorrow morning -- excuse me. Let me scroll down here. Is Theo Woods here? Theo. And I'll wait until after lunch and give him time to get in here.

So we're about 45 minutes ahead right now, but we may use that up this afternoon. And if you're speaking, if you're signed up to speak with Michelle, there is a sign-up sheet outside that we can verify that you are, in fact, here, made the trip to be here. That might help us with scheduling.

And we may, in fact, use 15 minutes of this for an extra 15 minutes for lunch because it is hard for everybody to get out and back and get back in on time.

So with that, we're back in session, and we have Trudy with PCC. And let me see who's on deck, Trudy, before you get started. Excuse me. Pat Kane, you're on deck. No, Trudy, you're up. Pat Kane is getting nervous getting ready. And Michelle is not here -- you got it, Lisa? Thank you. Okay, Trudy.

MS. BIALIC: Ready to go?

CHAIRPERSON STONE: Yes, ma'am.

MS. BIALIC: Thank you very much for the opportunity to be here and comment. My name is Trudy Bialic. I am the director of public affairs for PCC Natural Markets. We're a retailer in Seattle. I'm not going to restate the written comments that we submitted, but I do want to comment in general about concerns over what is perceived or

appears to be a growing allowance for synthetics.

On behalf of the 49,000 people who own our stores, we realize that it is very challenging for you to review every material. But shoppers, especially long-time organic shoppers, are concerned about the synthetics already allowed. Remember back at the point of the Harvey lawsuit in 2005 there were only 38, and right now we're at over 200.

And many shoppers are just finding out about DHA and carrageenan, and they're puzzled, they're confused, and they want to know how it was that NOSB approved them. We've had to post signage about DHA, and now our nutrition educators say some shoppers are reporting improvements in their gastrointestinal disorders after they stopped eating foods with carrageenan. It's not proof. It's anecdotal. But after reading the available research, customers and even my bosses at my company are asking how it was

that NOSB approved these.

In fact, I believe it was every consumer organization argued against DHA and carrageenan at the time, against the allowances. But NOSB sided with industry, and that's a perception that carried over, I think, from even with the poultry standards on the space allocations.

So that brings me to my request by the Handling Committee for comments on other ingredients. We did a survey in 2011, and we resubmitted that to you, where we found that organic shoppers expect all ingredients, including ingredients of ingredients, to be organic or on the National List. And that's why we support option D, no ingredient of any kind should be in organic food unless it is organic or on the National List. Nothing in OFPA distinguishes between ingredients in other ingredients.

As far as tetracycline, which I recognize is not a synthetic, but as far as

tetracycline and tree fruit goes, I do want to say that I assumed incorrectly that the consumer empathy for challenges faced by organic farmers would trump concerns about antibiotics, the support for farmers being so high as it is. But I was wrong.

I talked with countless shoppers, and all but one of them said antibiotics do not belong in organic food period. Their views did not change when given the arguments for an extension.

After talking with our primary apple and pear growers, we had no choice but to change our company position. So now we oppose any extension for tetracycline. We just have to go where our constituents' interests take us. We have to go where the information takes us. Thank you very much.

CHAIRPERSON STONE: Thank you, Trudy. Questions for Trudy? Calvin?

MEMBER WALKER: Could you share with us your survey? Could you share with us

your survey and how it was done and some of the conclusions again?

MS. BIALIC: Well, the methodology is included in the report itself. We surveyed almost 1,500 shoppers. We did it through online and through, as I recall, through print, as well. The results were pretty clear and conclusive. There was just no other way of concluding, but the consumer does not want additives and they don't want synthetic additives of any kind. Basically, they believe that organic foods have inherent healthy values as they are. They don't need anything extra to be healthy.

CHAIRPERSON STONE: And thank you. They are very detailed in her written comments so appreciate that. We can refer to -- one more. Joe?

MEMBER DIXON: Hi, Trudy. Thank you. So you said you talked a lot recently with consumers about concerns about antibiotics in tree fruit. Can you walk us

through sort of the methodology and the questions you used in those conversations?

MS. BIALIC: Mostly, I would say it was through being in the stores. We were, I was in stores. I took phone calls. I actually did it through outreach, through being at some of the stores, set up tables and just actually greeted people when they were coming in.

It's been over, really over the last couple of months, but it began probably two years ago when I first heard about it. It was on a quiet level. We didn't talk much about it but until the last couple of months.

CHAIRPERSON STONE: Thank you, Trudy.

MS. BIALIC: Thank you.

CHAIRPERSON STONE: Pat Kane is up. Micah Frye is on deck. Is Micah here? Not seeing Micah, so that puts Amha Belay on deck.

MS. KANE: I would like to thank

the Board for this opportunity to provide these comments. I'm Pat Kane. I'm the coordinator of the Accredited Certifiers Association. We did submit written comments on several proposals, and I'm just going to summarize our comments here but also urge you to review our written comments.

Regarding the auxiliary and other ingredients -- dear, where'd it go -- we were supportive of the Subcommittee proposal and request that the Board adopt this proposal. We do suggest that the NOSB recommend to the National Organic Program that any instruction or final guidance contain a clear definition of other ingredients, as this is not contained in the regulation.

The first three paragraphs of the Subcommittee definition should be included in any instruction or final guidance. Sorry. I'm having trouble here. Oh, dear.

ACA agrees with the concept of transition period for operators to bring their

products into compliance to prevent the destruction of markets. We also believe that moving cleaners, sanitizers, and disinfectants, and other non-food substances, such as the boiler additives, to their own dedicated section of the National List will provide clarity that these materials are not ingredients. So we did provide some wording in our written comments about that.

Regarding the tetracycline petition material proposal, we believe the entire organic community is committed to developing and implementing a non-antibiotic approach to controlling fire blight in apple and pear production. ACA supports the Subcommittee's acknowledgment that any expiration date for oxytetracycline must allow time for research on alternatives to draw the conclusions and for those alternatives to go through the process to become commercially available in the marketplace.

We support the new expiration date

of October 21, 2016. If effective control tools are not available and fire blight threatens the viability of an orchard, despite preventative efforts, ACA believes that farmers will prioritize their agricultural livelihood over retaining organic certification and access to the organic market. By allowing this time, the Subcommittee will ensure growers have adequate tools to remain in organic production and provide consumers access to organic products.

We also support the Subcommittee resolution pertaining to the commitment to a phase-out of the material while asking certifiers to include in organic system plans an annual increase in the extent and/or number of alternative practices and materials that are trial for controlling fire blight. As certifiers, we will do our part to move the resolution forward, and throughout the two-year extension the use of oxytetracycline will continue to be highly regulated.

We note that producers may only apply synthetic materials when physical, biological, and cultural practices are not effective, provided conditions are documented and approved in the organic system plan. The certification process effectively verifies that growers are following their plan and operating in compliance with organic requirements.

Phasing out antibiotics offers the opportunity for the NOSB to engage in lead agricultural experts, growers, and consumers in a public-private effort to cooperatively strengthen the organic label from farm to table. Thank you very much. I apologize for the --

CHAIRPERSON STONE: Thank you, Pat. Question, Jay?

MEMBER FELDMAN: Thanks, Pat. I have a question for you.

CHAIRPERSON STONE: Question, Pat.

MEMBER FELDMAN: Thanks. You've

mentioned the organic systems plan both in your written and oral comments. I'm curious as to whether, within those plans, there are any model fire blight-resistant strategies that are viewed as programmatic? In other words, programs that the community of certifiers and inspectors believes are preventive in nature, that are specific, and should be incorporated into every organic systems plan where fire blight may be a threat. Is there such a plan or model programmatic language that is incorporated across the board uniformly in all organic systems plans?

MS. KANE: I would doubt that at this point. I would believe that that's something that could be worked on, but it's up to the grower to tell the certifier what the plan is. I mean, you can answer, you can put questions in there, and they can respond to that.

MEMBER FELDMAN: And so, as a

result, we can expect that there's wide variability in the degree to which preventive measures are adopted in various areas, various farms or range of farms?

MS. KANE: Currently?

MEMBER FELDMAN: Currently.

MS. KANE: I would suspect there is, yes.

MEMBER FELDMAN: Okay, thank you.

CHAIRPERSON STONE: Zea?

MEMBER SONNABEND: Thank you, Pat. Did the ACA talk about how workable they think the other ingredients proposal is in terms of being able to take NOSB deliberations into the field as certifiers?

MS. KANE: Yes, we did. It was my glitch that I did not cover that here. We supported the other ingredients recommendation. We thought that the individual other ingredients do not need to be on the National List, but we did want them included on the review checklist so that there

was some means of identifying what had been looked at. So, yes, they thought it was workable.

CHAIRPERSON STONE: Thank you, Pat. Amha Belay is up. Theresa Griffith? Is Theresa here? Is on deck. Amha?

MR. BELAY: Thank you for the opportunity to provide our comment. The comment will be on organic spirulina production. My name is Amha Belay, and I'm senior vice president and chief technology officer of Earthrise Nutritionals, and I'm here representing two companies: Cyanotech Corporation based in Hawaii and Earthrise Nutritionals based in California, the only two past and present producers of spirulina.

It will be remembered that Cyanotech Corporation and Earthrise Nutritionals produce organic spirulina until 2005, following the regulations of the land-based crop production. The two companies stopped production due to the limitation of

the use of Chilean nitrate to only 20 percent of total input.

The two companies have now researched and considered the use of alternative organic nutrients and may wish to resume organic production. However, the status of organic spirulina production and certification and the current regulations for crop production has been put into question by NOSB to the extent that separate regulations and aquaculture regulation and/or soilless crop production regulations have been considered and are against being considered.

A 2008 document by the NOSB describes that, "The Crops Committee of the NOSB is gathering information and discussing the formation of a recommendation to the NOP for rulemaking on the subject of soilless growing systems in organic production." Spirulina is among three categories of production considered under a soilless organic production. However, the document has raised

several questions, as described in the full 2008 report. It is also noted that the NOSB was asking opinions of certifiers about this issue for possible rulemaking.

It, therefore, appears that there is no regulation regarding organic spirulina production at the moment. Since there is organic spirulina imported into the United States and sold as USDA organic and with USDA logo, the question arises as to what regulation is applied to organic spirulina certification of imported products currently and for those who may wish to produce organic spirulina in the USA, such as Cyanotech Corporation and Earthrise Nutritionals.

The answers to these questions by the NOP are pertinent to our future growth and development as spirulina companies in the USA. We would like to have a clear guideline on this matter in order to plan our business strategy on solid grounds with respect and respecting, following the appropriate

regulations.

We eagerly await for a response. Thank you very much.

CHAIRPERSON STONE: Thank you, sir. Are there any questions? All right. Thank you very much.

MR. BELAY: Thank you.

CHAIRPERSON STONE: While Theresa is getting ready, Bob Durst, you're on deck. And just so you'll know, Michelle is out trying to pick the lock on the cover over the thermostat so she can warm it up in here. Okay. Thank you.

MS. GRIFFITH: Okay. My name is Theresa Griffith. I am the president of Somebody Cares, an international relief organization which assists people with chronic illness, autism, and ADHD. This song represents what we have seen and known to be true.

(Whereupon, a song was performed by the commenter.)

CHAIRPERSON STONE: Thank you very much. Very good. Bob, you going to top that one, buddy? And Natasha Gallegos is up next.

MR. DURST: I just wanted to make a couple of comments based on the antibiotic scenario that's going down here. As a consumer, what I see as a real concern on their part is the use of antibiotics primarily in the livestock industry where there's a lot of carryover and a possible health risk of antibiotic resistance showing up in food, the food supply, etcetera, that leads to human health risk. I don't see that same risk showing up at all in the use of tetracycline in an orchard situation.

So the loss that's been mentioned of organic orchards and production of organic apples and pears, et cetera, which would be at risk by restricting something used for fire blight control is a real concern to me, whereas I think the consumer perception of antibiotic use just doesn't relate and

translate into its use in an orchard where it does in the livestock production. So I'd like to see it extended and see that consumers can still get organic apples and pears without having orchards taken out because of fire blight. Thanks.

CHAIRPERSON STONE: Thanks, Bob. Question? Jean?

MEMBER RICHARDSON: So, obviously, I'm concerned about residues of antibiotics possibly in harvested fruit, and you said you just don't see that as a problem. Do you have any scientific data to support your statement?

MR. DURST: No, I certainly don't have any data along those lines, and I'm not sure that anybody does. But being a food scientist and having a lot of knowledge of this sort of thing in general, the timing between when antibiotics or tetracycline is used for fire blight control in the harvesting of apples is such a long time difference that I can't imagine that there's residue concerns

that would lead to health concerns of any kind.

CHAIRPERSON STONE: Okay. Jay?

MEMBER FELDMAN: Thanks, Bob. I want to follow-up on Jean's comment because we're hoping to have a scientific discussion here. As you know, we're informed, as a board, by technical review documents that are supplied to the Board in its deliberations. Have you had a chance to review the technical review document for tetracycline?

MR. DURST: I have not. I'm sorry.

MEMBER FELDMAN: Okay. If you do, you have a couple of days, it would be helpful for you to review the documents on the AMS NOP website because there is, there are studies in there that show resistant bacteria. Whether it's commensal bacteria or human pathogen doesn't matter. It's the question of lateral gene transfer that eventually makes its way as resistant genes into human pathogens, which is

what the Infectious Disease Society of America is concerned about as a public health crisis, as an extreme public health crisis.

So you, as a scientist, it would be helpful if you were to look at that documentation, as well as the Schnabel and Jones citation that's in the TR that shows resistant bacteria in the fields where these materials are used. In addition to that, of course, the American Academy of Microbiology is extremely concerned, as a professional society, about the use of antibiotics in crops, as well as in animal production. If you talk to infectious disease docs, they say by the time you see the problem it's too late.

So I guess knowing what you know as a scientist, it would be helpful to get your assessment based on reading the scientific literature. But, also, I'm interested in whether you view the organic statute, given the science, what is known, what is uncertain, what we understand is

scientific effects or process, how you apply that in a preventive or precautionary way and how we should apply that under the Organic Foods Production Act. What is your assessment of our duty as a board to try to prevent problems up-front, given scientific uncertainty in balance with what we know about mechanisms that are at play here?

MR. DURST: Off the cuff, and it really is just that, and, again, I don't have the data to back it up, is that the amount of resistance that one would find and the transmission routes that one would experience from field crops and orchard crops is significantly different than it is in the livestock realm where we know that there's antibiotic resistance cropping up and they're leading to human pathogens. So, again, without having read the literature that you suggested, which I will go back and do, I just don't see that as a major concern or as a significant factor as it is in the livestock

side of things.

CHAIRPERSON STONE: Zea?

MEMBER SONNABEND: Hi, Bob. Wearing your consumer hat that you came up here with, have you talked with other consumers or what's your sense of how many of your fellow consumers might agree with your opinion?

MR. DURST: Quite a number of them have. Because I wear that hat, a lot of people come to me and ask questions about what I think about various organic things, and even animal scientists and livestock people that I work with at the university have said that they're concerned about it from that standpoint but they just don't, they don't get why there's a problem with it in the crop side of things. So my sense is that it's sort of misdirected concern on the consumers' part that they're equating antibiotic use in livestock and antibiotic use in crops and saying they're one in the same when the

concerns are really significantly different and the risks are significantly different.

CHAIRPERSON STONE: Thanks, Bob. And Natasha Gallegos, are you here? Not seeing Natasha. Sommer Gard? Sommer Gard? Okay. Lynn Huffman? Lynn? Yelena Korchman? Yelena? Albert Strauss? And let me see who's on deck before you start, Albert. Gabriella Nunez? Is Gabriella here? What about Erik Paul? Like I said, we had some confusion about a week or two ago. Laura Reed? Okay. Judith Reedy? No Judith. Amy Wachspress? Okay. We're looking at moving up some of tomorrow's agenda to today to give us more time tomorrow. Kathie Weinmann, Weinmann? Jennifer Wilcox? Michelle could tell that something was going on here. Jessica Zern? Jessica? And we know Terry Shistar is here, so it looks like, Terry, you're on deck. Okay. There you go.

MR. STRAUSS: Okay. Thank you for the opportunity to speak today. My name is

Albert Strauss. I'm an organic farmer from Northern California, and I'm also the founder of Strauss Family Creamery. We produce certified organic dairy products, including milk, yogurt, butter, ice cream, sour cream, and Greek yogurt. And we distribute in the Western United States. My dairy farm in Marshall was the first certified organic dairy farm west of the Mississippi River, and my creamery was the first 100-percent certified organic creamery in the United States.

In 2006, I found my certified organic corn was contaminated with GMOs by up to six percent. In the following two years, I implemented a GMO testing program at our dairies and the creamery to keep GMOs out of our processes and products. In 2010, the creamery and our dairy farms because the first to achieve non-GMO project verification.

I'm here to talk about the threat of GMO contamination to organic crops and the importance of non-GMO verification in the

organic industry. GMO contamination is occurring in organic crops. A study from the Organic Trade Association in 2011, which I display, found that more than 30 percent of certified organic corn was contaminated and 11 percent of that exceeded the EU threshold of 0.9 percent.

This puts organic dairy farms like mine at risk. It is increasingly difficult to source certified organic feed for my cows, and the prices are continuously rising. The deregulation of genetically-modified alfalfa has added to this problem. The supply of organic feed will only decrease as GMO contamination increases.

Our consumers expect our products to be non-GMO. We want to make sure that we want -- excuse me. We want to make sure that what we eat is free of GMOs. I believe that non-GMO verification is essential.

Organic practices don't allow for the use of GMOs, and the organic seal should

reflect that. I believe that organic certification is the gold standard, and it should include non-GMO verification. I, therefore, suggest that we have a meaningful threshold for GMO contamination that is defined and implemented in the National Organic Program and the National Organic Program requires a testing and verification standard for GMOs.

On a different subject, I also want to urge the NOP to make the certification processes easier for farmers. The burden of all the paperwork is tremendous and very time consuming. If there is a way in which we can make the process simpler and more efficient, I, as a farmer, would very much appreciate it. Thank you.

CHAIRPERSON STONE: Thank you. Is there questions? Francis?

MEMBER THICKE: Thank you, Albert. Do you have any suggestions on the threshold limit for GMOs in organic and also the testing

procedures that would be required or frequency?

MR. STRAUSS: Well, for feed or for seed, I mean, I think that, as long as we get a testing and verification program in place, the thresholds can start higher and you can tighten them over time. And you have to start with a program. You can't start -- if you get stuck on thresholds or rejection, you know, if you have to reject a load if it's over a threshold, I think you get diverted away from the goal of eliminating GMOs from our food supply.

MEMBER THICKE: Would you think, though, that testing, routine testing of feed would be necessary or seed only perhaps?

MR. STRAUSS: I think everything.

MEMBER THICKE: Everything.

MR. STRAUSS: There is all these points of risk. Seed, feed, ingredients in products all need to be tested and verified and have strict analysis on each of them. It

could be started with a strip test, but I think we need to start somewhere and get it implemented. And it should be under the organic program.

CHAIRPERSON STONE: Jean?

MEMBER RICHARDSON: Mr. Strauss, I know you weren't testifying on GMO vaccines for cattle, but I wonder if you would, as a dairy farmer, you would have some opinion or explain to us how you verify that none of the vaccines that you give to your dairy cattle have GMO in the vaccines?

MR. STRAUSS: We contact each of the manufacturers and get a letter stating how they manufacture their vaccines and to verify they're not from genetically modified, derived from genetic modification.

MEMBER RICHARDSON: And does that work well for you? So you get written documentation to support non-GMO?

MR. STRAUSS: Yes.

MEMBER RICHARDSON: Yes. Thank

you.

CHAIRPERSON STONE: Nick?

MEMBER MARAVELL: Jean asked my question.

CHAIRPERSON STONE: And Jay?

MEMBER FELDMAN: Thank you. Thanks for being here. I'm interested if you have any thoughts on GMO contamination prevention and, as we, as a board, try to communicate the views of the organic community to the Secretary of Agriculture, what we should be saying, as a board, relative to prevention of contamination?

MR. STRAUSS: So what I think the OTA study showed is, I didn't show all the slides in the whole study, but, once you test and verify a required testing and verification from your suppliers, the contamination level went dramatically down. The corn actually preserved and organic that was tested was only at, I think, 11 percent contamination level above the 0.1 percent, compared to organic

that wasn't tested, you know, at the 30 percent.

So just requiring a testing regiment reduced the GMO contamination. I think there's unintentional -- people aren't paying attention to GMOs if they're not required to. Does that make sense?

MEMBER FELDMAN: Yes, it does. I'm interested, though, further down the chain where we have co-existence, say, you know, out in the fields, in terms of production of genetically-engineered crops and conventional organic crops that are not GMO. How we protect the purity of the crop, do you think about that as an advocate for changes in practices that go beyond the scope of this board, certainly, but affect our ability, at the end of the day, to deliver a product to you as, you know, as a user of feed, how we can assure the delivery of a product that is free of GMO contamination?

MR. STRAUSS: I think all the seed

has to be tested and verified. I don't think there's any way around it.

CHAIRPERSON STONE: All right. Thank you. Okay. Terry is up. David Moore, David Moore here? Okay. David Moore is on deck.

MS. SHISTAR: My name is Terry Shistar, and I'm on the Board of Directors of Beyond Pesticides. This slide shows some of our current and former board members. We have a long history of involvement with organic production. Our roots are in the problems of agriculture, from poisoning of farm workers to contaminated food, soil, air, and water. We have promoted organic production and the organic model in non-production situations as a solution to pollution.

If you visit our website, you'll see a section called eating with a conscience. It's there because, for us, organic production is not only about good, safe food, it's about saving the Earth and those who live there.

I'm going to talk about restoring the public's expectations of organic. We've submitted comments on most of the issues before the Board, but I'll focus on three today: tetracycline, inert ingredients, and other ingredients.

The public has a strong expectation that antibiotics are not used in organic production. This may be a misconception, but it's one promoted by the organic producers and even the USDA. There are reasons that the public does not want antibiotics used on organic apples, just as we don't want carcinogens used on them. These reasons are based on science and personal experience.

The science was presented to you in the minority position of the tetracycline report. My personal experience includes a strep infection that failed to respond to a couple of antibiotics, as well as several bouts of my son's ear infections that required

more than one antibiotic. I'm sure all of you have had similar or worse experiences.

We were disappointed with the report of the majority of the Crops Subcommittee. It reflects the same kind of blind denial as when conventional apple growers denied, and some still deny, the science concerning alar. We would like to prevent a public revolt against organic apples and organic food in general, similar to the alar rebellion that was so costly to apple growers.

From the growers' perspective, there will never be a right time to end the use of antibiotics. There will always be another silver bullet on the horizon, another reason to postpone the decision for another two years. The decision to eliminate them has been put off for too many years. The only decision you can make that will restore the public's expectations is to uphold the 2014 expiration date.

As you all know by now, so-called inert ingredients in pesticide products are not biologically or chemically inert. In fact, because OFPA criteria have been applied to active ingredients, these additives, especially those formerly on List 4B, are probably the most toxic ingredients in the pesticide products used in organic production.

We congratulate the Board for undertaking the project and reviewing these mostly secret ingredients, and we urge you to start immediately on the review to restore the expectation that hazardous chemicals are not used in organic production.

So-called other ingredients, also known as ingredients within ingredients in processed organic foods, did not meet the public expectations, which can be simply stated all ingredients of a product labeled organic must be either organic or on the National List for that purpose. The public has a right to this expectation because it is

a law. In place of this very clear policy, the Handling Subcommittee proposes to make distinctions that are not in OFPA but to allow ingredients that do not meet OFPA criteria and to ignore existing law, all, apparently, in order to codify mistakes that have been in the past, that have been made in the past.

Again, the Board needs to take action to restore public expectations of organic food. Public expectations are what caused people to buy organic food. You cannot ignore what the public expects without destroying the market for organic food for those of us, and for those of us who place our faith in organic production to heal the Earth, the destruction of the organic brand would be tragic. Thank you.

CHAIRPERSON STONE: Very good. Steve, she got you on that one, buddy. Questions? Okay. Thank you very much, Terry. Thank you for your written comments, as well. We've got David Moore is up and Harriet Behar

on deck.

MR. MOORE: All right. Good afternoon or good morning. I'm David Moore. I'm a California pest control advisor and qualified applicator and I work for Neudorff. For over a year now, I've been speaking to agronomists, organic growers, and extension farm advisors about the issues of organic weed management, and I hear one answer and that is we need more tools.

There's already a powerful environmentally favorable and allowed material that should be among those tools, and that material is soap. The environment and toxicological advantages of soap pesticides are very well known and, yet, their use for weed control is illogically and capriciously restricted on food crops.

I'm sure you all know the language of OFPA. Soaps are explicitly in OFPA as allowed synthetic materials. If that's not original intent, I don't know what is.

Support for lifting the restrictions on herbicidal soaps for food crops comes from growers of all stripes because all growers have problems with weeds. But weed control is the most significant challenge facing not just organic agriculture but all agriculture. It's been an article of faith for many years and, yet, the flimsiest of logic keeps this material from growers of food crops.

Organic regulation prides itself on being a process standard, not a product standard. But the restriction on soaps stands in the way of better process.

I won't try to detail the many reasons why herbicidal soaps are consistent with sustainable organic production systems. I'm here to encourage each of you to consider this for yourself. Ask somebody from the NRCS about destructive forces of tillage and cultivation, especially the concept of tillage erosion. Ask someone from EPA about soaps as

pesticides and read the soap salt registration eligibility document and the fact sheet.

Ask the soil scientists about how cultivation affects soil organic matter and ask a certifier about how they enforce the soil fertility standard and about what's happening to the soil organic matter on the farms they certify. Ask a hydrologist how much clean, sweet water we have in the arid West to give to weeds that compete with drops. Ask an orchardist or a vineyard manager what they most need to become or remain organic. Ask David Granatstein about what happens to orchard soils under plastic mulch for years, and ask Carol Dawson about the challenges of managing weeds by flaming.

Ask John Foster, Zea Sonnabend, or Carmela Beck what they hear from growers in and around the Salinas Valley. Ask a vegetable grower how much diesel they burn pulling cultivator rigs through their fields and how many hours of hoeing it takes to bring

a leafy greens crop to market. Ask a farm worker how much he or she likes hoeing weeds or running a two-stroke weed eater all day.

Presumably, those of you all that are not farmers yourselves know your organic farmer. Ask your organic farmer what he or she needs for weed control. Ask your organic farmer how they like competing with a foreign grower that can have weeds pulled or hoed for a few dollars a day. And then ask yourself if it's worth reconsidering this annotation. Thank you very much.

CHAIRPERSON STONE: Very good. Questions? Harold?

MEMBER AUSTIN: With your description of what the soap material would be competing with as far as the hoeing, the flaming, the other, what would your opinion be the impact of the inclusion of soap as an allowed substance to sustainability to reduction of the carbon footprint, the benefits that it would bring to organic in

general?

MR. MOORE: I don't have hard data, but we know that growers spend a lot of energy cultivating. We know that cultivation requires a lot of energy. Flaming, as I understand it, is fairly propane-intensive, so it has a fairly large carbon footprint. And you can certainly pull a spray rig on wheels through an orchard or a vineyard with a lot less horsepower than you need to pull a disk or harem.

MEMBER AUSTIN: With the research that you guys have done with the material, are there any perceived negative impacts that you could tell us that would be of concern to all of us, as organic farmers?

MR. MOORE: EPA loves soaps as pesticides. The registration eligibility evaluation from 1992, all 300 pages of it, exciting reading, gets into a lot of detail about why they like soaps so much. It talks about environmental half lives as short as 24

hours, about the fact that the fatty acid chain on a soap molecule is essentially food to almost any living thing, and it's biologically broken down very rapidly.

I think the only negative that we've encountered so far is the fact that there's a warning label on most of the concentrates because of the potential for temporary eye damage.

CHAIRPERSON STONE: Thank you very much. So Harriet is up, and is Steven Shore here? Steven? What about Bozena Cverckova, if I'm saying it close enough? Ryan Stewart? Ryan? So Michael Sligh? All right. Harriet?

MS. BEHAR: I am Harriet Behar with MOSES, and we educate, inspire, and empower farmers to thrive in a sustainable and organic system of agriculture, and we envision a world where all agriculture will be organic and sustainable. I want to say thanks to the NOP for working on the apiculture standards. I'm probably one of the few people who say that.

And I want to also say that I support the full review of other ingredients to the OFPA criteria.

I'd also like to say, for the vaccines used under excluded methods, that I really would like the NOSB to expedite the process in providing farmers the tools they need to verify that their vaccines are not GMO. This is kind of a travesty that right now we have this non-compliance occurring in the world of organic livestock production, so I encourage you work as quickly as possible. I'm concerned that the market for non-GMO vaccines, that the people who make those non-GMO vaccines need to know that there's a market out there, and the longer we wait and don't provide them with a market, that the vaccines for livestock will move more and more towards GMOs.

On antibiotics, I don't feel that there has been an urgency felt by the organic tree fruit community until now, that they

really need to be working towards finding another solution. They have matured with the use of these materials, unlike livestock which, from the very beginning, didn't have antibiotics and became, as they grew they learned all those alternatives. I think that -- so I support a 2016 extension, but I would like there to be guidance given by the NOP through their program manual to really spell out all those alternatives.

I'd also like to make it clear that our pest control hierarchy includes the use of materials that, at times, there's a problem that, no matter what you do in practices, I support the systems-based approach very strongly, but the use of materials is part of that systems-based approach. And so as you look at all of the materials that you review, I think it's important that you look at the risks involved and the problems that a systems-based approach might not be able to solve, and that's when

those materials are important.

Look at what's happening in Europe. What they use instead is copper. And so you need to be comparing materials to materials when you're looking at the pest control hierarchy and whether or not to put things on the National List. And we all know that copper is a problematic material.

Another thing, too, in my experience, when growers leave organic production, they don't tend to come back. And so we don't want to lose this production. We want to keep these people, whether they're in organic with their soul and their heart or just there for the economic benefits. We want to see organic production remain in organic. I believe antibiotics problematic from a systems approach because they do get resistant. So human health is an issue, but I'm also looking at the farmer side. It's a problematic material from the beginning.

So I just encourage you to give

the growers a little bit more time. I think they know the urgency now, but don't, I don't want to see it continually extended. Thank you.

CHAIRPERSON STONE: Thanks, Harriet. Jean?

MEMBER RICHARDSON: Harriet, can you help me with the antibiotics in Europe, the information that you have on that? You said that they've obviously had the fire blight problem for a long time and they've been addressing it with certain forms of copper. As I understand it, the present forms that are being used are different from those that were used in the past in terms of the type of copper, and their rate of accumulation is not the same as it was in earlier kinds of products that were being used. Do you have any sort of factual data that would help me to better understand how they deal with it in Europe?

MS. BEHAR: My understanding is

that the use of copper to control fire blight is very heavily regulated because they've had issues with copper buildup in the soil. So they've started to regulate that use of the copper, so that's where I see the problem. If they've had to come in because it's been used so heavily, just as you have with your use of copper have had to, over time, make it more restrictive because of the dangers of the buildup, because copper is an element that is not going to go anywhere. It's not going to break down any further.

So as far a lot of data, no, but I just know what the European Union is doing in the control of the use of copper because they've seen it to be a problem.

MEMBER RICHARDSON: So is copper the primary way in which they're dealing with fire blight in Europe, or are there other products that are being used in an integrative approach?

MS. BEHAR: I think there's an

integrated approach, but when things get serious they come in with the big guns, which is copper.

CHAIRPERSON STONE: Jay?

MEMBER FELDMAN: Thanks, Harriet. You know we all love organic farmers, and organic consumers are an integral piece of the growth of the organic industry and the fact theat organic consumers dig deeper in their pockets against proclamations of the safety of the conventional food supply by regulators and other agencies. You know that there's tremendous support for organic production and its growth on a consumer side, so I hope that's clear. I know it's clear to you, to everybody else here, as well.

However, you also know and have followed the regulatory process for a very long time. And I wonder if you could address the fear that I have that extending, adding an extension to an extension to an extension results in another extension. And what

assurance can this board have that, at the end of another two-year period, that we or the future board will, in fact, uphold that extension? Is there any evidence? Point us to some evidence where that has happened in a timely fashion, especially given the urgency that we, at least I and some many others feel about the public health threat that we're facing here and the urgency associated with that.

I'm really searching for that assurance because I'm fearful that the consumer community will see this as just dragging its feet, government, USDA overtaken by grower interest, disrespectful of consumer investment in a sector of food production that they have invested their families' resources into. I'm fearful that we will be undermining that trust and faith. So help me out here with assurances that we get to an endpoint.

MS. BEHAR: Well, I can't make any assurances that anybody will never bring

forward another petition in the future. But as I said, I think that the National Organic Program should put out guidance as soon as possible, considering the centrist position that NOC had put forward listing all of the various systems and other materials that could be used and really having that be up-front and putting the growers' feet to the fire in the two extra years that they are really working on all those other alternatives so that it shows the urgency that they need to be moving forward. I don't feel that their feet have been to the fire until now, and so we really are going to hold them to that that, during that two-year period, they are using all of those tools, experimenting with all of those tools, and moving towards the time when they know that antibiotic is going to be gone.

And so that's where I feel we're giving them that urgency and having that very strong guidance from the NOP that not only do they try one, two things that, when the

inspector comes, the question is, you know, your spacing is very tight here when you're doing new plantings, are you giving more space, you know, because that's part of the issue is having a very tight planting, that there's not enough air circulation.

All of these things I don't think have been pushed as hard as they could have been at the certification level and have really been shown to the growers that they should be doing all of these things. And their feet will be in the fire when they know that in two years, 2016, it will be gone.

MEMBER FELDMAN: A quick follow-up. Is there precedent for that kind of NOP guidance holding feet to the fire on practices and performance?

MS. BEHAR: Well, I mean, guidance does not have the force of regulation. That's understood by all. But when it's transparent and out there saying this is what we are telling the certifiers to do when they are

looking over the organic system plan, I think it does give the growers more impetus to follow through. Rather than just saying cultural, biological, and physical controls, you're actually giving them some of those tools spelled out and it gives the certifiers more direction in what they're looking for when a producer is using the antibiotic for fire blight.

CHAIRPERSON STONE: Nick?

MEMBER MARAVELL: Harriet, I know you've worked with an awful lot of farmers. What do you feel are the most effective ways to communicate a change in practice to the farming community? And do we, are we in a situation now where that's possible?

MS. BEHAR: Well, I think, to the organic farming community, there's many of them who go to conferences and they get newsletters. But really it's when that inspector comes to the farm, and they're concerned about continuing their organic

certification. So if they had a guidance document with them when they came with the National Organic Program seal on the top saying have you gone through these various protocols, cultural, biological, mechanical, physical, I think that would really show them that, whoa, here's this, it's got the NOP seal on this, this is what I should be doing.

They all really, at this point, have read the rule. But when that inspector shows up or they get a direction from their certifier, they all are looking at that. I can't guarantee they're all reading our newsletter or they're all going, you know, their members of the NOP. That is not as transparent as when they are having that direct visit and their annual certification. That's when they're paying attention.

CHAIRPERSON STONE: Harold?

MEMBER AUSTIN: Harriet, during your presentation, you mentioned that part of the control process would be integrated past

management and control practices. We received a written comment that stated that integrated pest management had no basis for belonging in organic production program at all. What's your interpretation of that? To me, it would appear that the basic fundamental beliefs of what organic really stands for would be that integrated control process using the variation, the various tools that the growers typically would apply, whether it's fire blight control or other. Could you explain your comment and what you feel that that integrated pest management approach to an organic farm systems plan means to the organic grower?

MS. BEHAR: I was referring more to the, not integrated pest management but to the pest control hierarchy that's in our regulation, which is that you start with mechanical, physical, and cultural controls. When those are not effective, you move to natural products, biological products. When

that is not effective, then you have the use of the synthetics that are on the National List.

But to say that producers only have those top two tools and the last one of the synthetics is not part of that hierarchy is really not looking at it holistically and that that last synthetic piece is part of it. It is our last resort, but it is still part of the whole system.

And so when you are reviewing products, materials to put on the National List, I think you need to look at the effectiveness of the first two and how strong is the need for that last synthetic that would be the last resort. And we always want to be encouraging that systems-based approach, but in integrated pest management, in the conventional world, really has, it doesn't really fit with organic because it's mostly based in the lessening of the use of toxic materials, not really looking at a systems-

based approach for control. It's just, you know, transitioning from one toxic material to something less toxic.

MEMBER AUSTIN: But if we were to apply that terminology to organic, organic systems plan, and using the integrated control process and starting at the control points that you just laid out, wouldn't that systems approach then apply, though? I mean, isn't that exactly what an organic systems plan really represents is we are going to start at that lower level and work our way up and use that synthetic material only as that last resort?

MS. BEHAR: Correct, yes. And that's why I want to have the National Organic Program give a little bit more direction on what those first two items in the hierarchy really spell it out for people that these are all the tools they should be using, not just we did a little blossom thinning and it didn't work or, you know, whatever it might be, we

monitored and we had to use it. I mean, what are they doing in a long-term system in their orchards to lessen the effect fire blight has? Rootstocks, varieties, I mean, these are all things that they should be working on, including working with the consumer base to accept those less problematic varieties in the marketplace, too. I mean, they have responded to consumer demand for the Pink Ladies and the Fujis and the Galas that are, that tend to be more problematic when there's fire blight. But I think they should have been working and need to be working on promoting those varieties that don't need the use of oxytetracycline.

CHAIRPERSON STONE: Colehour, if you'll wrap this up for us.

MEMBER BONDERA: Yes, I'm going to try to wrap it up with a very specific question, but I just want a little bit more information based on, I guess, mixed messages that I'm getting and something that you

commented on, which is relating planting spacing of trees to the need for antibiotics. And I think, on our tour, my understanding was, and it's not very deep so I need help here, my understanding was that bees are the way that this is moved around between the trees and, therefore, to a large degree, the spacing between the trees is not really a big factor. But your comment suggested that you think that the spacing of the trees, from a systems plan, is a factor related to the need for antibiotics, in some way or another. I'd like you to comment further on that part of what you said. Thank you.

MS. BEHAR: Well, that's just one of the tools. And when you have that high humidity environment, anything that you can do to move, you know, have more airflow, I think, could be one of the items in a larger toolbox of things that you're doing. Pruning, you know, also provides that airflow, that sort of thing. You know, interspersing in the blocks,

you know, not having monocultures of very susceptible varieties altogether. I mean, there's a lot of different strategies that the producers can use.

CHAIRPERSON STONE: Thank you, Harriet. So Michael Sligh will be the last presenter before lunch. We are ahead of schedule. We're going to evaluate how we adjust tomorrow's schedule. I'll remind the Board that we were able to have a little latitude today, but we may not have this luxury tomorrow. But some of the folks, we're in the after lunch aspect, so some of these people may be getting here at lunch. So that's why we'll break a little early and then come back on time at one. So Michael?

MR. SLIGH: Good morning. I am Michael Sligh with the Rural Advancement Foundation International. I'm a founding member of this body and also an organic farmer since the 1970s. I wanted to start by, well, Miles is not here, but I wanted to really

thank him and encourage this urgent action towards sound and sensible certification. This is very timely, very welcomed, and looking forward to that making a big difference in the paperwork burden on organic farms and operations. So thank you for that, and we can help with that in any way you need help with.

On the other topic, I think that we had a pre-NOSB meeting yesterday. We had a very productive and high-quality conversation about this issue of antibiotic use in tree fruit and the conundrum that we find ourselves in and how we got here. We found very broad cross-sector support that we should remove antibiotics out of the remaining area of organic production.

We also recognize that it is not productive to use scare tactics or distorting information that would lead people to believe that organic fruit is full of antibiotic residue. But we also found it equally

damaging that no one here would really be arguing for antibiotic use and would not be recognizing the global implications of antibiotic resistance and that that is a real threat and that organic has built its brand here in the United States around that exclusion and around that distinction and that organic livestock producers had benefitted from that distinction and that we should continue to be that haven where consumers can find a safe and sane alternative to antibiotic use in agriculture.

We also recognize that we all take a responsibility for being in this conundrum, that we have encouraged the production and expansion of susceptible varieties and that the marketplace has promoted them and that all of us, as organic apple-eating consumers, have also contributed to this conundrum we find ourselves in. But at the core of this, to me, is, you know, I was leading the NOSB in 1995. We thought we were settling this matter with

a two-year extension that would be resolved in 1997. So there is this lack of institutional memory both across administrations and across NOSBs that we somehow need to embrace and memorialize. And I strongly urge this board to look at, when you make this decision, to create a process where you reflect on the lessons from this and you memorialize this decision so that you're very clear about that. And future boards can then refer to that clarity of thought because that's part of the difficulty here. I try to go back and parse through that 40-page analysis that was put together about the history of this subject, and it's very convoluted and it's very, you know, frankly, checkered.

And we have to be, as a board, we have to be able to send the clear signal to the marketplace that innovation is being encouraged and give the marketplace that time to create that innovation because the model of organic is continued quality improvement over

time and that has got to be at the core of it. And if that signal is confused, the market is not going to respond. We're not going to come up with an alternative to antibiotic if we don't signal that correctly. Thank you.

CHAIRPERSON STONE: Thanks, Michael. Questions? Jay?

MEMBER FELDMAN: Thanks, Michael. I'm curious, given your experience with all this, why you feel it's so difficult to get something off the list once it's on? I mean, even with this recent, relatively recent decision on sodium nitrate, I would argue that it wasn't because of the true analysis that the Board did but more because of international pressure that that was moved off. So even that isn't a good example of the Board removing something based on the criteria, the list of criteria that we utilize for review.

Why is it so difficult? I mean, the whole concept of sunset and continuous

improvement, it seems hard to operationalize for some reason. Why do you think that is?

MR. SLIGH: Well, certainly, in the founding Board, it was our strong understanding that the model we were using was that, as we were encouraging the growth of organic, we recognized there were certain transitional tools or materials that we would need that would -- you know, bottlenecks or deficiencies in our holistic system. And so the idea was that you could have something on a list for a period of time, but it could come off. And, in fact, much of what we voted on in the original list was predicated on that strong assumption that, A, annotations gave you scope and clarity of use; and, secondly, that those materials were not permanent additions and they would come off as better choices were innovated.

And so that's the model that this was built on. And why it hasn't worked is, I think is, there are multiple factors as to why

it hasn't worked, but one I alluded to was the fact of our institutional memory and the fact that the board rotates and the new board coming in may not share the former board's analysis. There can be new data that comes. The NOP also changes staff, and they have had different interpretations of this over time. So that continuity of thought and clarity has not persisted.

And then I think we have also violated our own process probably several times where we failed to follow the process, just for many different reasons. And so, to me, this concept of takings and the economic impact, that was not a part of our thinking in the original analysis of this, and we certainly never thought about that in putting it into the language of how this operated. This is a new factor that has emerged in this debate, and I think it's one that both the Department and the NOSB needs to wrestle to the ground because, indeed, if that is the

barrier, that's where you need to have that conversation.

I don't want to be between you and lunch.

CHAIRPERSON STONE: No, that's a good way to send us off for lunch. Thank you. So I've got about a quarter until 12. We'll break now, and we'll come back promptly at one and -- excuse me. Oh, did you have a question? I'm sorry. Go ahead. Sorry I didn't catch you.

MEMBER BONDERA: Thank you. Sorry. I hate to interrupt a break because I want one maybe as bad or worse than anybody, but, Michael, I appreciate what you said and I am intrigued a little bit and inspired a little bit, but I'm, in my brain, thinking about, when you introduced yourself, you mentioned the fact that you're a farmer. And I'm curious if, you know, I wrote down what you said, innovation is being encouraged.

As a farmer, do the behaviors of

the NOSB or the NOP encourage innovation in your activities at the practical farming scale and/or -- and that doesn't have to be a yes or no answer -- but and/or what could we be doing realistically and in practice that would be encouraging innovation? Because from my perspective, it's a great idea, but I don't know where to go with it. If you could, I don't know, address that. Thank you.

MR. SLIGH: Well, I mean, certainly, clarity of standards and clarity of instruction helps to provide, you know, that motivation to do the best practice. But I think where this is broken down has been in this decision-making around encouraging alternative improved products to be developed. If I was a German company and I had a product that might be a solution to the antibiotic issue here that was actually found in this local area, but the message from this body was ambivalent, I'm not sure I would make that investment.

And so that's what I'm getting at is that, if you want to encourage better tools, this body has to be clear, you have to be decisive, and you have to set goals, and then you have to follow them out, because every time you don't do that it just, I think it throws a monkeywrench in that ability. Farmers, of course, need time to adapt. I mean, I'm not for taking anything away that doesn't have a better replacement, but we've been at this a long time and we've got to run this railroad better than this.

CHAIRPERSON STONE: Thanks, Michael.

MR. SLIGH: Thank you.

CHAIRPERSON STONE: So Urvashi Rangan will be on first thing after lunch at one. We'll break and return at 1:00. Thank you very much.

(Whereupon, the above-entitled matter went off the record at 11:50 a.m. and resumed at 1:05 p.m.)

A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N

(1:05 p.m.)

CHAIRPERSON STONE: If we could have the Board members take their seat, please. We want to get started for the afternoon session. We want to backtrack a little and be sure. Some of those that weren't available when their name was called -- so Urvashi is still on because we asked her to be, but is Gabriella Nunez available? I don't see a hand. What about Erik Paul? Okay. Laura Reed? These are people that were notified of being after lunch, so I'm checking that back. Judith Reedy? No. Amy Wachspress? Kathie Weinmann? Jennifer Wilcox? Okay.

With that, we'll go where we are.

MS. ARSENAULT: Tracy's here.

CHAIRPERSON STONE: Okay. Tracy is here. Okay. Jessica Zern? Okay. So we'll back up to those that we do know. So at this time, let me see who's going to be on

deck. One second. So Urvashi is up, and Jo Ann Baumgartner is on deck. Thank you.

MS. RANGAN: Thank you. Good afternoon, everybody. My name is Urvashi Rangan. I'm head of the safety and sustainability group at Consumer Reports. I've been there about 15 years, and I'm a scientist.

I'm here today to talk about, for the most part, the antibiotics issue in apples and pears. As you know, this has been a controversial issue for the last couple of years. It's something we've known about, too. I spoke with you all at the last National Organic Standards Board meeting in Providence. This is something we don't think that comports with consumer expectations of organic. It's inconsistent in that it's the only product that allows for antibiotics, and it really doesn't comport with what consumer expectations are.

But because we've had a lot of

dispute about whether it comports with their expectations or not, we actually conducted a poll this month of over a thousand consumers online and asked them the question. And so the first question we wanted to know was whether consumers actually knew about this practice, so the question was are antibiotics used to treat disease in apple and pear trees?

So about 70 percent, 67.9, did not know that. They just don't know that these things are being used in agricultural practices, other than sort of what's going on in meat production. Only 15 percent knew, 17 percent said they did not know, and 67 percent -- I'm sorry, 17 percent said, no, they are not used and 67.9 percent said they didn't know. So the overwhelming majority of consumers actually don't know that this practice is going on.

Then we informed the same consumers who were taking the survey that this was a fact, that these were being used, and so

should fruit from these trees be allowed to have the organic label? Fifty-four percent say no, thirty-five percent say they don't know, and only ten percent say yes.

So we've got some, at least statistically, significant data here showing what consumer expectations are around this issue. Frankly, it hasn't been transparent. Consumers haven't known about it. We don't talk about. We're part of that issue. We are talking about it now because it needs to be talked about, and it needs to be transparent to consumers for as long as we are using these materials. It is our position at Consumers Union that we would like this oxytetracycline to retire in 2014. We do not want any further extensions on it.

So there is a failure sort of of transparency, and there's also a failure of sunset. And I think consumers are weary of materials that are being allowed in organic production. I get calls from reporters all

the time about it, about what materials are being used, is that really appropriate, does that comport with consumer expectations? And the answer to these things around this issue is no. And the failure of these materials to sunset is a real problem in creating a real incentive for organic alternatives to be developed.

And I think we're all really pleased that we are seeing the emergence of these alternatives. Pamela Coleman from Cornucopia can comment on even how long ago these alternatives were starting to be developed, but the real pressing rush didn't happen until the last year or two. That's because we're at year, what, seventeen or eighteen of this listing on the National List. So this has been a very long time, and because it doesn't sunset we diminish the incentive to actually create commercially-available organic alternatives.

But perhaps the most pressing

issue of all are the public health concerns we have around the use of antibiotics. And as a scientist who runs safety and sustainability at Consumer Reports, I can tell you that we, as an organization, are simply against the use of antibiotics in agriculture, in farming, except for the treatment of sick animals. And, frankly, the problem with antibiotic resistance is real. There is scientific data around that. Thank you.

CHAIRPERSON STONE: Thank you. Questions? Jay?

MEMBER FELDMAN: Hi. Thanks for coming to this important meeting. Explain a little bit more about the process that you use, please, to get public opinion, generally. And in addition to that, if you, as an organization, really chose to sort of get the word out, I guess you'd call this preliminary type of work you did with a thousand, a targeted population, what impact do you think that could have, given your preliminary

results?

MS. RANGAN: Well, we just did this poll about a week ago, Jay, and we have done a press release yesterday, along with Food and Water Watch and Center for Food Safety. We all share the same position around this. We all represent consumers.

I think this poll, basically, was conducted online. It's done by our national survey center through Google Online Polls. We actually have an entire survey department dedicated to polling. And this is one of the polls that we've done. It was these two questions. It's more than a thousand respondents, so it's statistically significant. And it's randomized.

CHAIRPERSON STONE: Jean?

MEMBER RICHARDSON: Hi, Urvashi.

MS. RANGAN: Hi.

MEMBER RICHARDSON: So as a scientist, could you point me to the direction of any research which has been done which

measures the amount of residues of antibiotics left in fruit that have been harvested?

MS. RANGAN: So, Jean, it's a good question, and I'll start by saying our primary concern with antibiotic use in these situations is about the resistance and the resistance that can grow and spread in the environment. But residues are certainly important to some consumers. Some consumers don't want to buy things if they think it might have residues.

There's no question that you can get residues from the use of this, and there are studies out there to show that. In fact, on page 11 of your technical review from April 2011, the EPA 2006 source states there is a high probability that oxytetracycline-resistant bacteria are present in the environment as a consequence of pesticidal use, which may have negative consequences for humans.

So they've acknowledged the

resistance. In terms of the residues, EPA set a tolerance of 0.35 PPM for oxytetracycline in apples and pears. They did that based on field studies that they did looking at residues and potential residues that may result. The residue levels that they found, in general, were at the limit of detection, a little bit lower, but some were above that. So that suggests that the scientific question of can it be possible is yes. Does it happen all the time? No. And we know this use is somewhat intermittent, so you're not going to see always a residue on there. But the fact of the matter is this practice can, in fact, lead to that, although, like I say, we think that's a secondary issue compared to the resistance problem.

There's also other papers out in Europe, but I encourage you to go to those EPA sources, read through the EPA documents for how they arrived at that tolerance level for tetracycline. They have actually looked at

the uptake in fruit.

MEMBER RICHARDSON: A follow-up question. If it's an issue and there have been alternative ways of controlling fire blight in Europe, why is that we have not used the European materials to control fire blight in the United States?

MS. RANGAN: Well, I think that's a really good question, and it's not that we're always the same as Europe, but we began in 1995 by putting these materials on the list. And because we didn't retire things properly like they should have been, it's now almost 20 years later, and so back to the sort of why don't we have these incentives created for commercially-available alternatives? In part, it's because the sunset system is broken, and we don't retire materials when we are really supposed to be retiring these materials. And so we don't see these developed in an adequate amount of time.

CHAIRPERSON STONE: Colehour?

MEMBER BONDERA: Yes, thank you, Urvashi, for what you've shared. And I actually would like a little bit more information from your perspective because I also am a member of the public, I also am a consumer, even though I'm here representing farmers, and I think the truth is I'm curious, in that survey, did it go the next level of asking what people were concerned about related to this, if you were informed them through the survey that this was a reality? And I guess from a public health perspective, were there questions and how those were answered if they were in that? Thank you.

MS. RANGAN: Sure. Colehour, you know, we didn't go into this survey. There was really two questions, and we really wanted to be very targeted about asking about antibiotic use as it relates to organic apples and pears because, after all, that is the very sliver of the issue we are focused on here.

So in terms of why consumers care

about that, I'd like to offer at least some greater perspective. And we, as an organization, have a whole meat on drugs campaign. We think that no animals should be given antibiotics. We're pushing Trader Joe's to only carry no antibiotic meat. We hold Whole Foods up as a model of providing no antibiotic meats to people.

So we think that that is one rung up on the sustainability chain. We say organic gets you a few more rungs up on that chain. And then there's other things, like animal welfare-approved when you add on to that that does even more.

And so there's a sustainability continuum. The lack of using antibiotics, at this point in animal production, is now considered the first step up but an incredibly important one.

I also want to say that you're going to hear from three physicians over the next 24 hours who are going to speak to the

incredible public health threat of antibiotic resistance. It's not about using little bits or comparing that to a lot. Little bits of antibiotic in the environment do create resistance, and you're going to hear from a physician that's working with us at Consumers Union, Dr. Michael Crupain. You've already heard in written testimony from Dr. Bob Lawrence at the Johns Hopkins Center for a Livable Future where Michael teaches classes with him on antibiotic resistance. And you're also going to hear from the Infectious Disease Society from Dr. Morris tomorrow who will also be speaking to this issue.

So the public health problems are real. They're scientifically-based. We are concerned about them from a public health community, not just scientists but also medical professionals, as well.

CHAIRPERSON STONE: Tracy?

MEMBER FAVRE: You've talked about this survey a couple of times, and you

mentioned just a moment ago that it's a very narrow sliver that you're looking at about the antibiotic use in apples and pears. I'm curious, I think most of us know that the design of the questions used in the survey have a lot to do with the response that is elicited. So my question is do you believe that consumers understand that, potentially, with a decision to remove the antibiotics, we might be looking at the loss of organic apples and pears in this country so we're faced with either eating conventional apples and pears or getting them imported from other countries who may or may not have the same stringent evaluation? So do they really understand the potential for that if they want to continue to consume those products?

MS. RANGAN: Yes. We worked pretty extensively with our survey department to actually structure these questions in a way where we could provide enough information and then give them the factual information because

we didn't want this to be an esoteric question. And so, you know, gauging whether they know or not about the practice was important for us because that's been the subject of some debate here over the last few years. Some people say consumers know about it, they don't care, they're paying for it, it doesn't matter.

But what we know from this poll data is that consumers don't know. They actually don't know the practice is going on. So now, in a survey, once you get a response like that that you don't know, then you have to provide them the information of what the fact is.

And then our next question was really do you think an organic label then should be used on those apples and pears? And it's only ten percent that say yes. The rest either don't know or more than half say no. That's a pretty definitive answer.

And, you know, I think, from a

consumer point of view, why this product gets antibiotics, why dairy never does, consumers have come to expect that this is a practice not used here. And the fact of the matter is that alternatives are being developed, and there are some producers who aren't using it. And we think the market should reward those people who can truly differentiate themselves as meeting the gold standard here.

And the problem here is that there's no way for them to do that. There's absolutely no way. The organic label doesn't distinguish them as actually meeting a standard that they have come to expect from all other organic products that they buy, and that's a problem. And we think there may be some market depression, but there will be a supply that comes in that meets that standard. That is how our market works. And we don't think, by simply saying we need to keep the acreage, we need to keep the subpar products on the market, that that is a reason to

continue to do it year after year after year. We're in year 17 or 18 of this listing. It is time to retire it, and that's what we think needs to be done. And we're really looking forward to the alternatives coming onto the market. And at the very least, we need to have a transparent system where consumers can know. And we had a really interesting discussion yesterday with the folks in, I believe it was Washington State University, I'm sorry, Washington State Department of Ag who were actually saying on the certificate they are noting whether they're certifying a block in an orchard, they do it by variety, that didn't use antibiotics.

So is there a way now to start differentiating? Is there a way to say, no, these apples didn't get antibiotics, these ones did? Because, frankly, this is where consumers are completely in the dark, and that's not fair, and that's not fair to the market. We need full transparency here

because we don't want this label to be undermined. And when consumers are in the dark and feel sort of cheated and they learn about these things, that's when the serious undermining of the label actually happens from a consumer confidence point of view.

So we think it is time to recognize what those expectations are and at least make it transparent to consumers and provide a way for growers who are truly meeting the gold standard to be able to differentiate their product as that.

CHAIRPERSON STONE: Harold?

MEMBER AUSTIN: In your expert opinion, in terms of the potential to induce resistance in the environment, is there a difference between the various antibiotics that are currently being used? And if so, is there an impact on where and how those are used?

MS. RANGAN: Yes, it doesn't really matter. I mean, there are a number of

different antibiotic classes, and they have a number of antibiotics within each class. Streptomycin and tetracycline are both broad-spectrum, medically-important human antibiotics. So as an antibiotic goes for using it in agriculture, that's a pretty serious decision to use a drug that is critically important in human medicine.

Now, when bugs get resistance to these things -- and, remember, you use, when we treat sick people, you want to use pharmacologically-relevant doses that are going to kill that bacteria. When you use low levels in the environment, it's like a perfect recipe for creating resistance in the environment. The bacteria sort of gets pinged with these things, and then it learns how to mutate and, essentially, resist it. And then what happens is those bacteria can pass along that resistance to other related bacteria. They can also, in that genetic resistance pattern, transfer resistance among that class

of antibiotic. And in some cases, in certain antibiotics, you can hop classes.

The point is really that resistance isn't contained. It isn't just based on the little amount you think you might be using. Once you put that resistance into the environment, into a bacterial gene, you're sending it through. You have a live bacteria now that can, indeed, grow and spread its resistance over time, not only to the fire blight organisms but any of those related organisms that are in the orchard. And there are studies to document that.

CHAIRPERSON STONE: Nick?

MEMBER MARAVELL: Yes, Urvashi. We've heard some discussion of antibiotics use in livestock and then distinctions made with regard to the amount and frequency of antibiotics used in tree fruit. And then we've heard various suggestions as to what should be a phase-out date. I was wondering if you could comment, just from your

perspective, on your distinctions between livestock use and tree fruit use and your sense of urgency to phase this product out, specifically with regard to tree fruits?

MS. RANGAN: Sure. Thanks, Nick. I think there's a misnomer that somehow, because less antibiotics are used in apples and pears compared to livestock, it is, therefore, less of a problem. That simply doesn't hold scientific water. The fact of the matter is that wherever you put antibiotics into the environment, you start to create and exacerbate the resistance. I mean, resistance is there, naturally. But you will accelerate that resistance wherever you're applying those antibiotics. These are sprayed onto trees, so they're sprayed in the orchard and all the bacteria, which there many of, that sit in the orchard, once that antibiotic hits them, that resistance can take place. And then that resistance can start to spread and move downstream and do all sorts of

things. That mechanism is in livestock production, but it's not dependent on livestock production. It's because, once the bacteria itself is resistant, that is the problem of antibiotic resistance in the environment.

So it's not a matter of quantity of antibiotic used. It's once you start to actually put that into the environment, you start to create the dilemma and the resistance problem.

In terms of phase-out, because I think we have had this on the list for such a long time and we have testified prior to this in the last round it was re-listed that this was not appropriate and that it was time to retire this material. And at the last re-listing of this material, we were here telling you the same thing, that this really has to stop, this has to be the last listing. And now we're here again having the same discussion. And so for us and for consumers,

we think that the phase-out should happen in 2014 and that we should start moving towards those alternatives.

In the meantime, whatever your decision is, and between now and 2014, if that is the date that is chosen, we want it to be very transparent to consumers that this is going on. And we think, frankly, if the OTA and the industry is saying we all agree that we want to get rid of this, take a pledge, say something, take a position. You guys could write a policy. Let's anchor that down because consumers need to know that, as an organic community, there is commitment to doing away with a practice that they don't want, they don't expect, that has public health ramifications. And I think we need a serious commitment to the closure of this use. And if it's true in this room that everyone agrees with that, and the question is really on date, then I think that can at least begin a public dialogue showing that there is true

commitment to end this practice.

CHAIRPERSON STONE: Jay, are you going to wrap this up?

MEMBER FELDMAN: Thank you. I'm trying to -- and you addressed this, in part, but I'm trying to ask you to help the Board understand its responsibility in this balancing act. Obviously, everybody sitting around the table here is concerned about impacts on growers. How do we integrate the concern about consumers, which is a requirement, actually, of the Board, as we balance and calculate this decision?

MS. RANGAN: Well, Jay, you know, on other issues, and it's sort of a similar approach, we look to you all from the public as being guardians of the materials that are allowed and not allowed for use in organic production as a way that maintains the integrity in this program. And we truly believe that your goal is not to maintain acreage, your goals is not to grow it as fast

as possible, the goal is not to approve as many materials as possible at all times. The goal is actually to maintain the high integrity of the meaning of these standards, and welcome aboard if you can meet that.

But the goal is not to somehow create a lopsided standard that then creates an exception for certain products but not for other products because that is very negatively perceived. And part of the goal of the Organic Food Production Act was to impart consistency in this label. And so consistency, high integrity, and quality improvements over time, that's your goal.

And this is a slippery slope, isn't it? I mean, peaches and nectarines, from what I understand, are also, in conventional agriculture, use streptomycin and tetracycline. They don't in organic. So I don't see any organic peach and nectarine growers here, but they're not allowed to use it either.

And so, really, this is about leveling the playing field. And if we don't have a certain product on the market because they can't get to that standard quite yet, that's okay. And we're having this whole debate in fish, aren't we? I mean, whether it's the fish meal in the open net pins or even antibiotic use in aquaculture. We're going to get into that. We don't want to see this slippery slope of allowing something that is really incongruent with the organic program and doesn't comport with consumer expectations to then start bleeding into other areas, and we think it is the job of this board to maintain that.

CHAIRPERSON STONE: Thank you very much.

MS. RANGAN: Thank you.

CHAIRPERSON STONE: So I let us run on that one, but just remember we may not have this luxury tomorrow. So, Jo Ann, you're up, and Lisa Bunin is on deck.

MS. BAUMGARTNER: Hello. I'm Jo Ann Baumgartner with the Wild Farm Alliance. We're based in Watsonville, California. Thank you for the opportunity to share Wild Farm Alliance's comments. As you might imagine, we're pleased that the NOP is pursuing the development of biodiversity guidance. It comes at an important time now that the NOP checklist used to accredit certifiers addresses the Natural Resource Conservation Standard.

To remind you, organic operations must maintain or improve the natural resources, including soil, water, wetlands, woodlands, and wildlife. Biodiversity conservation is part of the definition of organic production. It's in the preamble language, and it's in the crop production standard for perennial systems. Native habitat supports natural enemies of crops and has been estimated to be valued at $100 million in a seven-state region of the U.S.

Moreover, habitat supports pollinators, many of which are in decline. In California alone, researchers have estimated that wild pollinators are worth one to two billion dollars and actually provide a third of the pollenation services for that state.

Soil biodiversity is critical for competition, predation, and eventual die-off of foodborne pathogens. Raptors and four-footed predators help keep rodents in check, which is not only good for yields but also good for food safety. It's better to have a couple of predators in the field than many rodents.

In FDA's proposed produce safety rules, they state that the presence of wildlife, in and of itself, is not a food safety issue. And in five areas of their preamble, they say they do not require farms to take measures to exclude animals or destroy habitat.

We are happy to see that the NOP

is working on sound and sensible project in order to make organic certification accessible, attainable, and affordable. With upcoming guidance on biodiversity, we propose that a slate of examples are given to help farmers see how they can shape biodiversity conservation practices to fit their specific situations in an attainable way. And with help from NRCS, installing practices can be affordable for farmers.

Wild Farm Alliance, MOSES, and several other sustainable ag groups are assisting NRCS to better serve organic farmers, and it's starting to pay off. Recently, hundreds of NRCS personnel have participated in our eight webinars, and in Santa Cruz County, where I'm from, the NRCS conservationist says he works now with more organic farmers than conventional farmers.

And integrity. Consumers expect organic products to protect the environment. One of the issues that the guidance needs to

cover is addressing the conversion of high-value conservation lands, which could give organic a black eye. So by addressing all of biodiversity in the guidance, it will uphold the integrity.

Besides guidance, what we need is a concerted effort to train inspectors, certifiers, and operators about biodiversity conservation. Later this year, we'll begin a process working with several partners in hope that, once guidance is out, the NOP, too, will be incorporating this critical issue in their trainings. In regard to the penalty matrix, we're glad that it's back under review because the NOP needs to consistently address the full definition of natural resources in the non-compliance, not just soil and water.

Now, to the tetracycline used in apple and pear production. It should be phased out in a way that support those farmers that are diligently using antibiotics sparingly while fostering biodiverse vibrant

soils that produce healthy trees, versus those who schedule sprays based on the calendar and don't take a holistic approach to plant nutrition. The spread of antibiotic resistance is troubling. We don't understand all the consequences to the environment and human health.

Sulfuric acid. It's very toxic, and it should not be allowed in organic production.

IBA. Since we don't know what the environmental effects of it are, the precautionary principles should be used. Finally -- okay. Thank you.

CHAIRPERSON STONE: Thank you, Jo Ann. Questions? All right. John?

MEMBER FOSTER: So I thought I heard you say the tetracycline and streptomycin were applied on a calendar basis just now. Where did that come from? Because I haven't heard that up until now.

MS. BAUMGARTNER: Were you on the

tour yesterday?

MEMBER FOSTER: Yes.

MS. BAUMGARTNER: I had heard that that's what one of the farmers had responded when they were asked about the application.

MEMBER FOSTER: Well, the Board can correct me if I'm wrong, but I have no recollection of that.

CHAIRPERSON STONE: Nick?

MEMBER MARAVELL: Yes, I don't know if you were in here, but, basically, there was one orchard that was pretty much practicing three applications of tetracycline, on average. They could go more or less, but it was not indicated that any individual year would be zero and there was some skepticism voiced with regard to the use of the fire blight models for the exact trigger to start that. That's what I heard.

MEMBER FOSTER: That's real different than a calendar basis, to me.

MS. BAUMGARTNER: Okay.

MEMBER MARAVELL: Yes. Well, I'm not defending the words "calendar basis."

MEMBER THICKE: But it was based upon the bloom stage, per se, without the model or weather conditions.

CHAIRPERSON STONE: Okay. Thank you. Lisa Bunin is up, and Tracy Miedema is on deck.

MS. BUNIN: Good afternoon. My name is Lisa Bunin, and I'm the organic policy director at the Center for Food Safety. CFS oppose extending the use of tetracycline until 2016. A growing body of evidence demonstrates the public health threat of antibiotic resistance and warns of the dangers of losing tetracycline considered by the World Health Organization as critically important for combating human infection. This is reason enough to prohibit tetracycline in organic.

CFS supports the minority position to maintain the expiration date of 2014 because tetracycline used for fire blight

control in organic apple and pear production fails to meet the material review criteria. What is most concerning about even low-level uses of antibiotics is that their use can contribute to reservoirs of resistance that can spread to other bacteria and human pathogens through horizontal gene transfer.

The Board has repeatedly warned growers that antibiotics would not be allowed in organic indefinitely. Growers who sell to the EU have heeded this warning by finding ways to successfully avoid antibiotics, demonstrating that they are not essential.

This extension request has sparked public debate about why antibiotics are used in organic in the first place. Over 30,000 people signed CFS' petition to end tetracycline use, and many are asking questions about which varieties are likely to be sprayed so they can avoid buying them.

CFS urges the NOSB to deny the extension because allowing it could tarnish

both the organic apple and pear industry and the reputation of organic. We further urge the Board to state in its final decision that antibiotics are incompatible with organic.

CFS agrees with the GMO Subcommittee that clarity is needed around the median words used in excluded methods, but we support leaving the definition of excluded methods intact. The regulatory history shows that it was never intended to be rewritten but, rather, it was a benchmark against which new and emerging technologies would be evaluated.

CFS believes that the term natural condition and traditional breeding should not be replaced. We urge the NOSB to use guidance and policy statements to clarify the rule, instead of regulations. And we urge the Board to confirm in writing at this meeting so that there's no doubt that excluded methods prohibits genetically-engineered organisms and processes.

Sugar beet production and beet sugar extraction are chemically intensive and environmentally destruction, and the TR makes that clear. Conventionally grown sugar beets use synthetic toxic fertilizers, pesticides, and soil fumigants that harm the environment. Sugar beets are processed with formaldehyde and generate a large volume of wastewater. Sugar beet seeds are treated with a neonicotinoid pesticide which threatens bees, beneficial pollinators, and birds. This certainly is not the type of production that organic should support under any circumstances, particularly since viable alternatives are commercially available.

To meet OFPA requirements, conventional sugar beet seeds would have to be non-GE and identity preserved. This seems unlikely, particularly since 95 percent of all sugar beets grown in the U.S. are genetically engineered.

While the petitioner is based in

Sweden, granting the petition would open up sugar beet fiber production to all companies, including U.S. producers. We urge you to reject the petition.

Transparency is the bedrock of organic. Consumers buy organic food because they know what's in it and how it is grown. Yet for innovation to thrive in organic, some limited and prescribed CBI may be necessary. Some materials ingredients can never be permitted in an organic system, and, for the NOSB to make that determination, all materials and processes must be transparently scrutinized and never be claimed as CBI. CBI may be warranted for protecting formulas, recipes, market research, and financial data, but we oppose allowing the NOSB but not the public to see confidential business information because it could undermine transparent public participation which lies at the core of regulatory development.

Other ingredients need to be

reviewed, like all other materials. And CFS supports the recommendation to deny the polyoxin-d zinc salt fungicide petition. Thank you.

CHAIRPERSON STONE: Very good, Lisa. Questions? Calvin?

MEMBER WALKER: Dr. Bunin, could you share with the Board, as well as the organic stakeholders, how the Center for Food Safety survey was done? I did hear you mention --

MS. BUNIN: Oh, the petition?

MEMBER WALKER: -- quite a large number. Yes.

MS. BUNIN: Well, what we do is, in order to get one of our action alerts, you have to sign up. So you either have to go to our website or sign up on a list when we're at a conference. And so then you get your action alert, in this case telling you about how Center for Food Safety viewed the antibiotics issue. You read through our position. We

also have a web link to the MSB website where you can read the background information for yourself. And then if you agree with the petition, then you have to click "take action." If you don't click "take action," you are not signed up on the petition. And then before we submit the petition signatures to the docket, we have a program that goes through and sweeps to make sure that there are no duplicates on our lists.

CHAIRPERSON STONE: Harold?

MEMBER AUSTIN: Could you clarify for us your position on polyoxin-d zinc salt?

MS. BUNIN: We think that it shouldn't be on the list.

MEMBER AUSTIN: Rational for that?

MS. BUNIN: Because it is a fungicide, and it's toxic and it doesn't belong as a material on the list.

CHAIRPERSON STONE: Okay. Thank you, Lisa. Tracy Miedema is up, and Steve Crider is on deck.

MS. MIEDEMA: Good afternoon, everyone. Welcome to Oregon. I hope you enjoy our majestic state and have a little time to take in some street food while you're here, maybe get up into the mountains. I am here today to urge us to all look at the tetracycline issue from the perspective of consumers who aren't necessarily answering online answering online polls.

My name is Tracy. I'm a mom. I have three kids that are all school lunch box age, and I buy an awful lot of organic apples. I grew up in Washington state, a great apple growing state, and it's been wonderful. And a person very involved in the organic foods industry for the last 15 years. I work for an organic farm. To have seen organic apples really become a bonafide part of the orchard industry and farming.

So two years ago, we were in Seattle, a lot of the people in this room. I broke a gavel at that meeting. And I was, you

know, I heard a lot of information about tetracycline. Some of it that was just, it was just not true. And I heard Urvashi up here. I heard her ask the question of are there antibiotics in the apples, and I didn't feel like we got a straight answer. The answer is almost none and almost never, ever.

And here's the thing. Tetracycline will go away from organic, but two years is just not enough time for alternatives. It's just not enough time. And so the alternative to tetracycline today is conventional apples.

I can just barely afford to keep my kids in organic apples. Organic apples are set to become food that only the most elite consumers are allowed to eat. And moms all over just won't be able to put them in lunch boxes anymore. So, you know, just looking at logic, two years is not enough time to do the research. And let's play this through.

Last year was the first year that,

potentially, field trials could have gone. And we had two years, let's just say two years in a lab working on what these alternatives are to combat fire blight. This spring we might have got out into the orchards. We need another year to get into the orchards for trials, minimum. And my family has some involvement in some of these alternatives, works in the wood products industry, and there's some amazingly promising alternatives. We just don't have enough time to actually do the field trials because this is a crop that we get one shot a year out there to do the testing.

So I'm really here today to just urge some balanced thinking and reason around this and give the researchers the time. Don't take the wind out of their sails. And, you know, if tetracycline were to sunset in 2014, as it's set to do, you're going to see orchards go back to conventional. And, you know, it's going to be really disappointing,

and that's where they're going to stay.

So, you know, let's find a way, let's find something that's balanced where the orchardists, the consumers, and the scientists can work together. And what we're heading to is something that's really, that's not balanced.

CHAIRPERSON STONE: Thank you, Tracy. Questions for Tracy? I'll say I have a renewed respect for those that came before me that have to swing this thing around. Zea?

MEMBER SONNABEND: Thank you, Tracy. Have you talked to other moms and other consumers about the issue? And do you think they're capable of understanding it and tend to agree with your or not?

MS. MIEDEMA: You know, I manned the phones and talk to organic consumers everyday for about six years and realized, you know, the people in this room are probably the most educated people in organic on the planet. It's like a brain trust in this room, and we

know a lot. If the study had been fielded that, you know, Consumers Union, I believe, fielded it, asked the same question about a multitude of materials that are on the National List today. There are multisyllabic. They're hard to pronounce. I think we would have gotten a wholesale rejection of a large swatch of the National List. I think we can manipulate consumers into being scared through surveys like that.

No, Zea, I haven't gone out and fielded a study. I really come at this from a personal experience and as an insider that knows those details and is thrilled to be able to provide that kind of wholesome food.

And I will say one last thing, which is the characterization of the sunset process as a retirement process is not the congressional mandate here. It's to review, not to retire. And nowhere in the OFPA or in the regulation does it say the list should only be six inches long or X number of digits.

And so we're starting to promulgate that as if it were true that the sunset equals retirement. It's just not true.

So don't let that, you know, vernacular start to work its way in. It will cause you to think something that's not true about the sunset process, which is to review any new information that's come to light.

CHAIRPERSON STONE: Harold?

MEMBER AUSTIN: Tracy, thanks for coming today. As a mom with kids that you firmly believe in organic and what it stands for, the principles, we hear and we've heard ever since Seattle that some of the alternatives would be to change varieties, go back to those less resistant. As a consumer and as a mom, what dictates the choice of the fruit or the apples that you, as a consumer, a mom, would buy and what would your kids prefer to eat varietal wise?

MS. MIEDEMA: Well, you know, I grew up in the sad era of the Red Delicious,

knocking around, pithy, mushy. I didn't even know what a good apple tasted like from a store, you know. There were orchards around my house. I grew up here in the Pacific Northwest. We canned food in the summertime, and it was really, you know, it was quite wonderful. However, the grocery store was not a place where you found a decent apple. And the same apple gets put back in the lunch box the next day, just more bruised than the day before, because the kids don't eat.

So what dictates, you know, it needs to be tasty. It needs to be wholesome and crunchy and all the wonderful things that the apple growers have done to actually bring apples back to life. And, you know, it just would be a crying shame that, in this room today, we could set back what's going on with organic apples and the inroads that organic has made and reintroduce pesticides onto thousands and thousands of acres.

CHAIRPERSON STONE: Jean?

MEMBER RICHARDSON: So I'm one of those consumer reps on the Board that is trying to understand consumer perception and concerns. So I'd like to try to understand how you made your decision that you would rather be feeding an apple to your kids that may potentially have a detectable amount of tetracycline antibiotic in it. I'm not saying it does or doesn't, but it may. Balanced off against the -- did you do it by balancing off the risks of all the other things that are in the conventional apple or pear by comparison? So did you look at sort of risk versus risk when you made the decision to, and came here, of course, obviously, to say I'd rather stay with the, for the next couple of years anyway, the pear that had been treated or the apple that had been treated with antibiotic?

MS. MIEDEMA: You know, just, again, speaking as a mother, I didn't weigh any of those things, Jean. I would say I'm coming at it much more from the avoidance of

the pesticides. And I have tremendous faith in organic apples and quite unquestioned the notion that there is some residual oxytetracycline from a blossom spray. It's more likely somebody handling it, you know, and not having it have been washed. A pathogen from a hand would make me a lot more nervous than a potential diluted oxytetracycline spray six months before the fruit came to market.

I don't know that any moms are kind of thinking that way. You go in and there's certain mandates now for organic consumers where we've decided we're going to get as much organic, we're going to buy organic milk. Even if times are tight, we're going to buy organic milk. We're going to buy organic apples. When we can, we're going to buy the meats and the breads and the other groceries. But apples, you know, they're an iconic organic item now. Please, let's keep it here to stay.

CHAIRPERSON STONE: Thank you very much, Tracy.

MS. MIEDEMA: Thank you.

CHAIRPERSON STONE: Next up is Steve Crider with Brady Jacobson on deck.

MR. CRIDER: Yes, I'm Steve Crider with Amy's Kitchen. We're a large organic food company based in California and here in Oregon. My comments today may not rise to the same level of controversy as tetracycline, but I'm here to speak on behalf of our company with regards to silicon dioxide, which is currently allowed as a synthetic under 205.605. And we appreciate the opportunity to address the Board.

Extensive detail and technical background have been submitted by our team in our written statement regarding our concerns with the commercial availability and the sensory issues around silicon dioxide alternatives. But we have one other issue that we wish to raise in our oral comments.

At Amy's Kitchen, we use a large amount of rice in our frozen meals, our soups, in our gluten-free line. And we go to extraordinary lengths to protect our product quality, flavor, integrity, and safety. Our brand is found nationally at all levels of retail distribution.

Therefore, when news events occur, such as the article by our friends at Consumer Reports highlighting detectable levels of heavy metal arsenic in the U.S. rice products, we receive an enormous response from concerned consumers regarding our products. What is the truth of the matter? Are they safe for us to eat? What risk are we taking in buying Amy's foods? What steps are we taking as a company to assure that the food we produce is a safe as possible?

At Amy's, we've been investigating this matter, working with others in the industry, like Lundberg Family Farms, UNFI, the OTA Research Group on arsenic, to better

understand this phenomenon and how it might best be prevented or mitigated. In the course of this study, it has come to our attention that rice will uptake and retain detectable traces of arsenic which tend to concentrate in the hulls at levels at up to 1,000 parts per billion. Much more study is needed on this question, but it raises serious concerns for us.

We currently use spices with silicon dioxide added to keep them free-flowing. This substance, though synthetic, is neutral, safe, and with proven functionality. It's approved for use in certified organic food system plans throughout North America, Europe, Japan, Asia, all of which are important export markets for Amy's products.

We would find it extremely difficult to justify substituting silicon dioxide, something that we know now could add incrementally to possible detectable arsenic levels in our finished product. This flies in

the face of the expectations of our large consumer base, who we hear from daily via email and social media. And it places us at increased risk in the marketplace. It also raises serious ethical concerns within the company with our production team.

Amy's Kitchen strongly encourages the continued use of silicon dioxide as an improved synthetic while further study of potential alternatives are thoroughly investigated and researched. As outlined in our written comments, it would take Amy's around three or four years for a thorough test of any reformulation of a substitute product for its effect on shelf life, both in storage and in our finished products.

So we thank you for this chance to comment on this substance and look forward to the rest of the week with you. Thank you.

CHAIRPERSON STONE: Great. Thank you, Steve. Questions? All right. Thank you, Steve. Brady Jacobson is up, and Ib

Hagsten is on deck.

MR. JACOBSON: Hello. My name is Brady Jacobson, and I am not the enemy. My husband, John, and I are co-owners of Mt. Hood Organic Farms, which is located in the Hood River Valley of Oregon. Our area is responsible for growing about 30 percent of the winter pears in this country. I'm here today representing the interests of the Hood River Valley commercial organic growers.

This issue of the use of antibiotics for control of fire blight is of upmost importance to organic tree fruit growers of apples and especially of pears. There is still no acceptable substitute for antibiotics for fire blight control available for commercial organic growers. I know that researchers are working on other biological control options, but they are not thoroughly tested and proven under the variable and extreme conditions that kill orchards and will not be ready by 2014.

What I do know is that there's been an orchestrated campaign of fear by certain seemingly well-meaning organizations timed to coincide with this meeting that have distorted and misrepresented this subject, and this I find extremely disappointing. The message has gone out and gone viral that antibiotics are sprayed on the fruit and that, by eating organic apples and pears, you're being exposed to antibiotics. I have personally responded to a number of the blogs and Facebook posts, as well as to many of our wholesale customers who are being barraged with inquiries about this issue.

While I understand that the phase-out of antibiotics for organic orchardists is inevitable, the science of this subject is a difficult one to understand. The loss of tetracycline will put organic orchardists in a very precarious position, both in the marketplace and in the continuing existence of our orchards. My hope is to convey to you,

the NOSB, the ones who really count in this debate and who are under tremendous pressure by ill-informed consumers and the media, the importance of staying the course with this until there's an acceptable substitute that is generally agreed to be so and is tested by the industry.

Our orchard, Mt. Hood Organic Farms, was the first commercial orchard certified organic in Oregon in 1989 and, certainly, pre-dated the NOP. We grow eight varieties of pears and 26 apples. Tree fruits are a specialty crop, and orchardists receive no subsidies. Profit margins are very slim, which makes things all the more difficult for the smaller growers. But it's the small to medium-sized growers who aren't independently wealthy who will be hurt the most by this ban of antibiotics. It's just that in some cases, in extreme fire blight conditions, when you know that you don't have a good tool like tetracycline, which is 85 to 90 percent

effective if used properly, that you stand to lose parts or all of your orchard. There's absolutely no fairness or common sense in this approach. Also, the fact that fire blight is the disease issue that is unique in its circumstances and it affects a specialty crop but a crop that takes many years and many thousands of dollars to bring to production.

In 31 years, we've probably used antibiotics six times and never on the whole orchard because you spray according to models of open bloom, temperatures, and moisture. All of the orchardists that I'm representing today follow this protocol of antibiotics as the tool of last resort to protect the life of our trees. I can't convey this message strongly enough. There are no fire blight resistant pears, and most of the interesting and good-tasting apple cultivars are also prone to fire blight. So the proposed solution to planting different varieties, as if it were as easy as changing your boots, is

no solution at all.

Thank you for your time and for listening with an open heart and mind to a passionate, long-time organic farmer and all the other farmers I represent. Thank you.

CHAIRPERSON STONE: Thanks, Brady. Jean, question?

MEMBER RICHARDSON: Brady, first, thank you very much for visiting your farm yesterday. That was really interesting.

MR. JACOBSON: Well, that wasn't my farm, Jean.

MEMBER RICHARDSON: Well, all the ones that we went to and you were there. We really appreciated that. We learned a great deal.

MR. JACOBSON: Thank you.

MEMBER RICHARDSON: In your orchards, have you tried the Blossom Protect that came out last year, 2012? And if you haven't or if you have, will you be using it or trying it this year as an alternative to

using the tetracycline?

MR. JACOBSON: Well, the Blossom Protect is something that I understand you need to spray multiple times. To my mind, since we have had a devastating episode of fire blight back when we were naive enough in 1990 that we did not use any antibiotics and lost almost 25 percent of our pear orchard, I don't think that it's worth the risk. It isn't proven. And when you have had such a devastating loss, you don't want to go with something until it's been widely tested in field trials under all circumstances.

And every year is not a fire blight year. As I said, we've used it probably six times. We wait and we watch and we hope that we never have to use it. But knowing that it's something that actually -- it's like killing your children, watching your children die. I can't even tell you how devastating it is to have -- it takes 12 years to bring pear trees into production. Twelve

years. It's not like some annual row crop. When you plant those trees and you watch and you spend thousands of dollars and so many hours of time, and then you lose those trees because you don't have an adequate tool or you're naive enough to think that you don't have to spray something like an antibiotic.

I hope and pray that something like Blossom Protect or some of the other products that are being tested right now will become an adequate substitute. But they need to be tested in field trials on orchards other than people that stand to lose everything.

CHAIRPERSON STONE: Harold?

MEMBER AUSTIN: Hi, Brady. Six applications, six times you've used it in 31 years. When you get to that point in time when you make that determination that you are going to have to use antibiotic or something for fire blight control, what criteria are you using in the field to help you make that determination?

MR. JACOBSON: Well, when we started growing organically, there were no Cougar Blight programs. There were no computers in general usage. And so there was the, you get out and you add all the degree days, the highs, the lows. You look at the models. Maybe you all know by now that it's a combination of moisture, vectors, and temperature that create the disease. And so in the old days, we added the numbers, and now we look to the Cougar Blight model. There are weather stations throughout our valley. People are fairly sophisticated now about this. People are also well educated about the overuse of antibiotics.

And so we do work with field men and they do tell us, and, you know, it's like the forest fire danger exactly. It goes from low to moderate and then you hope that it never goes to severe. If it goes to severe and they're telling me it's severe, then I would have to spray.

Fortunately, we haven't had that many times. As I said, we've probably sprayed six times in all of those years. So it is our tool of last resort.

We have done anything and everything that you could imagine as good husbands of the soil and our farm to create biodiversity, to create the kind of environment in our soil that actually produces natural disease-reducing antibiotics produced by the soil. We hope that those bacteria are not out there, and I can't imagine that the usage of tetracycline that I have seen and know that my fellow orchardists, the models that they follow, are going to create any kind of major problem to the health of the consumer or the health of the environment. And I'm standing here as a very longtime staunch environmentalist when I say that. I've built and staked my life on this so --

MEMBER AUSTIN: One more question. You mentioned the field men.

MR. JACOBSON: Yes.

MEMBER AUSTIN: Could you explain to us the role that the field man plays in your operation, as far as do you receive a written recommendation from the certified crop consultant to make an application?

MR. JACOBSON: Do I get a good recommendation from them? Are they people that I trust?

MEMBER AUSTIN: Well, do you work with a licensed crop consultant, and is your spray program based off of a written recommendation from a certified crop consultant?

MR. JACOBSON: I don't know that we actually have a certified crop consultant that you may be describing in our area. The field men are usually the agricultural field men associated with the, they're the ones that actually sell the chemicals. When we first started in this business, we sought out field men that could help us because nobody knew.

The research was not there. We had been guinea pigs. We actually had the first pheromone trials ever in existence, happened on our farm.

So we've been kind of guinea pigs for this. We've built up a lot of information over the years. So I almost know, without anybody telling me, without looking at a computer model, when I'm going to need to spray for fire blight.

So when my field man calls me up and says, "I guess you know that there's a severe fire blight infection happening," I already know that. So there is not, to my knowledge, a certified crop consultant that runs around our valley.

CHAIRPERSON STONE: Nick?

MEMBER MARAVELL: Yes. We appreciate you going with us yesterday on our field visits. You've been at this a long time and have been a pioneer in the field. Could you give us just a few little details about

what you've discovered along the way in trying to manage your orchard so that fire blight would not be a devastating occurrence? And where do you see, where do you see the future of this going, particularly with regard to pear production, which we understand is different in terms of its innate ability to resist the fire blight?

MR. JACOBSON: Well, there's all these things that you balance, being an orchardist. Economics is, unfortunately, a really important part of that. So we've tried and done a little bit of everything over the years. We, at one time, had 150 acres of high-density organic orchard. We took a century-old farm, and, when we came, we followed European models. We planted high-density orchards. They were only doing it at that point. There were a couple of people in Washington state that were doing it. We actually got bud wood from this fellow. His name is Grady Auvil in Washington who

introduced Gala apples in this country. We actually grew the first commercial Gala apples in the state of Oregon. We're now taking out a lot of our Gala apples because they've become a commodity. It's not because they're prone to fire blight. It's because they've become a commodity item, and they aren't worth as much money. So that's part of the reality of being an orchardist. You have to make money to stay alive.

So as beautiful as our farm is, the land use laws in the state of Oregon are extremely restrictive. If you live on farmland, you grow farm crops. That's kind of the way it works.

So we have gone to high-density blocks on dwarfing rootstocks for a number of reasons. I actually think that the airflow is actually -- and we have, we're on a slope, so we have a great sight. We get a lot of air drainage, natural air drainage, which makes us, in theory, relatively frost-free, although

the frost fans were going this morning, which reminded me of the difficulties of being an orchardist when you have one shot at a crop. Fortunately, we're not yet quite in bloom.

But we've gone with high density because that's the quickest way to actually get your money back. It also reduces the volume of spray that you use, and we found that early on. It's also a better usage of the land. We have 200 acres, and of that, now, we've downsized. We have about 50 acres of that of orchard, and so we have huge pools of biodiversity on our property. We have ponds and lakes, insectaries. I planted wild flowers all throughout the property. The central core of our property is all open space, gardens, lawns. We also pack and ship all our own fruit. So we're kind of vertically integrated. We were actually forced to do that because there was nobody packing organic fruit. We naively came and said we're here, we're going to grow

organically, but then nobody would pack our fruit. So we actually spun off a number of marketing companies. There was no distribution system set up. You know, this was kind of back in the beginning stages.

So we have gone with varieties now that are more heirloom varieties. It doesn't mean that they are not prone to fire blight. That's the unfortunate thing. So we've gone with things that I think that the consumers are much more interested in, and we also sell directly to the public. We wholesale. We're big enough that we wholesale and always have. But we also go to farmers' markets. We have people come directly to our farm to buy our fruit. We have worked at all the major markets sampling apples and pears. We have our finger on the pulse of the consumers.

So as I said, we now have eight varieties of pears. We have 26 varieties of apples that we've planted. For labor shortage reasons, for ease of picking, and for reduced

spray volume, for light penetration, and for the fact that there are no true dwarfing rootstocks for pears, so it takes a long time, a much longer time for pears to come to production than it does for apples. Apples are more precocious on the dwarfing rootstocks and maybe it takes five years before you can start to pick some fruit for sale.

Pears is a different story. But with apples still you have to imagine that it takes a long time to not only grow them, to pay yourself back. If you're talking about starting to introduce varieties into the public sphere for consumers, it takes years and years and millions of dollars, campaigns to actually make consumers want to buy certain items. But from my knowledge, the consumers really love what we grow. And we have Cox's Orange Pippin, Ashmead's Kernel, Newtown Pippin, these are ancient varieties, as well as we have Swiss Gourmets, Rubinettes. We have Honey Crisp. We have some Galas. We

have Jonagolds. I could go on and on. Sierra Beauties. I mean, 26 varieties. That would test my 65-year-old brain to have to tell you those.

But economics is really important and working with the consumer and giving them what they want is really important, as well.

CHAIRPERSON STONE: Jay?

MEMBER FELDMAN: Hi. Thanks again for joining us yesterday.

MR. JACOBSON: You're welcome.

MEMBER FELDMAN: You know, we saw a snapshot yesterday of different growers and practices, perhaps. I'm wondering if you felt we saw the range of variability in terms of management practices that go on or did we see some outliers, or how would you characterize what we experienced yesterday in terms of typical practices?

MR. JACOBSON: Well, I'm glad you asked that. And I have to be really careful as to how I answer that. I was not contacted

about that tour. I had no idea that that was going to happen until two days before the tour. And I was actually gone for three weeks. I don't think anybody tried to contact me.

But when I found out where you all were going, I kind of looked askance at that because I did not think at all that that was representative of our industry. So one of the growers actually, he was certified the year after we were, so he's a longtime grower, as well. But you'll notice that he had about five acres of pears left. They decided, they were struggling to make a living as a pear grower, and they took their orchard out and they planted wine grapes. So that's one of the -- it's almost like that voice doesn't get to be counted because the trees are standard trees. They're old trees, and there's only five acres of them. And I don't think that that's what we're talking about when we're talking about somebody that actually makes

their living as a pear or apple grower.

And the third person on the tour, the third group on the tour was a conventional orchard. And I think that our extension agent, who is not particularly well-versed in anything to do with organics, who actually set the tour up or was one of the people that set the tour up, thought maybe that that was a good idea to take you there because that particular orchard, and they have 700 acres of conventional orchard, and, of that, 20 acres are organic. They have had a history of problems with fire blight, and I think, in his mind, he was thinking, well, I should show them what the reality of what fire blight can do. And it is true. They've been devastated by fire blight, and it can do that. The same year that they lost a lot of trees to fire blight was the same year that we lost 25 percent of our pears to fire blight. And the world's experts in fire blight convened at our orchards, both of our orchards, talking about

the subject, trying to get more information about the subject.

But what I knew that you were going to pick up on and I already heard that asked was that they said that they had a spray program, that they use antibiotics as part of a spray program. And you notice that their spray person that was talking had been spraying, he had been their guy for 40 years.

So I don't think that they come from my perspective of being organic growers. They are conventional growers that were trying it organically and had been disappointed because it's so very challenging. And that part, I guess, I wish you would pick up on that it is very challenging. And he said they had, as part of their regular program -- I don't know any other truly dedicated organic orchardists that include that as part of their regular preventative program.

CHAIRPERSON STONE: Thank you very much for your time and your input.

MR. JACOBSON: You're welcome. Thank you for having me.

CHAIRPERSON STONE: Ib Hagsten is up. While Ib is coming up, is Angie Crawford here? Anthony Kritikos? Diane Brighton? Lisa Stoke? Stoke? Stoke? I got the Lisa part. Dave Murphy? Okay. Ib?

MR. HAGSTEN: Thank you. Good afternoon. My name is Dr. Ib Hagsten. I'm an independent organic inspector and chair of the IOIA Board. IOIA means International Organic Inspectors Association. During the dialogue about sound and sensible organic certification, we have seen NOP focus on improving communication, and thank you, Miles, for coming to our annual meeting.

The ACA is focused on reducing paperwork, and we are pleased to learn of some of the changes that are being done by the people behind me. During the focus on making certification simpler for the client and the certifier, there is little mention of

meaningful life for organic inspectors. Let me remind us that the organic inspector is the only onsite, on-the-ground, eyes and ears and nose for the certifier and for the entire verification process.

NOP oversees the organic program. The NOSB makes recommendations to the NOP. And while I'm here, I want to thank each of you for the often thankless job you do as an NOSB Board member.

The ACA manages the organic client certification, and the organic inspector is expected to visit the operation, observe, verify, collect, and summarize in the shortest possible time. In recent years, inspectors have tooled up to meet new NOP needs, like pasture rule verification, dry matter intake calculations, food safety verification, enhanced mass balance calculations, animal welfare assessments, and now pesticide sampling. Dialogue among inspectors in reference to Sound and Sensible, often we

heard moans relative to the issues that bother well-trained seasoned inspectors who have uniform IOIA training coupled with ample commonsense. Let me share two examples.

An inspector sits at a kitchen table to dialogue the review letter. Three of the six minor non-compliance issues are referenced to a missing tag or invoice that happens to apply to three sections in the OSP. When we allow one missing paper to result in three non-compliances, the farmer gives up, while the inspector is embarrassed on behalf of the ACA.

Example two. The inspector opens his clipboard to look at a farm map prior to the farm walk-around. The farmer says, "That's a two-year-old map. I sent a new one this spring." Now we're scrambling. How can we be sure we work off the same page?

In summary, please do not forget to consider your inspectors, your on-the-ground eyes, ears, and nose, when you try to

make organic certification sound and sensible. IOIA-trained inspectors are capable of seeing, hearing, interpreting, evaluating, assessing the OSP, the farm, the livestock, the fields, and the direct and indirect answers and cues received from the operator. However, when the paperwork gets too cumbersome, one, the farmer gives up, and, two, the inspector becomes a paper pusher rather than what was intended: an inspector.

Thank you for your consideration of the IOIA inspectors. Thank you.

CHAIRPERSON STONE: Thank you, Ib. I have a question. So in the vein of sound and sensible, apparently many inspectors use the checklist type of inspection form that somewhat mimics OSP sort of generically. How can inspectors using technology, if you do inspecting as you describe it, visual, that if the inspector sees it, it's the same as seeing it and checking it on a list, so how can we reduce paperwork but ensure, use your skills

as an inspector and convey that back to the certifier?

MR. HAGSTEN: Obviously, we have to write it down. We have to say it. He or she said the following; we can state that. We can write right on the paperwork. And, again, we can say we saw things, we heard things, but just to spend lots of time checking C tags or those type of things. Some of that is work that is just way too tedious that doesn't really serve very much of a purpose.

And, of course, we need to get out and walk around before we start looking at paperwork. How can we verify what the person is doing if we haven't seen the place? Forty-five minutes in a pickup truck with a guy, go out and checking the fence and checking the fields and digging the heels in the dirt, it's amazing how much you know about him and his operation versus trying to sit at a kitchen table and just flip pages and think that you know what's going on.

It's a good question, Mac. Thanks.

CHAIRPERSON STONE: All right. Thank you very much. Thanks for your time and attention and being here today.

MR. HAGSTEN: Thanks.

CHAIRPERSON STONE: So I think with -- Zea, I'll get you a little warning that we're ahead of schedule. My recommendation would be is if we can take a break now. If you need a few minutes to prepare for the Materials Committee, yes or are we ready to go? So what we have is we're about an hour and a half ahead, even though we're in two and a half hours into public comment time. So let us run a little long. We had some great resources at the podium.

So if we work through the materials in the GMO Committees, as are scheduled this afternoon, then I want to double back and make sure that some of these folks were delayed or got here that were

scheduled for sometime during today. We'll run back through the list and be sure that if anybody had opportunity that they're here, and we'll get them back up to the podium, as they were scheduled.

So, Zea, can you -- ready, or do you want to take a break to get ready? Okay, okay. Well, let's take a 15-minute break. I've got 5:30, but, actually, it's 2:30. So we'll come back at 2:45.

(Whereupon, the above-entitled matter went off the record at 2:27 p.m. and resumed at 2:47 p.m.)

CHAIRPERSON STONE: Board members, we're going to go back in session. We're taking up the materials. We are ahead of schedule, so we still want to respect that some of those that may have emailed a scheduled time may have planned their schedule very tightly around that. So we want to honor those, and we'll double back and check, even some of those that have scheduled to speak for

materials or GMO. So if we get a little bit out of order, we certainly want to get the feedback from those that are planning to give it to us.

So at this time, I'll turn the microphone over to Zea Sonnabend, the chair of the Materials Committee.

MEMBER SONNABEND: Thank you, Mac. Okay. We have three things we're going to discuss today. We have the confidential business information and petitions, the limited scope technical reviews, and the definition of production aids. So, first, Jay will talk about the production aids discussion document. We just need a logistical second here.

MEMBER FELDMAN: Thank you, all. Okay. And thank you for everybody that commented on this discussion document. I'm going to walk you through a PowerPoint here that gives you some of the justification for this, the legal basis for pursuing this issue.

And then, at the end, I'll summarize the kinds of comments we got. Obviously, being a discussion document, we will take all this information under advisement, and we will make a determination as to whether we need to do anything. And if so, we will come back to the Board and the community with a proposal.

Okay. The basis for this and the definition of this as an issue stems from OFPA Section 6517(c)(1)(B)(I), which allows substances to be added to the National List. And as everybody knows, there are categories of substances, the last one being the section there in bold that says "and production aids, including netting, tree wraps and seals, and set traps to keep barriers, row crops, and equipment cleansers."

So the question is what is, because that's a list of, perhaps, examples, that is a list, and what is the definition? So the next slide is what is a production aid?

The examples in OFPA suggest that

production aids are meant to include materials that have a minimal impact on food, soil, or the ecosystem. A bit of history here. In 2005, the NOSB recommended a much broader interpretation that was referred to the NOP for legal interpretation, and nothing has happened since then really.

In 2005, the recommendation read as follows "carriers, stabilizers, adjuvants, fillers, extractants, excipients, solvents, that do have an active function in the formulations of farm production aids, such as fertilizers, soil amendments, compost, inoculents, sanitizers, aquatic plant extracts, and fish emulsions, and active substances used in pest control, disease, weed, insects, nematodes, that do not fit into other OFPA categories."

So I think we agree pretty much in the Materials Subcommittee that there is a need for clarity in the NOSB practice. Only one substance, microcrystalline cheesewax for

use in log-grown mushroom production, is listed as a production aid on the National List. However, several items listed as crop or livestock impacts inputs on the National List do not fit into any of the OFPA category, and some recommendations for these materials refer to them as production aids. And, in fact, many of the petitions that are passed from the NOP onto the NOSB for review are identified as production aids.

So on this document, we received four comments. Wolf DiMatteo and Associates said that it does not support continued work on such a definition. NOC said, National Organic Coalition said the terms should be strictly limited to physical items with minimal direct interaction with crops and livestock, as well as chemical substances that are used on equipment but not directly on crops or livestock.

And then we received comments from Cornucopia and Beyond Pesticides that said

production aids include physical items used in production but not leaving any residues in the aquatic or terrestrial ecosystem and chemical substances used on equipment but not used on crops or livestock. And it also, these two groups also said production aids do not include any substances taken up by plants, chemical substances dispersed into soil, water, air, or plant surfaces.

So there you have it. We didn't get a lot of comments, but I think I captured them all. Thank you.

MEMBER SONNABEND: Thank you, Jay. So next we'll take up the confidential business information and petitions. This was also a discussion document, and I was the lead person on this. As we stated, this was brought before you because the procedure that we have now has not really served either the petitioner or the NOSB particularly well, and it's also been cumbersome for the Department.

The petitioners usually don't

realize what happens to their confidential information or what doesn't happen. And before I was appointed to this board, I found myself in the awkward position of talking to petitioners many times and being the one to tell them that the NOSB themselves hadn't seen their confidential information, which they had just assumed that people would see it before making their decisions.

Furthermore, we've been in dialogue with Lisa Brines from the Department who handles the petition process, and she informs us that many people don't even understand the instructions. And so it results in petitions having to be sent back and forth a number of times until they can get the correct format for the confidential business information and address all of the issues that are actually in the guidelines.

So we thought, well, we want to start reforming this process. And we realized that, in fact, as Miles mentioned this

morning, that, indeed, the whole petition guidelines and associated parts of the policy manual that govern how petitions are accepted and reviewed and TRs happen probably needs to be revised, and you will see that on our work plan when we get to the last day.

So we had put out a proposal, we had worked on a proposal. To make it clear to people in each subset of stakeholders in this, petitioners, the USDA and the TR contractors, the NOSB and the public, all are very clear about what happens, what can be kept confidential and what happens to anything confidential once you submit it. And that ended up in our discussion document as possible recommendation two.

Shortly before we were finalizing this, the Department came to us and said, well, why accept CBI at all? And we had, up until that point, just assumed that there was some reason why CBI had to be accepted, but we didn't really know what it was. And so we

thought, well, we might as well ask the public if they, what they think about that. And so that turned out into possible recommendation one, and this turned into a discussion document rather than a recommendation.

So we received ten comments on this specifically. Unfortunately, almost none of them were from people who actually had petitioned anything. In a few cases, they were groups who had helped support petitions for things, but especially not crop input petitioners. We didn't hear from any of them.

We did, however, have some good insight from the comments into what people would like to see. And I think everyone believed that this is needed. I think that was universal, which was our first question: is there a need to -- oh, let me scroll down here. Well, is there a need to refine the process? That wasn't our first question, but everyone agreed that this is valuable to work on.

People disagreed about whether CBI should be prohibited categorically or not. But everyone agreed, as is already the case but not so clearly spelled out, that the actual ingredient that may be contained within a petitioned item cannot be held confidential. So there's no such thing as confidential main ingredients, other ingredients, et cetera. The only thing that's confidential at the moment is inerts when they're used with a main ingredient that may be petitioned. And as you all know, we are planning to start the review of inert ingredients. But those are, generally, not submitted with the petitioned item directly.

So there was, the main differences in the comments submitted included whether manufacturing processes could be held as confidential or not. And some of the groups think, you know, most of the groups understood, and commenters, understood the reality that a lot of times your manufacturing

process is what's proprietary and not just the formula, which, of course, we would expect could be kept proprietary, but the steps and what order those steps occur might be confidential. And they have the right to this under the trade secrets law, but, in many cases, it doesn't serve us very well if we're trying to make a decision on whether something is synthetic or non-synthetic, agricultural or non-agricultural, and which section of the National List it belongs in.

We've also received a number of petitions which had significant CBI in the question about human health effects, and many petitioners, many commenters commented that this should never be allowed. You know, I, personally, when I look at a petition that has that, I will then look to a TR to see if there's public information that would come in about that that would not make the petitioner have to disclosure. But, further, if it's clearly a petition that probably isn't going

anywhere anyway, I'm less inclined to send it back for more work of the petitioner on the human health if there's really other things in the petition that make it clear I would vote against it in the first place. And we will see at least one petition on our agenda in the future that that was the case.

So on the issue of whether there could be an affidavit that would alleviate the need for absolutely full disclosure, we had mixed reactions, although nobody was violently against it and the certifiers tended to be the most supportive because they're used to dealing with affidavits in the context of excluded methods and other situations in reviewing certifications. And so the main comment we got on that was the wording had to be really tight so that the affidavit could really mean something because there's no point having a meaningless affidavit.

So, you know, people recognize that, some people recognize that, even if they

don't like it, they could see situations in which confidential information is appropriate. Recipes and formulas is the main one, but, perhaps things like market research data, if a company paid for their own market research and doesn't really want it confidential, or things that directly relate to financial matters of a business are appropriate things for CBI.

And then we received a comment from OTA to make sure that the policy would not be applied retroactively to when we adopt it, and I'm sure that will be the case when we do it. It will be only going forward and not backwards.

So we received good input, and we are going to take it back to our subcommittee and work further on CBI. And you will be seeing a recommendation from us probably at the next meeting. So thank you.

Next, Jay is up again to discuss limited scope TRs.

MEMBER FELDMAN: Okay. Thank you, Zea. This policy we actually propose as a policy. I think we're going to, for purposes of this meeting, turn this into a discussion document and take back the comments we received and consider reissuing this as a proposal for the next meeting. But I'd like to walk everybody through it just so you know our perspective on this and why we thought we should propose a policy at this time.

The current policy on TRs is in the Policy and Procedures Manual, and it allows flexibility in topics, questions considered in a technical review. The NOSB committee assigned for the review must decide whether there's sufficient information to petition. The committee can reasonably research any pending technical information or there is the need to secure a technical review from a third-party expert, and that's where we get the TRs.

In addition, when requesting the

assistance of a third-party expert to evaluate a material, a committee must identify the main technical review issues needed to be addressed, including but not limited to all uses of the petition material, all uses beyond what the petitioner has requested, all uses of the petition material in combination with other materials that have already been approved, interactions of the petition material not addressed by the petitioner, all possible manufacturing methods for a petition material, potential effects on public health and biodiversity, environmental risks, and hazards including but not limited to. This is our checklist, essentially.

So the purpose of this proposal goes like this: since the three criteria of environmental and health effects, essentiality and compatibility, so it's environmental health effects, essentiality and compatibility with organic production practices, all must be met in order for the material to be listed.

A full technical review is unnecessary if certain threshold issues are not met. Should those threshold issues not be met, considerable resources of time and money could be saved by conducting a first-stage TR that would be allowed by, that would be followed by a complete TR.

Now, you know, this was really viewed, at least initially when we put this together, as something that would create efficiencies and reduce costs associated with these rather expensive technical reviews. The process applies in those cases in which the NOP's review of the petition is unable to assign the substance petitioned for a crop or livestock use to an OFPA category and when the material comes to the NOSB because of a question of its synthetic/non-synthetic classification.

So the proposal was to incorporate into the manual, the PPM, basically, a procedure in which, before requesting a

complete TR, the reviewing subcommittee would receive a more limited review that would answer the questions below, and we put three questions there that would be answered. And the following checklist questions there, number one, two, and three: what categories in OFPA does the substance fall under; number two, describe the most prevalent processes used to manufacture or formulate the processes or the petition substance; number three, is the substance synthetic?

And we sort of had unanimous agreement on moving this forward. But then we received ten comments, which suggested we had more work to do on this. So total supporting proposal was four. This is from the public comments. And total opposing the proposal was six. But it's interesting, of all of them, there seemed to be an underlying support for doing something to streamline the process. MOSA supports the proposal as a sound and sensible approach to moderating technical

review work. We agree that checking threshold issues ahead of a more complete technical review is a wise use of time and technical resources. Beyond Pesticides, National Organic Coalition, Cornucopia supported the proposal but thought there was some clarity needed. And OTA said, "While we agree with the intent of the proposal and we believe there may be instances where a limited scope technical review would be useful, we believe the proposal, as written, is too prescriptive and is unnecessary at this time. We respectfully request that this proposal be withdrawn." We always do what OTA asks us to do, so we've withdrawn the proposal. No, seriously, we agree with that.

And then CCOF said, "We agree with the concept behind this proposal in that some petitioned items do not need to have a full TR for the subcommittee to decide on a course of action. However, the whole petition and TR process in the Policy and Procedures Manual

should be rewritten," which is basically what we're going to do when we bring this back to the subcommittee, "with a step-by-step process with the roles of the NOP and NOSB clearly spelled out in the initial assessment of each petition."

Now, I should note -- that's the last slide -- that NOP, I hope I'm representing this accurately, believes that we already have this authority, that we can ask the contractor to do a limited TR based on the subcommittee's request. And we will do that. We have done that, actually, in the Crops Subcommittee already. This was really an attempt to codify that process, to put it in our PPM, and to affirm it. So we will do that and bring it back to you all, hopefully, next time as a proposal again. Thank you.

MEMBER SONNABEND: And that's the end of the Materials Subcommittee presentation today.

CHAIRPERSON STONE: Do any of the

Board members want to comment or question on either of those? Okay.

MEMBER FOSTER: It just occurred to me last night when I was thinking about this on the production aids one, kind of the broad description or potential definition of what constitutes a processing aid. And this gets to a question I've wondered for a long time. Where does PVC pipe fit in? Where does hoses fit in, plastic trays for transplants things? And as I was reading those definitions, there's a fair amount of latitude there. And what I would not like to see is needing to petition plastic trays for transplants and hoses and greenhouse film and aluminum or steel or rebar or things that do have contact in a variety of, you know, situations. Historically, like stainless steel, well, it's synthetic. I just want to kind of get that into the discussion at some point because I don't want the definition to be so broad that it immobilizes us as farmers

and handlers and livestock producers. That's all.

MEMBER FELDMAN: Well, the broader the definition, the more materials we can let in. So it is a category, as you know, in OFPA, so the question is does it need to be constrained in any way and, if so, how, you know, so that the Board has the authority to review these materials in that category and knows the sort of range of materials that fit into that category or types of materials or types of interactions with soil and food. So that's what we are struggling with. And, you know, I really do hope if there's more input out there in the community that we could receive that as we take this back to the subcommittee because we really didn't get, like your comment just now, I mean, we need that kind of comment as a part of this discussion. We didn't get a lot of it.

CHAIRPERSON STONE: Any other thoughts around any of those material

discussion documents? Okay. Jennifer, a little heads up, depending on if these people are here before they're allotted time, you may start getting ready. Signing up for the materials public comment, we have Carol Boutard. Is Carol here? Craig Baker? And we'll come back at this, at their official scheduled time in case they're local and just dropped the kids off at soccer and they're on their way here. Christine Hall? Anthony Boutard? Peggy Miars? I see Peggy. And Darryl Williams? I saw him here earlier. Yes, you're on deck, Darryl.

MS. MIARS: Good afternoon. I'm Peggy Miars, executive director of OMRI, the Organic Materials Review Institute. My brief and non-controversial comments today address the proposal for limited scope technical reports, or TRs. And, Jay, I think you must have missed OMRI's comments in your summary, so I'll highlight them here.

We do agree with the intent of the

proposal to allow for limited or reduced scope TRs, and we agree that a recommendation is unnecessary at this time. OMRI currently has a contract with the USDA that authorizes our organization to bid on TRs, as requested, and it does include the fact that TRs may be limited in scope, including initial assessment reports and supplemental reports, as needed.

In addition, the categories in the evaluation question number one of the proposal seem to only address crop and livestock materials, and the Handling Subcommittee may have other questions for limited scope TRs for handling materials. And we do agree that the proposal should be withdrawn until a more comprehensive proposal can be drafted that possibly includes the other issues that are being discussed, such as review of other ingredients and whether to require confidential business information in petitions.

And on the topic of production

aids, since OMRI wasn't mentioned, I want to mention that OMRI did submit comments that included the definitions that we use for both crop and livestock products for production aids. In general, OMRI considers production aids to be substances, rather than devices. And, therefore, we limit the scope of review for production aids to be those that are generally meant to be applied directly to or come into contact with either directly or indirectly with organic crops, soil, animals, and food. And you can read our written comments for the specific definitions that we provided.

And that's it. And in my remaining time, I want to invite everyone to our reception tomorrow night hosted by OMRI OTA, organically-grown company, and Oregon Tilth. And we're going to start at 5:30 with organic apple and pear tasting so that we can all taste the fruits that have been discussed today, and we'll have more information on that

tomorrow. Thank you.

CHAIRPERSON STONE: Thank you, Peggy. Question, Jay?

MEMBER FELDMAN: Apologies for leaving you guys out. I remember reading those. I don't know how that got left out. I really apologize. And so we will take those comments back and look at them. I guess I'm trying to figure out, because we do, as a board, have a Policy and Procedures Manual and it does address technical reviews, and, in fact, your contract with NOP should reflect our board policy, to some extent, since it's a materials issue and sort of how we go about the process of conducting materials review. Is there a problem in memorializing that in our PPM?

MS. MIARS: No, there's not a problem with it. In fact, I think that the NOSB and the NOP should work together to include that information. I'm just saying that the specifics in the proposal are not the

same as what's in the contract.

MEMBER FELDMAN: Okay.

MS. MIARS: So you've got more detailed and prescriptive information than what we provided.

MEMBER FELDMAN: Right. But do the details in the proposal preclude you carrying out the contract, as you've agreed to, with NOP?

MS. MIARS: If it was changed to reflect the proposal? I'd have to go back and look because our proposal -- well, we haven't been awarded a TR at this point. So if we were and if our proposal was based on the information that we had at the time, it might be different based on if we had to put in more hours to answer more questions and do more research and that sort of thing.

MEMBER FELDMAN: Right. Since you mentioned that, do you, knowing what you know at this point, do you think that a two-part contract, a two-part process, say two stages

of a process where a committee might ask for a determination or a recommendation or interpretation of synthetic/non-synthetic classification of material assessment, and then you come back with that assessment to the subcommittee and the subcommittee says, well, because it was determined synthetic, we need now a full TR, do you think that will be in the aggregate, a more expensive final document than if we were to do it in one full shot?

MS. MIARS: I would say that it might be slightly more expensive but probably not too much more. As you can imagine, it's easier to do the work all at once, rather than putting it aside and then two months later pick it up and have to work on it again.

MEMBER FELDMAN: Yes, that was my only question. Okay, thank you.

CHAIRPERSON STONE: Okay. Other questions for Peggy while we have her? All right. Thank you very much. Appreciate offering the reception tomorrow night. Darryl

is up.

MR. WILLIAMS: Good afternoon. Darryl Williams with Oregon Tilth. You're invited to our reception tomorrow too. So some of my comments, a couple of them are materials based, others are for the NOP and calculating organic percentages.

So the limited scope technical reviews, we concur with OTA and OMRI on the proposal for the process for limited scope technical reviews.

Other ingredients. It's been said that evaluating other ingredients individually will make less work for the NOSB. We do not agree with this statement, as all of the other ingredients accompanying the material on the National List would need to be evaluated one by one separate from the material in question. This makes more technical reviews and more recommendations for the NOSB to accomplish.

The NOSB can evaluate the other ingredients while looking at the general

material, which allows a well-rounded decision to be made without revisiting the original materials' technical review and recommendation the other ingredients reside in. The other ingredients in a material may very well reside and be needed in multiple materials on the National List. So every time a material is added to the National List or reevaluated, the annotation for the other ingredient would need to be changed. This seems to be an arduous task and may not be feasible.

The annotation can hold information as other materials on the National List do to show the allowance of carriers, solvents, preservatives, et cetera, or a list of allowed other ingredients could be listed in the technical review or other location for reference.

Labeling of dietary supplements and body care products. In the marketplace, you can find many organic claims on body care and dietary supplements that are not certified

and, thus, not produced according to the Act. The lack of scrutiny in the organic labeling of these types of products has been substantiated by the preamble former NOP guidance and various articles. However, it seems as though the ones under scrutiny are the businesses that are certified, as certifiers are looking carefully at the labeling claims in their facilities.

Recently, we were told by the NOP that products of these types can make organic claims, but the organic claim may not modify an agricultural ingredient. So organic multivitamin is okay, where organic multivitamin with herbs is not allowed as a claim because of the word "herbs."

As an organic certifier, we see the way the NOP is looking at these products, but our concern is that not all certifiers have heard this the same way from the NOP. Because of this, we are asking for guidance from the NOP for labeling of dietary

supplements and personal care products. We see this as not only a way to align certifiers, but it will also alleviate unfair advantages for uncertified manufacturers, as well as increase market surveillance for non-compliant labeling in the marketplace.

We understand that the NOP and the NOSB are currently undertaking numerous guidance documents and has to prioritize the need for each. But we hope that this becomes a priority in the near future.

Calculating percentages. Oregon Tilth provided comments on the topic for calculating the percent organic in multi-ingredient products. Please see our comments for details about the necessary changes or clarifications to that document.

Aside from the proposal, we would like to see water be counted towards the organic percentage in ingredients other than those in the FDA standards of identity when they can be supported by sound science. The

FDA standards of identity is a stagnant list in a world of ever-growing ingredients for use in many types of organic products. We see that handlers are utilizing dehydration and concentration of ingredients to save in the transportation costs, ethics behind carbon footprint, and, most importantly, food safety. I have more but --

CHAIRPERSON STONE: Thanks, Darryl. Is there questions for Darryl? I've got one. Describe how, and I'm going to the other ingredients topic here, describe how the certifier cross-references currently if other ingredients within a National List item, how that verify that that item is compliant or not.

MR. WILLIAMS: Well, some TRs have listed the other ingredients that were looked at. Other ones don't. So the way Oregon Tilth looks at it is that these other ingredients were looked upon by the NOSB when that material was petitioned. Of course,

those other ingredients have to have a technical or functional effect in that material you're looking at, and they can't have any technical or functional effect in the product they're going into. So we, basically, allow the other ingredients as long as they have a technical or functional effect, and we do look at the TRs to make sure that, you know, to see if there were some that were recommended along with it.

CHAIRPERSON STONE: So if you saw a product X was in the TR for a given substance, do you then extrapolate that it must be okay in some different application, some different product?

MR. WILLIAMS: So you're saying that if I see an other ingredient in a TR for one material, would I expect it to be okay in another? No, I wouldn't be able to extrapolate that.

CHAIRPERSON STONE: Jay?

MEMBER FELDMAN: How often do you

not see a TR address other ingredients, or do you see them consistently addressing other ingredients?

MR. WILLIAMS: It varies. I couldn't really say, I mean, with all the technical reports out there, how many do and how many don't. I could say, you know, maybe half and half, I could guess. You know, it's really hard to say. I see a material, and then I evaluate it, and I look at those to see if there was anything mentioned in there.

MEMBER FELDMAN: And you may have already said this, but if you don't find it in the technical review, then what's the process from there?

MR. WILLIAMS: Again, that it has a technical or functional effect in that material and that it doesn't in the finished good.

MEMBER FELDMAN: Okay.

CHAIRPERSON STONE: Jean?

MEMBER RICHARDSON: Back to the

calculating percentage organic comments, could you expand on the comments that you were making there verbally and that are also in your written materials with regards to extracts, hydrosols, flavors, and the water-related issues in standards of identity?

MR. WILLIAMS: Sure. That one has been a really difficult one to figure out. Like I said, the standards of identity are very slim in the FDA standards, and a lot of them don't have what natural water occurred prior to the process to make the ingredient that has the standard of identity for. Currently, it's been interesting to try and evaluate an extract or a hydrosol to figure out what the organic, the contributing organic percent would be of that. It's extremely hard, and we've looked at -- so we do certification for NSF-305, cosmetic and body care. And they actually do have calculations for different fresh extracts, you know, an oil extracted from a fresh herb or a dried. And

even those are, they're hard to take in as accurate. You can end up with these calculations with a negative contributing factor depending on a scenario.

And I've been starting to do more and more research with other certifiers to see what a sound approach is to an extract. I've even talked to a body care professional that said in some of these extracts you could even consider tea an extract and that the contributing organic percent would be less than ten percent. So it's difficult. It's something that we're trying to figure out a sound approach to on extracts.

Fortunately, we don't see a lot of them going into other products where we have to pull out the water because the organic contribution of all the other ingredients is way more than the non-organic. So a non-organic may be in there at one percent, where you don't need to question that water content. You could just say that that qualifies as

organic.

So we haven't gotten ourselves into any situation where we wondered whether or not that calculation was correct. But I can see it coming in the future.

MEMBER RICHARDSON: Thanks. That was very helpful.

CHAIRPERSON STONE: Colehour? All right. Thanks, Darryl.

MR. WILLIAMS: Thank you.

CHAIRPERSON STONE: Okay. Again, we'll double back to make sure that anyone's name that wasn't here when we called their name for the entire day, we'll check at the end of the program here. So with that, Ms. Jennifer will begin the GMO Ad Hoc Committee Subcommittee discussion.

MEMBER FELDMAN: Mac, I have a question.

CHAIRPERSON STONE: Jay?

MEMBER FELDMAN: Are we going to discuss some of these proposals we'll be

voting on? I'm trying to figure out when that's going to happen on the, like other ingredients, for instance.

CHAIRPERSON STONE: Yes, during the Handling Committee.

MEMBER FELDMAN: Okay.

CHAIRPERSON STONE: We just got opportunity --

MEMBER FELDMAN: Okay. So he was commenting, right. Sorry.

CHAIRPERSON STONE: Yes.

MEMBER TAYLOR: Okay. Thank you, Mac. And good afternoon. I'd like to start with a slide about the mission of the GMO Ad Hoc Subcommittee, please. Thank you. The National Organic Standards Board believes that genetically-modified organisms must be kept out of organic food and accepts responsibility for making recommendations on policies that can strengthen the rule's approach to excluded methods.

The NOSB GMO Ad Hoc Subcommittee

will undertake examination of all the areas where GMO contamination poses a threat to organics and will attempt to provide leadership in clarifying what excluded methods actually are and how compliance to the provisions of the rule can be monitored. So we've received hundreds of comments from our public and organic consumer communities that address growing concerns for GMO contamination in their produce in their fields that affect and impact the food system and the need to keep a high organic standard.

Organic stakeholders are concerned about keeping genetically-modified organisms out of organic livestock feed, crops, and foods. These are some of the comments that we have collected from your comments.

Please do not allow the introduction, by contamination or otherwise, of organics by genetically-modified organisms and seeds. Maintaining the trust of the public and the integrity of the organic

standards is imperative.

Please keep our food safe. There is no reason to allow synthetic chemicals or genetically-modified organisms into the growing or processing of organic food production. I count on the certified organic label on the food I eat. I, along with many millions of humans, depend on organic food for our health and well being.

Preserving food planting and organic methods of integrity is of utmost importance to me personally, as well as protecting my private land from negative invasive techniques used by neighboring farms. Thank you for reading this.

Another comment. Keep GMOs out of organic food. The USDA is responsible for contamination prevention. Organic farmers and the NOSB and the Program must hold USDA accountable.

Consumers choose to buy certified organic food because they want to support

systems of production that protect and enhance human health and the environment. They also expect their organic food to be grown without the use of antibiotics, growth hormones, genetically-engineered organisms, and synthetic herbicides and pesticides. Preventing contamination of organic crops by genetically-engineered organisms is important to maintain the organic integrity.

Other comments. Harmful synthetics and GMOs must stay out of organic foods. We are on the verge of a very serious food crisis if we don't act now. Please listen to your voting public. You are our voice.

The hardworking members of the GMO Ad Hoc Subcommittee include the list that you have there. And we have before the public two discussion documents, one on dealing with excluded methods terminology and Zea Sonnabend will provide the discussion and summary of public comments, and then we have another

document that has been revamped, so to speak, and we're received additional comments on GMOs and seed purity. It's also a discussion document, and Colehour and Jay Feldman will provide a summary of the comments that we have received in regard to those documents. Thank you, Colehour.

MEMBER BONDERA: Okay. Thank you, all. So at the last meeting, we had put forth a discussion document on GMOs and seed purity. And we decided to extend that opportunity for additional public comment on this same discussion document. It's still as a discussion document but looking for more suggestions from -- sorry -- what did we say? Sorry. I'm a little bit distracted there. From seed and crop producers, ideally, to carry forth with this.

So I don't really, like I just was suggesting, it's not a brand new process. I don't want to take you through too much of the details, but I'll still quickly go through the

eight discussion questions that are in this discussion document that we did put forth. The first one is, essentially, is there a need to establish a seed purity standard? What's currently known about the contamination from GMO contamination? What testing methods are appropriate? How would some of the possibilities that we had put forth in the discussion document affect your farmer business? Is some of the suggestions that we put forth, you know, do you have better ideas or options? What's known about sampling, testing, and detection levels to be able to implement such a standard? What training, guidance, or resources do certifiers need to verify compliance for such a standard? And also what could organic seed producer do to safeguard against GMO contamination? So that's, very briefly, the different questions that are in the discussion part of the discussion document that we put forth.

So, yes, like I said, we extended

the deadline. So let me figure out how to make this carry on for me. There it is.

Let me just quickly mention what had happened in the previous public comment very briefly. I would say, generally speaking, like was said at the last meeting, there was general support received in response. And it is perceived as a piece of the whole process to protect organic from GE contamination. In other words, if, you know, the seeds are a critical component of that.

I think that I realized a few minutes ago that, from my perspective at least, this is a subcategory, to some degree, and I think I sort of suggest that there, of the concept or definition or explanation of excluded methods in OFPA, which is the topic that Zea is going to be addressing. So at some level, this is, because I think it's related directly to that need for an update of excluded methods, which is, generally, what people said. Really, to consider the other

pieces of the picture, since many organic producers, as we all can and should be aware, and, you know, it's not exclusively true but it's true, are using conventional seed in organic production.

So, quickly, I'll just talk about the highlights, in my opinion anyway, my review with help from Jay, of what has come from the written comments that we have received. And I'm not going to quote and cite a lot of details, but I think it's, nonetheless, important to go through it. And some of them are just generally taken, essentially, do not make organic seed less available is a concern that came up several different places in a couple of different ways but I think is very important for people to be cognizant of the fact that would testing mean that there's less organic seed available or would this process constrain that? And I think that that's important.

But I think, like I already said,

generally speaking, testing is needed, is really, in summary, what people said. But several people commented on a slow phase-in of what's already happening in terms of systems for looking at seed is important.

We put in the discussion document the -- yes, I'm not ready to review it, but we did put forth this zero in 3,000, yes, it's item number seven in our discussion points, seed sample, and we did get one public comment on corn seed that went into that, and that's important, I think, as one approach. I think that several people, several comments refer to the co-existence issue, and I think it's worth noting Mark Lipson has been working with AC 21. AC 21's mandate is to look at co-existence, which, you know, seeds is part of that. And I think that it comes to that concept of working together, but it comes to, you know, how to get there. And I think that co-existence of conventional and GMO production relates directly to the opportunity

to have seed that isn't GMO contaminated. I think that that's a significant and important issue, and I think Mark has been participating in our discussions within this subcommittee on this topic, and I think we will continue working with and trying to move that forward.

I think I realize right now, and I think in my last point it sort of referred to, but I think that in this point, as well. You know, some of the commentary suggests, and one of the comments, and I'm not looking at it so I'm not going to cite it specifically, refer to the concept that the USDA really should be gathering and reporting ongoing data, including sources of contamination and things like GE production sites must be a matter of record where contamination trends are mapped and really things like that technical support should be given for remediation. And I think my point is putting it back to the USDA to enforce containment but also that the NOSB and the NOP can and should be holding the USDA

accountable, and organic farmers, holding the USDA accountable to ensure that, not specifically or necessarily, but this relates to the co-existence topic, that it's possible to have organic seed.

And I think that that's my final sort of point, and then I'll get to the final point on there very briefly, which is I think it starts out with, I think our discussion document starts out with the concept of how can we go about this or how can we pursue this, and I think that that's sort of where we're at right now. And I think from the public comments that have come, and I was happy that there have been some, and, in my preliminary look through our oral testimony, there was going to be even more people at least including in their subject areas the seed purity topic, I think that people are definitely interested. I think that what we've seen is that we need more information on next options so that, as a subcommittee, we

can really take this information and figure out how to pursue either further research communications, maybe do a study. I think my personal general sense and from discussing it with the Subcommittee, it doesn't seem like we're going to be coming up with a recommendation prior to seeking more information, but I really think what I put there of adding it to the NOSB's research priorities is necessary.

And I think, at this point in time, if other Subcommittee members, especially Jay, if anybody has anything to add to what I've shared, I think that that would be fine. But I do personally look forward to, you know, any oral testimony at this meeting that we get on this topic. I think it will help guide our direction, so thank you.

MEMBER TAYLOR: Zea? Thank you.

MEMBER SONNABEND: Thank you, Jennifer. Well, as Jennifer provided in the introduction to the GMO Subcommittee, Ad Hoc

Subcommittee, consumers are united in not wanting any GMOs in their organic food. And as one of the commenters that she quoted stated, we are their voice and it's our obligation to help keep the GMOs out of organic food. So in trying to think strategically about how we do that, we have to deal with the areas that we can do something about and try to raise the level of visibility of these issues and keep putting pressure on the powers that are imposing GMO dominance onto the world and try to resist them to be able to keep organics free of GMOs.

So for all of those positive consumer comments who recognize this, and we very much appreciate the reinforcement, there are a few who commented about things that we can't really do anything about. Much as I think we universally would support labeling of GMOs on conventional food, we can't really do anything about that. That's a state-by-state issue, and we will support them in our own

states, as we see fit. And we feel that organic food already does not contain GMOs, and that's more of our responsibility to try and keep GMOs out.

We also are accused by some commenters of the ulterior motive of trying to sneak them in without their knowledge. And believe me, while I can be as paranoid as the next person, but I really hope that we're all on the same page here and we are not trying to sneak them in by opening up these subjects, some of which are very complicated, for discussion. We're trying to air them out, air out the issues with a goal of strengthening keeping GMOs out of organic food.

So, that being said, we proposed a very complicated and ambitious topic, and that was is the term "excluded methods," which is used for genetic engineering in the rule, really sufficient as a definition? Our paper is fairly complicated. It analyzes the actual words of the definition word-by-word and

phrase-by-phrase. Then it suggests a number of other possible terms that may or may not belong in the definition. It takes no stand either way on whether something should be or shouldn't be in the definition but asks the public for their input on what should and shouldn't be in the definition.

It also takes no stand on how we're going to achieve a new definition. We did not specifically say that we are going to open up the rule and actually change the definition in the rule. We didn't specifically say we were going to have guidance or some interpretation of it through guidance or any other format. All of that is still a ways away, and we will be looking at all of our options in the future.

So, you know, I hope those of you who objected to the whole idea based on the fact that it was opening the rule understand that that isn't necessarily the outcome of this, and we do, we expect this will be a

long-term project until we come to this stage of a recommendation about this.

So we asked several questions of our public about what they thought of what we had put forth. We got more questions back then we got answers to those questions, and we got a lot more questions back. And they were really good questions, and they were sort of all over the place, which is why I haven't tried to summarize them with slides.

But suffice it to say that we appreciate very much that some of you turned in articles with your comments that brought up more terms that we hadn't considered. We got lots of good information about what other countries are doing. A group in Switzerland talked about their situation in Europe, which was very helpful to us, as well as we heard from Canadian stakeholders and others concerned with international equivalency on this issue.

So I'm not going to be, you know,

highlight specific comments like we've done in many of the other presentations here but just say that we are going to thoroughly digest each and every one of them and we will come back in the future with probably a few more discussion documents before we come to a recommendation on this subject.

Also, later today or, not today, later in the meeting, you will hear that we're hopefully finally ready to pass a recommendation about public communication. The public communication document is designed so that we can have an open docket year-round so people can provide input, not just in the three to four weeks before each meeting. And we're hoping that that is going to be able to be used two ways so that, because, really, for a document as complicated as this excluded methods document, we should have been able to have it up for six months to get comments from everyone. And so we're hoping, in the future, we can have a long-term document that can

really have a chance to get out there and get comments in for a long enough period so that everybody can properly review it.

So that's what we're anticipating. And we expect a lot more work on this issue to come. Thank you.

MEMBER TAYLOR: Thank you, Zea. Mac?

CHAIRPERSON STONE: All right. Thanks, Jennifer. We have, I believe, 11 people signed up to comment as part of the GMO Committee. First up is John Tanzi. John is available. And, again, we're a little ahead of schedule, so we'll double back if we have the opportunity. Kelci Bynum? Laura Batcha, I know you're here. Dag Falck, I know you're here. Dag is on deck.

MS. BATCHA: Hi and thanks. I'm Laura Batcha with the Organic Trade Association. I serve as a vice president of the Trade Association, and I serve on two federal advisory committees that are relevant

to some of the areas I'm going to comment on. One is the AC 21 that advises the Secretary of Agriculture on issues related to co-existence. And then the second is the Agricultural Policy Advisory Committee, which is an international trade advisory committee to the Secretary of Agriculture and the U.S. Trade Representative.

I have signed up to primarily talk about the seed purity document, but I just wanted to clarify a couple of things that I'm hearing about the difference between the use of alternatives in the European Union versus the U.S. in terms of practices and alternatives and antibiotics. So I'll just quickly address that and then move on.

I think, primarily, the difference is to keep in mind that what we're talking about for alternative protocols that are under research here is a combination of a yeast product and a copper product. In the case of what the trials are looking at, it's the Blossom Protect and the Previsto.

In the United States, the Blossom Protect was first tested in `08, registered with the EPA in 2012. So it was not available for growers to use until 2012. The copper product, the Provista, which is a 3-percent copper solution versus the more widely available copper product that's a 50-percent solution, is not yet registered with the EPA. We expect that that process could be completed in 2013. It could get kicked out further.

So one of the primary differences between the way U.S. orchardists and European orchardists have been able to manage this is that they have had these tools available to them to use, the yeast product and copper products, in the management of fire blight. To date, the alternatives that are under research have not been available to U.S. growers, so it's not just as simple as the fact that they're used to antibiotics and that was they've just grown up with them and so they like to use them. The tools we're

talking about and the research have been available in the European Union and they haven't been available here.

And I think the only other thing that I'll note about that is that keep in mind the European Union standards for copper applications are a little bit different than they are here. They typically will use that higher solution of copper, the 50 percent, and the requirements in the EU for restrictions on copper have to do with kilograms applied per hectare per year that you cannot exceed over an annual basis in terms of application. They do not have the restrictions that we have around accumulation in soil and requirements to test for copper accumulation.

And then, lastly, in the European Union, the standards allow for the member states to issue derogations or what are temporary variances on that restriction. So you only have to hit that load rate on copper of kilograms per hectare on average over a

five-year period. And we've heard about fire blight coming in cycles, so you could actually use all of it in one year in a bad fire blight year and still meet the requirements in the EU standard.

So I just think there's a little bit of difference in terms of what is allowed and not allowed in the standards that may provide a little bit more color to the difference in how those practices have developed.

So the first thing I want to do, as I change gears, is to do a shout-out to NOP. We just completed our consumer survey for the fifth year in a row, and this is the first year that we have seen a statistically significant increase in the consumers' trust in the organic seal. So a ten-percent increase over where we've been tracking as a flat line historically, where we'd see 32 percent of parents report in that top box that they had high trust that if it was labeled

organic it was organic. We saw that jump by ten percentage points in the last 12 months, and so I think that that's important as we take a step back because you guys do all the hard work on the leading edge of continuous improvement where you're challenging the things that need to be pushed forward.

So if anybody wants to ask me about seed purity, please do.

CHAIRPERSON STONE: Well, that was one way to time it good with the light but not -- I think Terry still gets the prize on that. Zea?

MEMBER SONNABEND: I'm going to go a little bit beyond seed purity, but this might enter into it. What I'd like to hear is, from your AC 21 perspective, how our work can best support your work on AC 21 and whether that might include seed purity issues at all.

MS. BATCHA: Thanks, Zea. I think if you all are not familiar with the final

recommendations from the AC 21 to the Secretary, they were, in large measure, disappointing. It was a tough debate in terms of stakeholders that represented organic and identity preserved agriculture. We had about 5 of 22 seats on the committee, so it was a very tough discussion in terms of getting our point across about fair, equitable solutions to prevent gene flow and contamination.

There were a few highlights in the recommendations that were delivered to the Secretary that called for USDA to engage in data collection about the state of genetic purity of the seed stock as a whole and also a request for seed providers to give data to USDA about the contamination levels of their non-genetically-modified seed that they're selling into the marketplace.

So there's a piece in the AC 21 recommendation that could further this discussion if that data is actually collected. I like the idea that Colehour suggested about

adding that to the NOSB research priorities because I think that could signal to the Secretary that the NOSB agrees that that data collection is critical in terms of getting the conversation off the ground. So I think I would fully support that.

One of the challenges that we faced over and over again in the discussions at AC 21 was, no matter how we presented the information, the response we got was, well, it doesn't matter in the organic standards how much GMO contamination you have in terms of your certificate, there are no consequences. Therefore, we are not taking seriously your communication to us that there are economic consequences of contamination.

So I share that because that's what we heard repeatedly. So I think you saw it in some of the public comments from other groups. I think, in fact, ASTA weighed in saying there are no consequences, so we shouldn't even be talking about this. So

that's an underlying debate that, you know, is, quite frankly, challenging because you don't want to see people losing their certificates for things that are beyond their control. But at the same time, the forces that don't want to see those hard restrictions on gene flow use our processed-based standard without a threshold as a rational for not taking action.

CHAIRPERSON STONE: Calvin?

MEMBER WALKER: Would you finish your comments on seed purity and, two, the survey? That is very good news. Could you give us a little bit more on the 58 percent and the sample size?

MS. BATCHA: Sure. Happy to. I'll do the seed purity first, and I'll try to do a short version of it. You have my written comments. This is the second time we've commented on it. I think it's clear to the Board that OTA's official policy, unanimously adopted by our board, is that we think it's

time for the organic standards to evolve vis-a-vis GMO. And that includes looking at a seed purity standard as the first place to start, in terms of controlling the contamination of GMOs in organic products. We see the consumer data showing regular upticks, statistically significant, every year about consumers' concern about GMO in products. They want to look to organic as the gold standard in terms of avoiding GMOs.

What we hear from our members and the reason we've gotten involved more deeply in this discussion is that our members are, quite frankly, frustrated. They're seeing a consumer expectation out there for organic, and they're seeing marketplace requirements to not have GMO contamination. So there's a whole set of external requirements on the marketplace right now, whether you're an international trader or selling into retail, that expects that there's testing and limits on the amount of GMO that's in the product.

It's not required in the standard, but it is becoming de facto in the marketplace.

So whether you're a farmer or a grain elevator operator or an exporter or processor, your interacting with an ad hoc testing system that is existing outside of the organic standards. And whenever you have an ad hoc solution that requires testing, it gets very expensive. The same crop of corn could get tested numerous times throughout the system, and so the costs become burdensome. People are frustrated, and they've committed decades to their organic program, and we're hearing a lot of people fed up. We want to know that our organic certificate is enough to demonstrate that we're meeting this expectation in the marketplace. So it just kind of gets that simple. So it's not about -- I completely understand and we advocated for it at AC 21 the perspective that the makers of the technology need to take responsibility for their products moving into

other people's products where they're not wanted, and we're in full agreement with that. But the reality is our members and the farmers and the operators are already taking responsibility because they're having to do the testing, they're having to do the controls. And if you look at seed as a place to start, you could see how rationally then certifiers could engage with growers around the practice standards.

So a certifier can't come in and test a crop and say, oh, we're detecting GMO in the corn, and have any idea about how to work for continuous improvement because you just don't know what was in the seed when it was planted. If you can eliminate that from the equation, then the variables are much more discrete. It's buffer zones and it's commingling prevention in the supply chain. And then you can work towards improvement in those areas, and I think it's a very basic concept and I know there's all kinds of

details that have to get worked out. We wouldn't want any farmers left behind. We would want to know it was feasible. We wouldn't want to drive people away from choosing organic seed. We want farmers to be able to save their own seed. But, ultimately, if that standard came through on the seed bag, the farmer would know they had a chance to meet the market expectations when they planted it and harvest their crops and moved into the supply chain.

And they wouldn't have to be testing the seed. It could come in like the other standards of analysis that come in on seeds, and certifiers could use the five-percent testing requirement to, if they choose, determine whether or not the label is true and the farmer wouldn't have to be testing. So that's sort of the concept, and we'd like to see you all sort of push yourselves to, you know, we know it's going to take a long time, but we encourage you to make

a commitment in that regard.

CHAIRPERSON STONE: Jean?

MEMBER RICHARDSON: Laura, thank you for clarifying the situation with regards the lack of availability for commercial alternatives to the tetracycline antibiotic. What about the situation with Canada? Are you aware from the OTA what is used in Canada for fire blight control? Is it any different to the Europeans?

MS. BATCHA: They're not allowed to use antibiotics. We know that, so I would imagine their protocols are similar. They tend to sort of differ that way. I don't have the specifics on that. I could find out for you, Jean. Their tree fruit production is a little bit more geographically limited. A lot of their consumption of tree fruit comes from the U.S. in Canada.

CHAIRPERSON STONE: John?

MEMBER FOSTER: So I like this union of analytics and process. So what would

you guess is the, you know, the final outcome? Are we looking at more organic seed or less organic seed as the seed purity standards moves forward? As you know, many in the audience know, that's kind of what I'm about is more organic stuff, so that's what I'm interested in here with respect to seed --

MS. BATCHA: Yes, you know, I think you guys hear us. Sometimes, you don't like it, but consistently we say take the time you need so we don't leave farmers behind. That's what we're saying on antibiotics. So we wouldn't take a different position than that on this. We don't want to see farmers left behind, and we don't want to see acreage move out of organic.

I think, to answer that question, you'd have to really look at and ask the question of the farmers that are planting those row crops because you're talking about a pretty small set of crops that would be impacted, at least out of the gate, on this:

corn, soy, cotton, a couple of others.

So the extent to which people are already using organic corn and soy versus commercially-available non-GMO alternatives, I can't answer that question. But I think that's important because it may have a different organic use rate than, say, vegetable crops, John.

So I think you'd have to start with that, and you would want to make sure that you didn't lose growers. But I know that one of the most dramatic drops in acreage for organic and the difference between the `08 NAS census and the 2011 USDA production survey is in the area of corn and soy. We're already losing organic acreage.

CHAIRPERSON STONE: Nick?

MEMBER MARAVELL: Yes, Laura, just to play devil's advocate, and I know you know I've never done that before, why not let the marketplace handle this specifically within the seed industry? And, that way, the cost

would be restricted to the seed industry, and it would be handled on a market basis.

MS. BATCHA: You could certainly do that, and that's already happening. There are private contracts that are being put into place. You know that. So there's certain blocks that are not purchasing seed unless it meets that standard. So I think to codify it gives a level playing field for all organic farmers to be buying seed that's disclosed and labeled so that they can, you know, again, sort of have a fighting chance to get out the other side. And I think what you don't gain by that is preventing what a lot of folks are concerned about, which is the erosion of the seal as the gold standard in the minds of the consumer for avoidance of GMOs if it's happening outside of the organic standards itself. But by the time you all get that work done, the private sector will have moved and you'll probably have something that's more feasible and viable by the time you wrestle

all the details on it.

MEMBER MARAVELL: Well, and this is a little bit more of a statement than a question, but are we transferring the cost and the effort to the organic community here? And in the interest of full disclosure, I'm a corn and seed, organic corn and seed producer. Are we transferring that to the organic community here? Has that meant that we are giving up on looking for other ways to handle this situation?

MS. BATCHA: You know, I would really hope that that doesn't mean that we're giving up on other ways to handle that situation, and I think there are ways for the Board to continue to articulate that to the Secretary and keep the pressure on because there's what USDA perceives as legal limitations through their ability to put real teeth into contamination prevention protocols. That absolutely has to get addressed.

What we're hearing from our

members is the difference is symbolic more than it is, in some, actual. They're already taking responsibility. They're already having to test. They're already having to meet the market requirements. So the cost burdens are already falling on the organic community in a way that is not as controlled as it could be were it to happen through the regulatory framework.

So that's sort of the top level what I hear from our members is they're bearing the cost.

CHAIRPERSON STONE: Thank you, Laura.

MS. BATCHA: Thanks.

CHAIRPERSON STONE: So in the effort of trying to be in respect to people's schedules, we're going to back up to the folks that were here for materials, a little closer to their actual time they were advised to be here. Carol Boutard, you're here. And Craig Baker is on deck.

MS. BOUTARD: Should I start? Hi. My name is Carol Boutard, and I'm speaking on behalf of Marcus Kastel who can't be here today. I'm a member of the Cornucopia Institute and here today as a citizen lobbyist. Together with my husband Anthony, we run a certified organic farm in the Willamette Valley.

Although it is not on the agenda, Cornucopia would like to comment on the conflict of interest issue. We disagree in several ways with the memo by USDA's Mr. McEvoy to the NOSB chair, which appears to attempt to highjack the process of developing an improved conflict of interest policy, historically, under the purview of the Board.

In light of this recent memo, we urge the Board to reclaim authority. This is especially important given the USDA's severely guidelines for determining whether a conflict of interest exists. The NOP essentially states that no conflict of interest exists if

at least one other business entity has an interest in the vote, as well. This ignores the very basic definition of a conflict of interest, which has nothing to do with whether others have a conflict of interest, as well. Two conflicts of interest do not cancel the other out.

A conflict of interest exists when a Board member has an interest that would impair his or her objectivity when voting. A Board member's primary responsibility is to the entire organic community and to organic integrity. Yet, the USDA has changed the definition of a conflict of interest by adding the criterion of disproportionate benefit. A conflict of interest has nothing to do with whether others stand to benefit, as well. It is about whether a secondary interest impairs a Board member's objectivity and responsibility to the organic community as a whole.

If a Board member's employer,

including its CEO, lobbies NOSB members for their vote, as happened prior to last year's carrageenan vote, how does that Board member not have a conflict of interest? Was that Board member able to look objectively at the science and make an objective decision, given her employer's clear interest in the outcome of the vote? Just because another Board member has a conflict of interest doesn't mean she didn't. It means there were two Board members with a conflict of interest.

Again, this is about whether a secondary interest unduly influences a Board member's ability to look objectively at the material and vote in the interest of the entire organic community. It has nothing to do with whether others benefit, as well.

We are also concerned that the USDA sets different standards for for-profit business employees and non-profit employees. A for-profit business employee, according to the USDA, can vote as long as others stand to

gain from the vote, as well. But a non-profit employee is expected to recuse him or herself if a donation was received, regardless of whether other non-profits are also the recipients of charitable donations by a petitioner. This double standard is not acceptable.

For the upcoming tetracycline vote, we believe two Board members involved in organic apple and pear production have a conflict of interest and should recuse themselves to protect the integrity of the process. Our aggressive pursuit in this matter is not an attempt to embarrass any Board members. It would reflect a highly ethical approach to voluntarily step away from such a vote. Thank you.

And as a farmer who has carefully followed organic standards for many years, I was personally insulted by the memo from Director McEvoy because anything that challenges the quality of the USA organic mark

is unacceptable. Thank you. And I'm sorry I read that so fast.

CHAIRPERSON STONE: Thank you. Is there questions? Zea?

MEMBER SONNABEND: I'm one of those people you're accusing. How do you know I have a conflict of interest?

MS. BOUTARD: I personally do not know if you have a conflict of interest. In a direct question like that, I would like to refer to Charlotte Vallaeys, who would probably have a clearer notion of that.

MEMBER SONNABEND: No, no referrals.

MS. BOUTARD: Okay.

MEMBER SONNABEND: But you did accuse me in your statement, and I submit that you have no idea if I have a conflict of interest or not.

MS. BOUTARD: I have great confidence in Mark Kastel's impression of the events that occurred, and I would refer, I

would stand behind any statement that he made.

CHAIRPERSON STONE: Thank you for you being here. Thank you.

MS. BOUTARD: Thank you.

CHAIRPERSON STONE: Dag, sorry I stepped around you. And that puts Craig Baker on deck.

MR. FALCK: Hi. I'm Dag Falck, organic program manager for Nature's Path Foods. Thank you for this opportunity to comment. Nature's Path Foods is North America's first and still largest certified organic breakfast cereal producer, and our highest priority is to keep organic standards strong and to prevent GMO contamination.

We support tightening the excluded methods language to be more accurate. Rather than using specific examples, we propose broad but accurate descriptions. And I'll just give you a very brief example. I drafted a rewording of it. Methods that change the genetic material of an organism through

recombining DNA in ways that are not dependent on the use of conjugating sexual or asexual reproduction methods. And there's some more detail in my written submissions.

In general, we feel that the current standard does prohibit GMOs in organic food production, but it does not prescribe the necessary tools to prevent GMO contamination from increasing in organic. This must be addressed so we don't allow uncontrolled contamination to start creeping into organic food production.

GMOs cannot be seen. Therefore, we must use testing for a farmer to know if he or she is planting a GMO-contaminated crop or not. Without mandated testing for GMOs in organic, there is no way to stop GMO contamination increasing year by year.

We strongly propose that the NOP should prescribe the using of PCR testing and to set a maximum contamination level for the protection of the farmers. In our experience

as a manufacturer, 0.9 percent in ingredients is achievable but not easy for organic products. To achieve 0.9 ingredients, seed thresholds probably need to be set at 0.5 percent.

On the issue of how to express the levels, the proposal from the committee talked about a number of seeds in the sample, and we propose that that's not the best way to express. We think it should stay with the percentage because that's what's being used currently, and it's not confusing. And we think that using seeds in the sample would be confusing.

We do not think that organic should accept or tolerate any level of GMO contamination. A threshold is only a practical way to ensure farmer protection and to make it possible to measure and achieve continuous improvement. And as soon as possible, the threshold should be reduced until the day GMOs are eradicated in organic.

A different topic. Nature's Path also wishes to comment again on why we need nanotechnology regulated in the NOP. The urgency of this is increasing daily as the field of applied nanotechnology is increasing at a fast pace. Only April last year, the FDA came out with a draft guidance document for comment, including nanotechnology. It's in my written documentation comments so you can look up the link to it.

This guidance is moving in the direction of treating substances that are intentionally reduced to nano size in a different way than their macro-sized equivalents. Organic, at this point, does not differentiate that. We believe it's not difficult to clearly define and regulate nanotechnology in organic without causing unintentional disruption.

And, last, we feel, Nature's Path feels that it's time to ensure that tetracycline used in organic is ended. And

the only way to accomplish this is to ban it as quickly as we're possibly able to do so. Thank you.

CHAIRPERSON STONE: Thank you. Questions? Nick?

MEMBER MARAVELL: I was wondering, you refer to a threshold of GMO contamination in organic product at 0.9 percent. This is currently a standard used in Europe. Do you have any thoughts on whether or not the U.S. should just fall into line with that or create its own threshold separately? And then the second question I have is you indicated that, for seed, the threshold should probably be 0.5 percent, and I was just wondering if you could explain a little bit of your rationale basis for that.

MR. FALCK: Okay. Yes, I do believe we should stay with the 0.9 percent threshold for food, both because the EU has set that and also because the Non-GMO Project has several years' history with working with

that threshold. And so we know it's achievable. We know it's hard, so we know it's not an easy slam dunk kind of thing, anybody can do it. We know it's actually very difficult to do it. We reject product in our supply stream with that threshold.

So we think it's tough, but we think it's achievable. And we think that's kind of exactly where we need to be because the idea here, the objective is to use a tool to drive contamination down. So we have to set it where we can live with it and then drive it down. If we don't set it now and we wait another few years, that level, that balanced level is going to be higher than it is today. So the sooner we set it, I think the sooner we have the tools to start reducing it.

And so I think that is the level that we found from our experiences that is achievable. And, of course, it's handy to have the same level as the EU, as well.

The reason I recommended 0.5 for seed is because if you plant contaminated seed in a field, the contamination increases because what a GMO is is it's a technology tied to a living organism, a living and reproducing organism. So it's not like a pesticide where you put it on and it diminishes over time, you know, it dilutes in the environment. What a GMO does is it's tied to a living organism that breeds and reproduces, and pollen that is spread from that one plant goes and affects other plants. And then more seeds are genetically engineered going forward.

So, you know, theoretically at least, we know that chances of increased contamination, so if you start with a certain percentage of contamination in the field, chances are you're going to have a higher percentage of contamination at the end. That's why we need to start at a low level in order to achieve because there's other sources

of contamination, as well, in seed cleaning and so on.

MEMBER MARAVELL: I can understand that rationale. Are you aware of any studies or data on this? There's also a possibility that the GMO, I'm not saying this is true, but there's also a possibility that the GMO will not be as selectively adapted in a particular area and actually won't increase. It could go either way. But chances are, you are correct, it will continue to increase. But I was just wondering if you're aware of any data, any studies, or anything on that that would be helpful to us?

MR. FALCK: I believe there are some references to it in the Myths and Facts on GMO. Is that the right term for it? I think there's a paper by John Fagan and some other scientists. I think they treat that issue there, but I'd have to go back to find the specific source of it.

But some studies have been done,

but what we do know from experience, for instance with flax in Canada, you know, ten years ago there was some flax used and then it was taken out of the system because the farmers decided they didn't want to have it or the Flax Council of Canada decided that they wanted to end it. And so they did. They thought they got rid of it, and then years and years later the Europeans found it in Canadian organic flax shipments. So we know even with the best intentions, it got out of, you know, it grew.

So we do have some experience with that. Canola is another example where we know it started out being there, and then the contamination increased to the point where no certifier was willing to certify organic canola in Canada.

CHAIRPERSON STONE: Thank you very much. We have Craig Baker, and Christine Hall is on deck.

MR. BAKER: Hello. My name is

Craig Baker, and I'm a consumer, along with my family, of organic foods. I'm a member of the Cornucopia Institute, and I'm here today as a citizen lobbyist. I volunteered to help present testimony because I want to ensure the integrity of organic food. Today, I will comment on two items: production aids and limited scope technical reviews.

As more farmers switch to organic certification, more materials have been petitioned for use in organic crop productions. The approved materials give farmers more tools to use in their organic toolbox, but, at the same time, the NOSB must be careful to adhere to the categories of substances allowed via the Organic Foods Production Act.

One of these categories, the production aids, has been used as a catchall for any material that does not fit into any other category. But it is not intended to be used as such. We urge the NOSB to clarify

this term. The examples given in OFPA are clear. Production aids are materials that are not dispersed in the environment and are not taken up by plants.

We request that the NOP adhere to a strict definition of production aids. We also request that the NOSB adhere to a strict definition of production aids as they are asked to review the petitioned materials. The production aids category includes only physical items used in production without leaving any residues on the crop or in the environment. Production aids can also include chemicals used to clean and sanitize equipment but not used on crops or livestock. Materials that do not fit that description should not be called production aids. It may mean that some petitioned materials will not be reviewed for addition to the National List.

Using this strict definition will reassure consumers about the integrity of the organic label. It will also save time. The

NOSB need not review materials that do not fit the strict definition.

We support the proposal to establish a process for limited scope technical reviews. We support the proposal as a way to save time and resources in cases where certain threshold criteria are not met and a full TR would not be warranted.

I personally was shocked earlier today to learn that antibiotics are still being used in organic pear and apple production. Myself, as a consumer and father, am outraged that this has gone on for as long as it has. I'm asking you to please keep the 2014 deadline and remove tetracycline.

Lastly, I expect all ingredients, including ingredients of ingredients, to be either organic or on the National List. Thank you for your time.

CHAIRPERSON STONE: Thank you. Questions? All right. Thank you very much. Christine Hall is up, and Anthony Boutard is

on deck.

MS. HALL: Hi. Good afternoon. I'm Christine Hall. I am a member of the Cornucopia Institute and here today as a citizen lobbyist. I would like to comment specifically on the proposed recommendation number two and the confidential business information discussion document and why such a policy would be unacceptable and likely illegal in the sense that it would facilitate violations of the Organic Food Production Act of 1990.

The subcommittee asked the following question, "Provision one and possible recommendation two is about using an affidavit to supplement a CBI petition. Comment on whether this is valuable." Under no circumstances should a petitioner be allowed to sign an affidavit stating that its ingredients and processing aids comply with the OFPA, which is, essentially, a proposal to allow manufacturers to regulate themselves.

Such a provision would prevent NOSB members from fulfilling their legal responsibilities under OFPA.

Manufacturers are allowed to police themselves by the FDA, which allows manufacturers to make their own determination regarding the safety of new food additives called the GRAS system. This system has come under heavy criticism, rightfully so, from the Government Accountability Office, the Pew Trust, and the media.

The organic system was designed to offer an alternative where independent panels, the NOSB, independent scientists, the technical reviewers, and public collaborate on determining whether ingredients, additives, and inputs are appropriate in food production and processing. Allowing manufacturers to sign affidavits would be asking them to essentially perform their own technical reviews, which is entirely unacceptable both in the terms of OFPA and the consumer

confidence in the organic label.

The subcommittee also asked, "Should procedures, such as the confidentiality agreement, be developed that would allow NOSB but not the public to see any CBI?" The Cornucopia Institute believes that this would be unacceptable for several reasons. First, the NOSB, which is not a scientific body, benefits from public input. NOSB members depend on research and a diversity of opinion from professionals in the organic community to help them in their decision-making process. If certain information is withheld from the public, it weakens NOSB's abilities to solicit and consider public input from the public.

We oppose the proposal to introduce confidentiality agreements designed to keep the public in the dark. Second, the NOSB members need to be able to speak freely and discussions during public meetings must be uninhibited. It would be impossible for NOSB

members to discuss a petition if they have information that is confidential and protected from public disclosure and could potentially open up these volunteers or the USDA to civil action if confidentiality is inadvertently breached.

For these reasons, Cornucopia supports recommendation one. Possible recommendation two appears to be an attempt to keep the NOSB and/or the public in the dark. We need to move towards more transparency, not more secrecy. Thank you.

CHAIRPERSON STONE: Thank you. Questions from the Board? John?

MEMBER FOSTER: What's the source of the information you're drawing, you're commenting on here?

MS. HALL: It's Cornucopia Institute. Okay? Okay.

CHAIRPERSON STONE: All right. Thank you very much.

MS. HALL: Thank you very much.

Appreciate it.

CHAIRPERSON STONE: Anthony Boutard? I hope I'm pronouncing that at least close enough for you to recognize it.

MR. BOUTARD: Precisely. Thank you. Good afternoon. My name is Anthony Boutard. I'm a certified organic farmer here in the Willamette Valley, about 35 miles due west of here in Gaston, Oregon. And I am part of the extended voice of Cornucopia this afternoon, so I'll be reading some prepared remarks.

I'm going to be, I'm commenting on the Materials Subcommittee discussion document on confidential business information. The Organic Foods Production Act of 1990 specifies that materials may only be added to organic foods or to the National List if certain criteria are met. The NOSB is not able to make an informed decision whether a material meets these criteria if critical information is missing. I think this is really important

stuff, and this is from the heart.

The only acceptable recommendation in terms of ensuring that the NOSB decisions are in compliance with the federal organic law is proposed recommendation number one, and it should be right there up there in the front for you when you make your decisions.

Information necessary to make an informed decision based on OFPA's -- I hate those acronyms -- criteria includes the full list of ingredients, sub-ingredients, processing aids, manufacturing processes, and complete disclosure of all known human and health environmental impacts. OFPA specifically states that NOSB must work with manufacturers to obtain a full list of ingredients of petitioned materials. OFPA also states that materials cannot be added to National List if they're harmful to human health or the environment. The only way to determine whether a material is harmful to health or to the environment is by considering

all the available data, including knowing which processing aids are used and having access to results from all safety studies, and I say this, once again, from my heart as a scientist.

Therefore, petitioners should not be able to withhold any information regarding processing aids or studies on human health effects or environmental impacts. The discussion document mentions the Trade Secrets Act, but it is important to note that OFPA is not subordinate to the Trade Secrets Act, nor does it state that any information necessary to carry out the requirements of OFPA is exempt under the Trade Secrets Act. Clearly, the Trade Secrets Act does not supercede OFPA or the responsibility of the NOSB to carry out their responsibilities.

Participation in the organic industry is voluntary. If a manufacture is unwilling to share information about ingredients, processing aids, or human

health/environmental impacts to protect trade secrets, the USDA is under no obligation to make an exception for such manufacturers. Manufacturers who wish to keep the public in the dark about their ingredients and processing aids can sell their products in conventional food stream. They can also apply for patent protection if they have a truly unique product.

The organic label is an alternative to conventional foods, an alternative food system marked by transparency and careful scrutiny. Manufacturers cannot have it both ways. Transparency is a prerequisite to participation in the organic food system. And that includes me, too, as an organic farmer. I can't go to Tilth and tell them, well, you know, some of this stuff I like to keep under my wings because I, you know, but it is organic. That transparency should carry through the system from the farmer all the way up to the processor.

Any petition with ingredients or processing aids with human health/environmental impact withheld as confidential should automatically be sent back to the petitioner by the NOP without wasting the time of the NOSB. And I hope I haven't wasted your time this afternoon. Thank you. Good day.

CHAIRPERSON STONE: Thank you. Any -- we'll take that slip of the tongue. It happens all the time. Any questions? All right. Thank you very much. Kathy Felch? Kathy is here. Pam Larry? I think it's not Larry Pam, but if there's a Larry Pam we got it backwards. Very good. Jennifer Forthmuller will be on deck. If you'd state your name and relationship, please.

MS. LARRY: Sure. My name is Pam Larry, and I am a grandmother from Chico, California, and my business card says I am the initial instigator and chief rabble-rouser for Prop 37, the California ballot initiative to

label genetically-engineered foods. This is the first time I've been to the National Organic Standard Board meeting. I tried to come the last two times but was very busy with the campaigning stuff. Even though we did not prevail at the ballot, I can tell you that the movement to label genetically-engineered foods has increased exponentially around the country.

I come here representing myself, the people of California. I'm also a member of a nationwide coalition. I do not speak for them, but I have talked to many of them and I want to share with you some of the things that are concerns.

I was very happy to see that OTA had done a study on, a survey on confidence in organics, but I'm wanting to know if people know what the organic symbol means because I have learned quite a bit today and I can tell you that I trust the organic seal a lot less after having been here.

So what does it mean here? It means a lot, and it seems like it's a constantly moving target. I can tell you what it means out in the field, which is what I call the general public that I come in contact with, hundreds and thousands of mothers and fathers and grandmothers and grandfathers. It's a purity, it's a purity of food. They don't think that there are antibiotics or genetically-engineered stuff or pesticides or chemicals or synthetic stuff are in there. They think natural food is organic. So, you know, their concept of organic is nothing what it is. And I can tell you that if they knew they would be even less trustful than they are now. And I worry about that because I would like to see there be integrity in the seal.

I'm asked constantly during the campaign and I continue to be asked by moms, "Well, if I buy organic food, I'm safe, right? I know that that means that there's no genetically-engineered products in there."

And at the beginning of my journey down this rabbit hole, I would have said yes. But now I cannot answer them truthfully that way.

What I have to say to them is that if you buy USDA certified organic, you've got a lot more chance of there not being GMOs, of it not being contaminated. If you buy products that are Non-GMO Project certified, you have the knowledge that there's 0.9 percent or less in there. But just because you buy something organic does not mean it doesn't have genetically-engineered products in it, and I think that's the little secret that I don't hear talked about a whole lot.

Albert Strauss showed the chart up there earlier today. I've spoken with farmers in Jackson County who grow chard and who have plowed under their organic seed chard businesses because they are afraid that their product is contaminated with Syngenta's sugar beet stuff. I don't know anymore. I'm considering not even buying chard anymore or

table beets because I don't know what's even in my own area of Bute County because we grow a lot of sugar beets there. I no longer eat corn because I don't trust that it's not contaminated.

I would like to trust the USDA organic symbol. I would like to be able to tell other people to trust it. And we count on you folks to establish that gold standard that I've heard about so much here before.

Along those lines -- oh, my God, four minutes. Okay. So AC 21, I would like to please say that we do not, I have not talked to one person who thinks that just offering farmers insurance is a good idea. Organic farmers must be protected. You must hold a line, or you're going to be talking about the same kind of stuff to clean up the mess that I've been hearing about today with the antibiotics in five years. Please, establish the standard and then get it to zero tolerance. Thank you.

CHAIRPERSON STONE: Thank you. Any questions? Jay?

MEMBER FELDMAN: Hi. Thanks for coming.

MS. LARRY: Yes.

MEMBER FELDMAN: One, thanks for your good work on Proposition 35.

MS. LARRY: Seven.

MEMBER FELDMAN: Thirty-seven. I saw the statistics on the level of involvement from different groups, demographic groups of people, and the level of Hispanic population involvement in voting for, the level of African-American community is extraordinarily high. We tend not to appreciate that when we talk about people in different communities concern about food safety and purity, but it's even higher than the percentage of white educated women. So we have, we have a community out there that cares about their food and, certainly, your work has shown that.

What I'm interested in asking you

is about engaging the public more in this process as a process that takes what is a very sound and protective statute, which I hope you have a chance to sit down and read, the Organic Foods Production Act. It's a really interesting law but, without public involvement, cannot achieve the spirit and intent because, like any law, it can be overrun by special interests that want a piece of the pie, from an economic perspective, but don't necessarily buy into the core values.

So my question to you is, doing what you did in terms of organizing people in different demographic groups that care about what's in their food, what would you see as the opportunity to engage the public more in the process that we're engaged in here? Because I can tell you if you were sitting at a meeting like this of conventional food producers growing food in the chemical-intensive industrial, you know, side of the equation, the story is much, much, much worse.

So we need the help of people like yourself and your advice to this board as to how to better reach out and engage the public so that the standards that are in this statute, which are incredible standards of protection of human health, biodiversity, beneficial organisms, air, water, land, etcetera, how do we engage the public so that what you just communicated to us is really felt by this board so that it can, you know, adopt the right positions that enable it to grow? Because we want, everybody here wants it to grow. Everybody that's sitting at this table wants it to grow --

MS. LARRY: I believe that.

MEMBER FELDMAN: -- and are bringing their own perspective to that. But we can't do it without your involvement and kind of the people that you have worked with so effectively.

MS. LARRY: I would suggest you have town hall meetings where you get out --

I know it sounds like you guys work tremendously hard and when would you fit it into your schedule. I get it. And I also want to really express that I appreciate all of your very difficult, your hard work and your commitment to this. And I know that many of us have different definitions of stuff, and I want to honor that.

But town hall meetings. I think it's really important to not just do surveys because surveys, you're asking the questions, you're not listening to people and allowing them to just speak from their perspective without your direction. This is not to say never to do a survey. I'm just saying there are two ways of communicating. One, you only give -- I never can answer a survey because it's never my answer. You know, you only give me certain options or something like that. So get out and meet and talk to the people on the ground. You know, internet activism is really important. It's a crucial piece of what we

do, but not everybody is on the internet. A lot of people aren't.

There's a huge gap between what exists -- again, I've been working in this, like, double full time for two years now, and I still have a lot to learn. A mother doesn't have time to go out and learn, like I call it a college-level course of trying to figure out what's in our food supply. And so we count on things like this symbol to be that gold standard, not just, oh, well, you know, at least it's not as bad as conventional. That's the option that I'm seeing right now with USDA certified organic, and I would like to be able to go into my store and know that, when I pick this item up, I'm not going to, you know, in the future, we've got to figure out definitions. You know, RNAI, DSRNA, you know, the nanotechnology thing. Thank God you're at least looking at that. Synthetic biology. What are we doing to our food, and when did it become elitist to want real food? I mean, I

don't get that part.

But I would do a town hall meeting or five in each county. I'm just saying, I realize that that's cost prohibitive, but really listening to people.

MEMBER FELDMAN: Thank you.

CHAIRPERSON STONE: Nick?

MEMBER MARAVELL: Yes, I want to thank you for your wonderful efforts and the fact that those efforts have spawned more efforts in other states. You told us a little bit about your education, your evolution about finding out about GMOs and somewhat of their use or non-use in organic products. But you stopped short of saying what happens now when you tell those consumers that, well, it's not exactly like I thought it was with USDA organic? What is their reaction now? What is it that they are saying to you?

MS. LARRY: Well, first of all, I look at their faces, okay, and their faces, they're shocked. They have trusted this

symbol, and they feel betrayed. I mean, I don't mean to be overly dramatic here. I am an Italian Leo, so I tend towards the dramatic. But I'm just saying they feel betrayed, and many of them are angry. So that's what happens when you feel betrayed. You get angry.

Now, many of them are reasonable people, and they want to at least have something better than conventional, so they may still buy. But I am concerned that, as time goes on and the erosion of the trust, why would somebody go out and, if all they have is an option to get organic food is to go to Whole Foods, why would they be willing to spend three times more on something and then find out it's very little, there's very little difference between it and conventional? And that's kind of what's starting to happen more and more is different things are allowed in or, like, I'm finding out, I had no clue antibiotics were on apples or pears. I'm not

going to eat them anymore unless I ask and I find out directly from the producer.

So that's what happens, and they're getting angry and they're starting to really get angry. And the good news is is they're starting to get out on the streets more. Mothers who voted no on Prop 37 because they listened and they believed the PR, they're now so angry they're becoming leaders in their areas in California to fight this. And I want to know why it is that moms who are busy just trying to raise their family and have healthy families have to do this kind of work on top of everything else?

You know, I would like to see, we've got to hold the line at some point. At some point, you're going to have the same kinds of discussions with GMOs that I've been hearing about with antibiotics today. The sooner the line is drawn the less difficult and complicated it's going to be to remedy on the other side. You're not going to have to

do a whole bunch of clean-up along with establishing new protocols if you establish protocols now and stick with them.

And, really, I mean, 0.9 percent is fine, but, I mean, I think that truth is a very difficult thing for us to grasp sometimes, but what is this for? And maybe we just have to let go of some products as being organic, and that's the truth because if we don't tell the truth about the corn -- and the corn is contaminated. It just is. There's no amount of hiding, and I know we want to protect farmers and I want to protect farmers because I love farmers. Some of my best friends are farmers. But we have to tell the truth because if we don't tell the truth about this now then what else is going to be so contaminated -- and I realize that this board is not trying to sneak things in, okay? I don't believe that at all. But I do believe that there are interests out there that are, and the longer this board takes to fight, you

know, draw a very strong line, the more you leave yourselves open to being seen as colluding, whether you are or not. Does that make sense? I mean, not that I would agree with it, but I'm just saying, you know, I'm just saying.

CHAIRPERSON STONE: Thank you very much for saying it.

MS. LARRY: Sure. Okay.

CHAIRPERSON STONE: We were listening very closely. I was watching the Board members. Any other questions? Great. Thank you --

MS. LARRY: Thank you so very much for listening.

CHAIRPERSON STONE: Thank you for being here. Jennifer Forthmuller? I didn't see any movement a minute ago on there. Is there anyone that got an email that was scheduled to be here today that wasn't here when your name was called? Okay.

So, Board members, there were

several no-shows today. I let the conversation run because we had the opportunity. I think it was a great opportunity to ask questions and allow some positioning of the questions, which took a fair bit of time. So tomorrow we may not have that luxury. We heard a lot. We were able to ask a lot of questions on different topics today that we'll have to be a little more reserved tomorrow.

So I just sort of put that out there. If you acted like I was in a bad mood tomorrow, it's not that. It's just that it's a time factor here.

So we're scheduled to be back at 8:00 in the morning. Is there any other -- Michelle, do we have anything you need to let us know? So I appreciate all the input today, thank the audience. The audience, again, appreciate your participation. If you were one of those that got to stand here longer and I cut you off tomorrow, again, it's not

personal. It's I'm cutting the audience off, as well as Board members, depending on how the schedule unfolds.

So thank you. We will recess until tomorrow morning at 8:00.

(Whereupon, the above-entitled matter went off the record at 4:54 p.m.)

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C E R T I F I C A T E

This is to certify that the foregoing transcript

In the matter of: National Organic Standards Board

Before: USDA

Date: 04-09-13

Place: Portland, Oregon

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

Neal R. Gross

Court Reporter

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURE MARKETING SERVICE (AMS)
NATIONAL ORGANIC PROGRAM (NOP)
+ + + + +

MEETING OF THE NATIONAL ORGANIC STANDARDS BOARD (NOSB)
+ + + + +
WEDNESDAY
APRIL 10, 2013
+ + + + +

The National Organic Standards Board convened at 8:00 a.m. at the Hilton Portland & Executive Tower, 921 Southwest 6th Avenue, Portland, Oregon, Mac Stone, Chairperson, presiding.

MEMBERS PRESENT
MAC STONE, Chairperson
HAROLD AUSTIN

CARMELA BECK
COLEHOUR BONDERA
JOSEPH DICKSON
TRACY FAVRE
JAY FELDMAN
JOHN FOSTER
WENDY FULWIDER

NICHOLAS MARAVELL
JEAN RICHARDSON
ZEA SONNABEND
MAC STONE
JENNIFER TAYLOR
FRANCIS THICKE
CALVIN WALKER

STAFF PRESENT

MILES McEVOY, Deputy Administrator, National Organic Program

MICHELLE ARSENAULT, Advisory Board Specialist

MELISSA BAILEY, Director, Standards Division, National Organic Program

LISA BRINES, Standards Division, National Organic Program

A G E N D A

P R O C E E D I N G S

(8:01 a.m.)

CHAIRMAN STONE: I've got eight o'clock. We'll get the meeting settled down and we'll get to work this morning. We have a lot of information to exchange amongst ourselves in the room, so I want to have as much opportunity to do that as we can.

Again, thank you all for being here. We have an aggressive agenda. We'll start with policy and then we've got livestock. We'll have a presentation on aquaculture this morning, and the afternoon is dedicated to the Crops Committee, and obviously the tree-fruit conversation will dominate the afternoon.

So we want to have as much opportunity for information exchange as possible. This morning, Miles has a little thought for the day, I believe, is what we'll call this. So Miles, if you have a mic up there and thought for the day.

MR. McEVOY: Okay. Good morning, everyone. Oh, we've got a little less people here this morning. People just waking up, but we'll have a poem to share. This is a poem from Marge Piercy. It's called "The Influence Coming Into Play, the Seven of Pentacles."

"Under a sky the color of pea soup, she's looking at her work growing away there, actively, thickly like grapevines or pole beans. As things grow in the real world, slowly enough. If you tend them properly, if you mulch, if you water, if you provide birds that eat insects, a home and winter food; if the sun shines and you pick off caterpillars.

"If the praying mantis comes and the lady bugs and the bees, then the plants flourish, but at their own internal clock. Connections are made slowly. Sometimes they grow underground. You cannot tell always by looking what is happening.

"More than half a tree is spread out in the soil under your feet. Penetrate

quietly as the earth worm that blows no trumpet. Fight persistently as the creeper that brings down the tree. Spread like the squash plant that overruns the garden. Gnaw in the dark and use the sun to make sugar.

"Weave real connections, create real nodes, build real houses. Live a life you can endure. Make love that is loving. Keep tangling and interweaving and taking more in, a thicket in bramble, wilderness to the outside, but to us, interconnected with rabbit runs and burrows and layers.

"Live as if you like yourself and it may happen. Reach out, keep reaching out, keep bringing in. This is how we are going to live for a long time. Not always, for every gardener knows that after the digging, after the planting, after the long season of tending and growth, the harvest comes."

CHAIRMAN STONE: Thank you. Very appropriate. Appreciate that. We're going to jump right into the Policy Subcommittee, so

I'll turn the microphone over to Colehour Bondera.

Policy Development Subcommittee

MEMBER BONDERA: Okay. Thank you very much and good morning to everybody. I hope that this is a good, smooth, easy start to our day. So yeah, I'm the chair of the Policy Development Subcommittee, and we are going to present today a few items.

Let me just briefly talk about what we are and who we are. Like it says on the screen, the members are on the right there of the Subcommittee, and we're trying to provide guidance, clarification and/or proposed standards for operations, policies and procedures.

We're the internal subcommittee, and I think that one of our ongoing activities is the content and updates of the policy procedure manual, which is our -- like I was told when I started, is our bible, and I think many people do see it that way. I think that

that's vital, and our new member guide, and then working in collaboration with other subcommittees, where policy issues are unfolding.

So today, we're going to be talking about three items, and I guess that frankly, in my slide there on -- with the word "Recommendation" at the top is slightly erroneous since the third one is actually a discussion document.

But we're going to talk about the New Member Guide, Public Communications, and new material initiation discussion.

Generally speaking, and each of the lead people will in a moment talk about this, the written comments that came in, we received none on the New Member Guide, which is fine. It's for a new member of the NOSB. So it's really an internal process.

And really on the other two items, Public Communications and material initiation discussion document, there were not a lot of

comments. But we can, you know, listen to each of the lead people review those, and then we can listen to the public testimony provided at that time.

So I'm going to at this point in time turn it over to our initial one, who is Calvin Reuben Walker on the New Member Guide.

MEMBER WALKER: Good morning. Probably before Colehour sit down, I probably will be finished, so we can move on to other topics. As Colehour mentioned, there was three individuals signed up for oral comments. One was scheduled for yesterday but did not appear. One is scheduled, I believe, for today, maybe two.

So I have a total of about 500 slides, if that will be okay. I'm going to try to condense them down, just kidding Wendy. I condensed them down to four, and as Colehour mentioned, it wasn't a lot. There was no written comments, but I would like to share with you the changes that the Subcommittee

did.

(Pause.)

MEMBER WALKER: Oh, okay. Well, since I have so many slides I can go through them verbally. The purpose of the New Member Guide is primarily to provide new guidance for the members. As the Vice Chair of the Policy Subcommittee mentioned that it will be a while before we have any new members.

But still, we do this on an annual basis, and also another purpose is to help ease the transition of new members. Personally, I found it helpful. When the program -- when I was appointed to the Board, I found it very helpful to have a New Member Guide.

It is updated yearly, and the reasons are for policy changes, subcommittee membership changes, staffing changing and personnel additions. Of the updates, one was in '07. '08 there was two. In '09 there was one update. In 2010, there were one, and last

year was one update.

Next to the last slide. The general changes were one, membership changes. As you know, we had went from committees to subcommittees. So that was noted in the update.

Where we had executive director and Lorraine Coke in the document, we made the modification of our current individual, Michelle Arsenault, where there's an email, and she's our Designated Federal Officer.

We've replaced the Terms Committee, it was quite extensive in the document, to subcommittee. We kind of fine-tuned the Travel section of the document, and we also noted that the listing of Federal Agencies, All, was not in alphabetical order. So we placed an order to those.

And next to the last thing what we did was officers, as you know, changed. Last year at this time it was Dr. Barry Flamm, our chair. Subcommittee changes, so we made those

changes.

Another change we did, but it's still listing all the program personnel and numbers and emails. We didn't use that; we just created the link.

Last slide. This is -- oh, it's not. The committee consists of Colehour --

(Off record comment.)

MEMBER WALKER: Oh, how about that. Next to the last. Yes, that's the one. The committee members are the chair, Colehour Jordan Bondura, Jay Feldman, John Foster our Vice Chair of the Board, Nick Maravell, Jennifer Taylor and yours truly.

That is in essence the changes that we have provided to the New Membership Guide. As we said, there was no written comments and there was two individuals signed up for oral comments we'll get to hear from. That is it.

MEMBER BONDERA: Thank you very much, Calvin. We're going to go ahead and

move on directly to Jennifer presenting to us about Public Communications. Thank you.

MEMBER TAYLOR: Good morning. I'm going to talk just a bit about the Public Communications proposal.

The National Organic Standards Board recognizes that members have been specifically appointed to the Board to provide advice and counsel to the Secretary concerning policies related to the development of organic standards, and the creation and amendments to the National List.

A part of the Board's responsibility is to communicate with the organic community pertaining to the implementation of the Organic Foods Protection Act. The Board must receive and review information from the USDA National Organic Program and other sources during its deliberations.

Input from the organic community is valuable in the deliberations of the Board

and the program and the community decision-making process. So therefore, providing an online mechanism that allows the public to share information between official comment periods will help to facilitate public communication that informs the Board and program deliberation in several ways.

So the online system is intended to inform discussions early on in the Materials Policy Review process, reduce the amount of new information coming to the Board and the program late in its deliberations, increase transparency for the Board and the program and the public itself to ensure that everyone has access to the same information in a timely fashion, and to help the Board and the program to become aware of issues that may not be on the work plan, or may not have been generated internal to the program in the Board's process, but are important.

The NOSB recommends, then, that the program establish a year-round online

communication mechanism for stakeholders to communicate with the Board and the program on matters of interest and concern.

The recommendation that you'll find in the public document reads "The NOSB proposes amending PPM Section 6, Miscellaneous Policies, page 27, to add a new subcategory, which is listed in italics, `Policy for Public Communication Between NOSB Meetings.'"

The NOSB and the program seek Public Communications outside of the Board by annual meetings and public comment periods, to inform the NOSB and the NOP of stakeholders' interest, and to comment on the NOB's and N.O.P.'s work activities year round.

It goes on to state the PPM Section 2 adds a phrase to the role of an advisory board specialist to include the following language: "With support from NOP, identify, implement, administer and maintain a year-round Public Communications mechanism, Internet and other means, by which public

feedback can be received, posted and archived online for viewing by the NOSB and the NOP and the public."

As a result of the posting and the development of this information, the NOSB received public comment that were very supportive of the idea.

All of the comments were supportive of the idea, and the concept of providing a central location for all public communication to the Board and to the program, that would enable and enhance transparency in Public Communications, and provide access to information from the organic community is very important.

So some of the comments that we received, the positive comments were "We support the proposed Public Communications policy. It is important that the members of the NOSB have access to input from the organic community during all stages of its deliberations."

Another comment. "We believe that the development of a year-round online communication mechanism would enable thoughtful feedback on issues, provide an opportunity to identify new or emerging issues, prioritize issues and share timely developments in thinking." That's also how we were thinking about the idea as well.

Other comments include "We specifically like the proposed policy for Public Communications between the NOSB meeting, voted by the Policy Development Subcommittee. We think that a year-round public communication mechanism sponsored by the Board is preferable and more transparent. We appreciate this recommendation."

The Public Communications proposal in itself is seeking to establish the development of a year-round online communication mechanism for all stakeholders to communicate with the NOSB and with the program on matters of interest and concern.

The Subcommittee vote on the proposal was done on, excuse me, on January 22nd, and six of the members of the Subcommittee voted to approve the proposal and the recommendation, and two were absent. Thank you.

MEMBER BONDERA: Thank you very much. At this point in time, I would like to have Jay Feldman talk about the discussion document on material initiation that we had put forth, that I think he will be able to talk about the public comment that came in on that after he introduces it. So thank you. Jay.

MEMBER FELDMAN: Thank you Colehour. So thank you. Okay. This is a discussion document on materials review initiation.

The statutory basis for work in this area stems from OFPA 6518(n), which states the Board shall establish procedures under which persons may petition the Board,

for purposes of evaluating substances for inclusion on the National List.

This issue is addressed in the policy and procedures manual, and which says the PPM policy dealing with NOP requests for modified or new standards, which we call the NOB-N.O.P. collaboration, reads as follows:

"Recommendation for modification of existing standards or new standards. The NOSB will use the decision-making procedures outline in Section 8 to justify modifying existing standards or proposing new standards. The NOP may request that the NOSB develop recommendations for new or existing standards.

"The request should be in writing, and should include a statement of the problem to be addressed, background including the current policy or situation, statutory or regulatory authority, legal situation, desired time frame for receiving the recommendation. The request will be posted on the NOP website."

The manual goes on to say "The committee work plan arises out of these main situations, items committed or assigned to a subcommittee by the Board during an official session, items that are reviewed by a subcommittee on a regular basis, such as a materials sunset review, for petitions submitted by members of the public, requests or suggestions from the National Organic Program such as clarifications on a particular issue or guidance on enforcement, proposals stemming from the Subcommittee members' contact with the organic community.

So the purpose of this discussion document, four points. Clarify whether the policy on NOB-N.O.P. collaboration covers materials review.

Clarify whether NOSB initiated proposals arising from contacts with the community may include materials review. Clarify the process used by the NOSB in initiating review in these cases, and to

receive feedback on priority of petitions.

We received seven comments on this, and we may hear that we received more, if my work from yesterday is any indication. But I hope I covered them all. There were seven comments on the proposal. Wolfe, DiMatteo & Associates, OTA, Hain Celestial Group, White Wave and California Natural Products all objected to considering the issue, but at the same time offered comments.

Beyond Pesticides and Cornucopia did not object to considering the issue and offered comments. All commenters agreed that all materials issues should use the public petition process.

All except Wolf DiMatteo said that the NOSB-N.O.P. collaboration process covers materials review, and Wolf DiMatteo said to stretch the interpretation of the NOSB-N.O.P. collaboration section of the PPM, as has been suggested in this discussion document, would not be in the interest of the stakeholders,

who through OFPA, are the persons that may petition the Board regarding the National List.

And then no one objected to the current priority-setting process. Thank you.

MEMBER BONDERA: Yeah. I think that that wraps us up in terms of where our Subcommittee worked and what we did. I'm going to pass it back to our Chairman.

Public Comment/Policy Subcommittee

CHAIRMAN STONE: Okay. We have two people signed up for public comment. First up is Sophie Sherman-Burton, and on deck will be Steve Connor.

Good morning, and just if you're not familiar, some of you weren't here yesterday, it's your first time. There's a little green light. When it goes yellow, Michelle, that means you have like one minute or something? Then when it goes red, it makes an obnoxious beep.

MS. SHERMAN-BURTON: Thank you.

CHAIRMAN STONE: Thank you, and welcome for being here.

MS. SHERMAN-BURTON: So my name is Sophie, and I'm a member of the Cornucopia Institute, and here today as a citizen lobbyist.

I just wanted to comment before I begin that I am really concerned about the use of antibiotics in our orchards, not just because of residues but because of the medical implications as well.

So the Cornucopia Institute supports the proposal to establish a year-round online communications mechanism, to facilitate communication between organic stakeholders and NOB and N.O.P.

The ability to communicate year-round will benefit the NOB and the organic community as a whole. Thank you for this proposal.

We strongly urge the N.O.P. and NOB to ensure that this mechanism will not

become a substitute for any of the other vehicles for public announcement and participation that are already in place.

However, Cornucopia believes it is unrealistic to expect NOB members, who are busy enough volunteers as it is, to log on to an online forum on a regular basis, to ascertain if there are any noteworthy recent postings.

Therefore, we suggest a daily digest email be sent to NOB members' email addresses, as well as to interested public stakeholders. This will allow the proposed forum to become a means for NOB members to keep a pulse on the organic community, without becoming overwhelmed with additional responsibilities for logging on or reading comments.

Cornucopia has some additional suggestions for maximizing public input. Cornucopia is concerned with the short time frame for submitting comments to NOB

discussion documents and proposals. For the Fall 2012 meeting, the public was given 25 days to comment.

For the Spring 2013 meeting, there were 22 days between the public announcements to the organic community and the due date for comment.

One way to lengthen the time frame for submitting comments is by posting discussion documents as they become available, rather than waiting for the semi-annual meeting notice, using the proposed online communication mechanism and using the N.O.P. Insider to alert the public.

Recent discussion documents have often been long, detailed and highly technical papers. These take time to read, research and analyze, and 30 days or 22 days, as was recently the case, is simply not enough to adequately address these extensive documents.

Some of these discussion documents were finalized prior to the agenda posting,

sometimes weeks ahead of time. Since it is a discussion document, often with a long list of questions that the NOB Subcommittee seeks public input on, it would be advantageous for the public to have access to these documents as they become available.

For example, the discussion document on GMOs and seed purity was first posted prior to the Fall 2012 meeting. The same discussion and questions were reposted for the Spring 2013 meeting, but the public was not notified that this was forthcoming.

The purpose for the reposting was to gather additional input from organic seed producers and handlers. If additional input is desired on a discussion document, the document could be immediately posted.

This would allow discussion within the organic community, and allow time for the input the NOSB is seeking. We would also suggest that the deadline for commenting on discussion documents be lengthened to at least

30 days past the date of the meeting. Thank you for considering Cornucopia's comments.

CHAIRMAN STONE: Thank you. Are there any questions for the presenter?

(No response.)

CHAIRMAN STONE: All right. Thank you very much. Steve Connor.

MR. CONNOR: Hi. My name is Steve Connor, as he already told you. I'm a member of the Cornucopia Institute, and I'm here today as a citizen lobbyist.

When I'm not up here outside my comfort zone, I run a scaffold company here in town. I've been eating organics for about the last ten years, and I never get sick anymore. It's in my interest to uphold the organic policies that we have set forth in the United States.

Cornucopia believes in transparency and maximizing public engagement. For this reason, we believe the NOSB and the NOP should follow the same procedures as the

public in initiating material review. We can think of no situations where it would be appropriate for a change to the National List to bypass the public petition process.

While it's entirely reasonable and appropriate for NOSB members to be proactive and initiate material review, their position on the Board should not enable them to bypass the public petition process, eroding transparency and public participation.

We believe the existing prioritization schedule, as outlined in the policy and procedures manual, already adequately ensures that the most important items, petitions to remove materials from the list, or the priority given to materials for which environmental or health concerns exist, be dealt with on an expedited basis.

Material review initiated by the NOSB or NOP should be held to the same prioritization schedule. The committee asked for additional comments. Cornucopia would

like the NOSB to develop a policy for the reconsideration of yes votes on material review.

Under Roberts Rules of Order, a member of the NOSB who voted with the majority to, for example, add a material to the National List, but then changes his or her mind after the vote, can offer a motion to put the item back on the agenda.

There have been a number of instances in the past when Board members, especially new Board members, voted to approve a material during the meeting, only to discover after the meeting that some of the information that they relied on to make this decision was materially flawed.

In such cases, we believe there should be an established mechanism outlined in the PPM for Board members to put the item back on the agenda, and call for a revote at the next meeting.

Cornucopia also encourages the

Policy Development Subcommittee to consider recommending a prioritization schedule for standards development. The NOP currently instructs the NOSB to give priority to petitioned materials.

This has led to slow development of standards, including in cases where existing standards needed clarification, such as pasture rule and for the outdoor access for poultry.

We believe that the clarification of standards, especially when they involve loopholes being exploited, should be given priority over the development of new standards.

Priority should be given to clarification of existing standards, when members of the organic community claim economic harm arising from the lack of clarity on the existing rule.

Examples include outdoor space for organic poultry, or the alleged loophole

allowing continual introduction of conventional replacement dairy cattle on organic dairy farms.

Development of new standards that are not explicitly required should only be worked on after loopholes have been closed, and after standards required by OFPA, such as peer review, have been adequately dealt with. Thank you very much. That didn't feel like four minutes.

CHAIRMAN STONE: Thank you, Steve. Is there any questions for the presenter? Waldo.

MR. FOSTER: So a couple of times you mentioned bypassing the petition process, where I'm not seeing anyone wanting to do that. So where are you urging us not to bypass the public petition process, and why is that a concern for you?

MR. CONNOR: Well, I'm not necessarily saying that there are, but it's always a good policy to keep aware that we

want to keep the foxes out of the hen houses.

CHAIRMAN STONE: Thank you. Okay. That's it for this session. Mr. Chairman, did you want to proceed with the vote, or are we going to wait until Thursday?

MEMBER BONDERA: At this point in time, I think it's -- I would entertain if there's discussion among Board members on these subjects to pursue that. But if there's not, I think that we could move forward with the vote. So I would entertain any discussion.

CHAIRMAN STONE: Any discussion from the Board on these two proposals, New Member Guide or Public Communications? Jay.

MEMBER FELDMAN: Excuse me. Thanks, Mac. Just to say that I'm really pleased at the progress we've made on this whole Public Communications thing.

I think it's, it would be incredibly helpful to the public and to the Board and to the program, to have the insights

of the public on an ongoing basis.

Yeah, it will be more information, but it will be more timely information to the deliberations of the subcommittees, and less, hopefully less 11th hour sort of decision-making, where we're getting new information at the last moment, and trying to integrate that into our final decisions.

So I don't sense any objection. I'd like to hear if there is among any of the Board members any objection. But it sounds like there's, this is one of those consensus proposals. I hope I'm correct about that. Thank you.

CHAIRMAN STONE: John.

MEMBER FOSTER: So I agree. I think that progress on this has been terrific. It's a pretty different place now than it was when it started.

My one concern I have is some comment came up with a daily digest. I don't know about other people, but I get about 300

emails a day, and I need to really deal with about 250 of them.

One more doesn't sound like a lot, but when the content is as significant as this is, it is a lot. So I'd just, I'm not -- I don't want to sign on through this document to a daily email, and that's putting a lot of burden on the program also that we can't count on. But in concept, I like the idea.

The other concern I have is that in a small town when you put up a stop sign, that implies that there's going to be people held accountable when they don't use it anymore. Same thing here. If there's information being delivered to Board members on a regular basis, there's going to be lots of opportunity for criticism if we're not reading it every day or every week.

That worries me too, just because you have exposure to information. It's going to -- I'm sensitive to kind of what, to not being able to keep up, all of us keeping up.

I want to make sure that there's some sort of cushion that we all have, because a lot of, you know, everyone on the Board has their own life, and I want to make sure that we're not going to be --

Just because someone submits something on Tuesday, that we're all going to be accountable for knowing it on Wednesday. That's it.

CHAIRMAN STONE: All right, thank you, and in our conversation with the program, this isn't like a listserv that's going up next week or something. This is going to take quite a while to determine staffing and capabilities and filtering and all sorts of things that social media has gone through, to protect it and make it a useful tool.

So this is, this will be a while, a work in progress, to see what it actually looks and feels like. Miles.

MR. McEVOY: Yeah. As I mentioned in the opening remarks, the program is very

supportive of this concept of having an ongoing Public Communications channel, both for the program and for the NOSB. Jenny Tucker, the Associate Deputy Administrator, assures me that we can set this up.

But we're going into a little bit of unchartered territory of the actual mechanisms for doing that, if you have some concerns about how much time and resources it will take for us to do it.

But we're very excited about the project of getting an ongoing Public Communications system in place. So thanks.

CHAIRMAN STONE: Okay. Anything else or proceed with the vote?

(No response.)

CHAIRMAN STONE: Okay. I think we'll, just since Francis is brand new, I'm not going to make him be the first vote coming out of the gate. So that puts it over to Colehour. So is there any conflict of interest does anyone have on this

recommendation, or declaration of interest is actually the word.

(No response.)

CHAIRMAN STONE: Seeing none, and again, to those in the audience, this is discussed at the Subcommittee level.

I just want to make sure that as we get to the actual voting, if any member has had thoughts or something that's arisen or changed since the Subcommittee conversation started, this is public transparency of that. So seeing none, Colehour, proceed with the vote.

MEMBER BONDERA: You need to have a motion on the table.

CHAIRMAN STONE: Oh, that would be good. The recommendation is to accept the revised 2013 -- oh, we're on the communications. Excuse me. Pardon? Start with this one? Okay.

The recommendation is to accept the revised 2013 NOSB New Member Guide that is

attached and was presented in principle earlier by Calvin.

MEMBER FELDMAN: I so move.

CHAIRMAN STONE: Is there a second?

MEMBER TAYLOR: I second.

CHAIRMAN STONE: Any further discussion?

(No response.)

CHAIRMAN STONE: Seeing none, we'll start the vote with Colehour?

MEMBER BONDERA: Aye.

MEMBER FAVRE: Yes.

MEMBER SONNABEND: Yes.

MEMBER FELDMAN: Yes.

MEMBER RICHARDSON: Yes.

MEMBER DIXON: Yes.

MEMBER FOSTER: Yes.

MEMBER WALKER: Yes.

MEMBER FULWIDER: Yes.

MEMBER AUSTIN: Yes.

MEMBER TAYLOR: Yes.

MEMBER MARAVELL: Yes.

MEMBER THICKE: Yes.

CHAIRMAN STONE: The Chair votes yes. That was unanimous. Thank you very much. We will move to the recommendation on public communication. The recommendation is NOSB proposes amending the PPM Section 6, Miscellaneous Policies, page 27, to add a new subcategory in italics. "Policy for Public Communication Between NOSB Meetings."

The NOSB and the NOP seek Public Communications outside of the Board biennial meetings and public comment periods, to inform the NOSB and the NOP of stakeholders' interest, and to comment on the NOSB's and NOP's work activities year-round.

PPM Section 2, page 13 adds a phrase to the role of an advisory board specialist to include the following language: "With support from NOP, identify, implement, administer and maintain a year-round Public Communications mechanism, `Internet and other

means,' by which public feedback can be received, posted and archived online for viewing by the NOSB and the NOP and the public." Is there a motion?

MEMBER FELDMAN: I was --

CHAIRMAN STONE: Motion by Jay. Second by Jennifer?

MEMBER FELDMAN: No. I was going to second.

CHAIRMAN STONE: Motion by Jennifer.

MEMBER FELDMAN: I second.

CHAIRMAN STONE: Second by Jay. Any further discussion? John.

MEMBER FOSTER: I just want to reiterate what we talked about in the prior meetings and in our session on Monday, that I'm not quite certain that itemizing job descriptions for NOP staff is appropriate in our policy and procedure manual.

So I know that's no surprise. I just want to get it out there and make sure

it's part of the transcript.

CHAIRMAN STONE: Very good. Anything else? Colehour?

MEMBER BONDERA: Yes, and thank you, John, for your comment. I think it's worthwhile to point out when we did have that discussion on Monday, that the fact is that we are in the process right now of reviewing and revising and updating the PPM.

So if it is deferment as you've put forth, that it may not be appropriate and/or we need to modify that, that is in process at this time.

So I just want to make sure that this isn't seen as -- if this is done, then this is the way it is, because that's already up to reconsideration anyway.

CHAIRMAN STONE: Any other thoughts, comments from Board members?

(No response.)

CHAIRMAN STONE: Okay, seeing none, Tracy, we'll start the vote with you.

MEMBER FAVRE: Yes.

MEMBER BECK: Yes.

MEMBER SONNABEND: Yes.

MEMBER FELDMAN: Yes.

MEMBER RICHARDSON: Yes.

MEMBER DIXON: Yes.

MEMBER FOSTER: Yes.

MEMBER WALKER: Yes.

MEMBER FULWIDER: Yes.

MEMBER AUSTIN: Yes.

MEMBER TAYLOR: Yes.

MEMBER MARAVELL: Yes.

MEMBER THICKE: Yes.

CHAIRMAN STONE: That appeared to be unanimous as well. I appreciate your work on that.

There are several of the materials, and even when we were talking about excluded methods, and there's already several topics that we're discussing that it was considered how this could be useful and give the public more time to help us in our

deliberations. Very good. Very good, Mr. Chairman. We're exactly right on time. Good job with that. Appreciate that.

Next, we're going to have a presentation on aquaculture. As Miles said, the program is working on a proposed rule for aquaculture and Melissa said that April 11th, I mean October the 11th, we should have something on that.

So but at this time, we have Mr. George Lockwood and Mr. Sebastian Belle. George is chairman of the Aquaculture Working Group. Sebastian was part of that group for many years. They've worked tirelessly and diligently for several years with previous boards.

We wanted this Board to get up to speed and try to regain some of that institutional knowledge that was lost with the transition of Board members, and be sure the public is aware that this is back on our work plan.

There are several materials being petitioned for both aquatic and animal and plant aquatic production. So the idea is here for these gentlemen to give us a mental picture and get us up to speed of how organic aquaculture may look different than commercial aquaculture, and a little bit about the rule, the proposed recommendation -- the recommendation that's being considered by the program.

So with that Mr. Lockwood, we appreciate you and Mr. Belle being here. Aquaculture Working Group

MR. LOCKWOOD: Thank you, Mac. My name is George Lockwood. I'm the chair of the Aquaculture Working Group, and joining me is my colleague Sebastian Belle.

We greatly appreciate this opportunity to address the National Organic Standards Board today. It's been about five or six years since we last appeared.

What I would like to do this

morning is show some slides of typical aquaculture systems, so that you have a better idea as you process our petitions for materials, how these materials will be used.

After the slide show, we will -- I will then have a PowerPoint presentation of how we are, the proposal from the National Organic Standards Board that's now in final rulemaking is substantially different than conventional aquaculture.

The Aquaculture Working Group was appointed in 2005 by the program and by the Board. It consists of 12 people. I'll just go quickly through. Sebastian Belle is the Executive Director of the Maine Aquaculture Association.

Bob Bullis is a veterinarian. Ralph Elston is a Ph.D. in Veterinary Medicine. Rebecca Goldburg, when she joined us, was with the Environmental Defense Fund. She's now with the Pew Memorial Trust.

Ron Hardy is the Director of the

University of Idaho Aquaculture Program. He is probably the leading feed scientist in aquaculture. John Hargreaves is a scientist formerly with Louisiana State University.

Robert Mayo is a catfish farmer. Christopher Nelson is an oyster processor. Bart Reid is a shrimp grower. Albert Tacon is a feed scientist. Kwemena Quagrainie is an economist with Purdue University and I was the chair.

As a way of background for aquaculture, the world's capture fisheries are at their limits. One-half of all seafood today is from aquaculture. It's amazing. The last 40 years, 30 years, aquaculture has grown to what it is. Half of the food that's eaten today, seafood eaten today, is farm grown. That's true in the world and it's true in the United States.

Any growth in seafood consumption is going to have to come from aquaculture. This last year or in 2010, the USDA and the

Health and Human Services agency published dietary guidelines for Americans, recommending increased consumption to at least two servings per week of seafood.

Farm seafood is the only major animal protein without USDA organic standards, and contrary to the intent of the Organic Food Production Act for single and consistent USDA standards, we have today salmon, shrimp, tilapia, oysters and perhaps other seafoods that are illegally marketed in the United States with organic claims, and some are not even certified to any standards.

The chronology of the development of our standards, in 1999 was the first proposal to this Board for aquaculture standards that simply wouldn't work.

Several of us went and asked the Board to postpone consideration of organic standards for aquaculture until the industry and the aquaculture community could come together, which we did at a conference at the

University of Minnesota, where we had people from the organic community and from the aquaculture community that began discussing what organic aquaculture standards might look like.

Margaret Wittenberg, who was then a member of NOSB, chaired a group of about 25 of us, that in essence did a feasibility study. Would organic aquaculture match, or would aquaculture match organic principles?

In 2003 and 2004, an independent ad hoc group called the National Organic Aquaculture Working Group, came up with a proposed set of standards, and in 2005, was the official appointment of the Aquaculture Working Group to advise the Board and the program on the advancement of such standards.

We work closely with the NOSB, and in 2006, we produced our interim final report that excludes mollusks. This was a comprehensive set of standards for aquaculture, except for mollusks.

In the Spring of 2007, the NOSB recommended that the bulk of what we were recommending but held back for further consideration are matters of feed and facilities, particularly net pens.

In Fall 2008, the second NOSB recommendations came out for feed and for facilities. The only work we had left to do, then, was for bivalves, which we completed in the Spring of 2010. Since then, we've been awaiting final rulemaking, which is beginning now. Sebastian.

MR. BELLE: Hello, and thank you for giving us the opportunity. We're going to show you a series of slides of aquaculture operations. We have a problem, which is that we can't show you slides of organic aquaculture operations.

So what we're going to try to do is show you slides of what's out there now, and then George will wrap up with some points about how what is being proposed under the

current standards is really fundamentally different than what's happening right now.

But I want to just leave you with one thought. My organization represents 180 farms. Most of them are shellfish farms, but we also have finfish farms, and right now we are competing in the marketplace against organic seafood which is being certified under programs overseas, being brought into the United States, and we're competing against it.

I can tell you that particularly for our finfish growers, that is very difficult. We are competing against, for example, salmon that's certified in Europe under European standards, which allow for the use of antibiotics.

We have not used antibiotics in the State of Maine for eight years. So that gives you an idea of what it means for us as domestic producers, as to whether or not we can get those standards out there and we can begin to start to work towards achieving them.

This is a picture about what's called a polar circle cage. This is kind of a standard finfish technology right now. There's a net bag that hangs down underneath that, and that's obviously one of the -- this is one of the production methods which has drawn a lot of fire.

It's open to the ecosystem. There is a linkage between the ecosystem and the farm itself, and when we developed the standards, we worked very hard to recognize that linkage, and to make sure that the farming methods that were being allowed under organic standards, were those that asked a farmer, that required a farmer to farm in synergy with the ecosystem around that farm, as opposed to trying to dominate that ecosystem.

This is a picture of a larger farm. Again, these cages are moored in the ocean. One of the things that we proposed in the standard was a system whereby farms would

be rotated and fallowed between sites. There would be a fallowing period, and that was a very -- we have used that in Maine for now eight years, and it's been a tremendously effective way to break infection cycles.

That's one of the reasons we haven't used antibiotics, is by using what is called "all in, all out by year class rotation" and site fallowing.

This is the only picture I have of an organic farm currently in this slide, and this is a picture about a farm called Lock Duart in Scotland. The reason I put this in here is this is an example of one of the differences between what is proposed under the organic standards and what a conventional farm would be.

This farm is farming at about a tenth of normal density of what a typical, conventional salmon farm would be farming, in terms of the number of fish in a cage.

You can -- a typical salmon farm

cage is this, the size of this room or larger. You can sit as a diver on one side of that cage underwater, and not see the fish on the other side or even in the middle of the cage, in an organically certified farm.

This is an example of something called integrated multitrophic aquaculture. This farm, in the foreground, you see what look like salmon cages. They're actually mussel rafts. So they're using shellfish, aquatic plants and then finfish together, all in one farm.

The way they deploy them is the plants and the shellfish are downstream from the salmon. So the nutrients coming out of the salmon are being recycled by both the aquatic plants and the mussels.

One of the most exciting things that we found in Maine about this is that mussels actually denature a number of the viruses which attack salmon. So we are using mussel rafts around the salmon cages as a

biological fence, to stop wild pathogens coming into the farm.

It's a very new technique. It was discovered in Maine actually four years ago, and we're still trialing it. But it appears to be very effective, based on the trials we've had so far.

This is a slide of some mussels that are raised on a mussel farm. If you look in the background, there's a steel cage there. That's the old kind of salmon farms that a number of people are still using. So what we've done is we've taken those old farms, converted them to a mussel farm.

You have salmon and mussels being grown side by side, and interestingly, the growth rates we get on our mussels that are located next to a salmon farm are two or three times what they would be if they were located away from the salmon farm.

This is kelp. We have a very innovative company in Maine called Ocean

Approved. They were also growing kelp both beside salmon farms and in other areas, and they have just been very successful, and they've built a product which Whole Foods now sells in their frozen -- if you go to the frozen pea, the frozen vegetable section and you look next to it, you'll find Ocean Approved kelp from Maine there.

These are some salmon eggs, just so you know what they look like. That's what a typical salmon hatchery looks like. In each of those trays are the eggs from one female. They're all kept separately and incubated for period of time, and then they hatch out.

That's what a yolk sac larvae looks like. One of the challenges we have in finfish aquaculture, and this is true in shellfish as well, is the period from the hatchery to the nursery is what we call the critical phase, when they're transitioning from internal sources of food to external sources of food.

This is true both for shellfish and finfish, and this is the period in time when the farmer has to be incredibly vigilant, because your mortalities can be very high if you don't do things right.

These are small salmon juveniles in the hatchery before they're put out into the ocean. This is what a typical feed looks like.

This is actually catfish feed, but there are a lot of different types of feed, and if you look at the standards that were proposed, I know one of the controversial pieces of it was the use of fish meal and fish oil as ingredients in fish feed.

We were lucky to have both Albert Tracon and Ron Hardy on our working group, and they really led us to a different place from a feed formulation and manufacturing point of view.

I think that anybody who has ever been -- the standards that are proposed

underneath the NOSB recommendations are by far the strictest in the world, and frankly there are a number of people who have questions, in terms of whether or not they're achievable or not from a feed point of view.

But I think it's okay to set the bar high, and see what we as human beings can do from a creative and innovative point of view.

This is monitoring of feeding on the farms. One of the things that a lot of people are doing now, not everybody, but a lot of people, but one of the things which is required under the standards is some form of active feed monitoring, and basically that can either be underwater video cameras or a Doppler sonar sensor, which senses whether or not the feed is coming down through the school of fish, and coming out below the school of fish.

If that happens, it automatically cuts the feeding off. The reason for that is

because if feed is wasted on a farm, not only is it expensive for the farmer, but it's also a potential threat to the environment around it. It can discharge nutrients directly into the environment, and enrich the environment around that.

If you're a bad farmer, you can exceed the carrying capacity of the ecosystem around the farm and crash the site, as they say. So video monitoring is very important. We require it in the standards, and it's a technology which has really revolutionized open net pen production.

This is another thing that we have in the standards is the requirement for humane slaughter, and this is a place that people sometimes get uncomfortable about. But the reality is on the finfish side of things, for many, many years we were slaughtering fish in what many of us viewed as a very inhumane way.

This is what's called a percussive stunner. The fish go through and are hit

basically between the eyes with a bolt, the way a veterinarian would kill a large animal, and it is instantaneous and has been approved by, for example, the British Humane Society as being the way to slaughter and harvest fish.

This is again required in the standard. It's not something that everybody uses in the world of conventional, and I think it's great that it's in the standard.

That's what we're competing against right now. This is stuff being imported from Scotland and currently sold in the U.S. as organic.

MR. LOCKWOOD: This is a trout farm in Idaho. I'll go rather rapidly through these slides. These are raceways, where water enters at the top of the picture and flows out the bottom. Those conical things are how the animals are fed.

Here's a trout farm in Hawaii. You can see the water cascading down, which produces, puts out fish into the water.

Here's Jim Pierce. Some of you may know Jim, and you may know that at one time he was -- for 12 years he was growing trout in Wisconsin.

This is his trout operation. He's crowding the fish towards the camera. This is his wife Cathy feeding some very small fish in this particular tank.

Moving on to oysters, these are oysters being grown in bags held off the sea floor. The tide comes in and brings food, and oysters consume the food and then -- and the water goes out and they get exposed like this.

Here's a typical bag. When I've used this system, we would start out with five pounds of oysters and come back a few months later and we have 35 pounds. The bag would be completely filled. We'd have to thin it out and restock it five pounds per oyster.

Here's another way of growing bags or growing oysters in suspended bags. This is a very important slide. The picture, the

oysters over at the left are natural oysters. The ones at the right are triploid. We proscribe triploidy, and but you can see here what technology allows them to grow much faster, and as a consequence, most of the West Coast operations for growing oysters are going to be precluded from organic certification, because triploidy is the standard here.

But nevertheless, we have felt that triploidy is a natural way of growing fish and shellfish.

Here are oysters at the seed stage. These oysters are probably a month old or so. They're fed in what are called upwelling silos. In other words, there's a tent to the water.

That's cultured algae, that feeds the algae or feeds the oysters. They sit on a screen, in this silo in the water flows from the bottom to the top. Microalgae and microalgae are very important in aquaculture.

Here's, I'm going to show a

progression of how cultures, algae is cultured. Here's a library where small cultures now grow into bigger cultures, and finally into operations like this.

Now you notice this is a red, pigmented culture. Astaxanthin, which is a required nutrient of salmon, is where they actually get their pigment. We will require that the astaxanthin is used, the organic, and this is a candidate operation.

Here's a macroalgae. This is a kelp plant. If you go to the ocean here, you'll see kelp growing. This is about a week-old plant.

Here's a full grown kelp plant, macrocystis pyrifera, which grows here on the west coast, and yes, those are salmon swimming with the kelp.

Here's a young abalone about two months old. Here is abalone going off to market and a very happy abalone farmer, because he's about to have this dinner. Here

we have catfish. Catfish, until recently, was the biggest aquaculture crop in the United States.

It's declined substantially in recent years due to the increased cost of corn and foreign competition. This is a typical catfish farm, 150 to 200 acres. Catfish is big in Mississippi, Arkansas, and Alabama. Here's Rob Mayo's catfish farm. This picture shows how waterfowl is attracted to the habitat that's being provided.

We estimate there's probably four or five hundred thousand acres of waterfowl habitat that's been developed in the United States for growing catfish. Here's a catfish nursery. These are catfish that are maybe a couple of days old, a little bit older.

Here's one taking feed at the surface. Aeration's very important, particularly in hot summer nights, and this is a farmer who's aerating his pond. Harvest time, the catfish are all crowded. They can

be netted, excuse me, I went too fast. Loading into a transport truck, off to the slaughterhouse.

Now we have standards for transporting our livestock, and here is a typical fish hauling truck. Not a very good picture. In the back, you'll see oxygen canisters to keep the oxygen. We have standards for maintaining water quality.

In one case I'm familiar with, fish were hauled for 36 hours in apparatus like this and greatly stressed. We don't want our fish to be stressed.

Here's tilapia. Tilapia is the second-most consumed fish in the world now. Here's a very innovative tilapia-growing operation. The tanks you see in the foreground are growing fish, and in the background you'll see hydroponics. In this case it's okra. This is at the University of Virgin Islands. The flop here in the background and okra here is in the foreground.

Now obviously the hydroponic crops can't be certified organic, but the fish can. Here's a conventional high density tilapia operation. We would not allow that high of a density. Another way of growing tilapia, also shrimp.

Here's harvesting of tilapia. Obviously, there's a tour going on. That's what you get in the fish market. Here's a shrimp operation where shrimp are being crowded for harvesting, a number of men in the water pulling a net.

Now here's a novel shrimp operation in Florida, which probably will qualify once standards are adopted for growing shrimp. Again, organic shrimp in the United States are common.

Here's a recirculating system indoors. This is Bell Aquaculture in Indiana, growing lake perch, and here's how they're killing their fish. This would not be legal or allowed under our proposed standards.

They're using ice, and as Sebastian mentioned, we have very strict humane slaughter standards, a standard processing line.

Now let me go into how our standards are -- the NOSB proposed standards are different. The organic system plan must include an environmental assessment with a lot of detail, and when we proposed this to NOSB, they said you know, we ought to require this for all of our farming operations, fresh as well as aquaculture.

We require that aquaculture operations include recycling and consider such things as polyculture and integration. I missed one here.

Origin of aquatic animals. Triploidy, as I mentioned, is prohibited. Monosex stocks by chemical and other means are prohibited, and that is a great hardship for the tilapia people, because they want to grow only males.

Genetically modified plants and

other excluded methods are prohibited. We require traceability. We require that the animals be under continuous organic management, beginning no later than five percent of their total market weight.

There is no way that we could have standards written that would cover the multitude of hatchery techniques that are used. Feed must meet the minimum nutritional needs. Antibiotics, hormones, mammalian and poultry slaughter products are prohibited, along with synthetic solvents and processing feeds.

Fish meal and oil may not be sourced where government agencies or FAO report the fishery is over-exploited, has a reduced reproductive capacity, old fish and so forth. Fish must be from regions in the world with the lowest levels of persistent biocumulative toxins, and the fish oil must be treated with activated carbon to remove any toxins.

Now here's a standard that the NOSB has recommended for the use of fish meal, which is to scale down from a maximum of 25 percent initially over 12 years to nothing. This is proposed by NOSB to be on the National List, and the reason for that is there are serious questions, if we can ever get away from some fish meal and fish oil being used in fish.

Fish have evolved to eat other fish, in which case the Board would -- when this would come up for sunset review, would be able to continue some sort of use of fish meal without having to go through final rulemaking. Why don't you take it?

MR. BELLE: You can tell we're farmers, not presenters. So in terms of aquatic animal health care, there was a lot of discussion in the group about what the, the way to move forward with this is. It's a field which is moving very rapidly.

The veterinary community, the

pathology community has been involved in aquatic animal health for about 100 years, from a diagnostic point of view. The veterinary community, from the point of view of treating disease on farms from a clinical point of view, has only really been involved in aquaculture for somewhere on the order of about 15 or 20 years.

So it's a field which is moving very rapidly, evolving very rapidly, and the science behind it is evolving very rapidly. Again, we have the privilege of having a number of world-recognized experts on the working group when we debated this and went back and forth.

We have, we struggled with minimum nutritional needs, and this was really focused around the fish meal/fish oil piece, principally for marine finfish ironically, not salmonids.

Marine finfish are species which are not salmon, but they're the marine fish

which are being brought into culture now, and many of their nutritional requirements are not currently known. So we established basically a basis when we said you have to try to minimally meet the nutritional requirements of the animal that you're growing. This is your responsibility as a farmer.

We had requirements to monitor, record and maintain water quality, to establish biosecurity measures. That's really one of the places where I think the organic, the proposed organic standards are way ahead of anybody else in the world.

The biosecurity measures and the way to go at that are probably some of, I think, the most progressive standards in the world.

And indeed, in many cases, way ahead of some of our terrestrial colleagues, because it particularly -- we don't have the ability to control, in open systems in particular, what our animals are exposed to or

what our plants are exposed to.

So we have to think about preventative risk management, as opposed to responsive therapeutic response. The administration of vaccines or other biologics. If they make it through the system, if you will, those will be allowed.

Vaccines have turned out to be tremendously beneficial for our finfish folks. When the emergence of effective vaccines came out about 10 or 15 years ago, antibiotic use was significantly reduced in many of the farms around the world. We think that vaccines are, as long as they meet the organic principles and standards, they're a good thing.

We wanted to employ a lot of non-therapeutic, non-chemical management methods. So site rotation, fallowing, biological control and integrated pest management. Those were things that we really emphasized in the standards, and there are a whole series of things that you can't do.

Obviously administer antibiotics, hormones. You can't sell clinically diseased fish. You can't administer synthetic parasites, parasiticides, sorry. You can't administer medications in the absence of illness.

Just as an interesting sideline, a lot of people have a misconception about the use of antibiotics in aquaculture. Antibiotics do not work as a growth promoter for cold-blooded animals. It's just a physiological fact. You can't, in a cold-blooded animal, administer antibiotics and get them to grow any better, unlike poultry or beef.

So even if you wanted to as a farmer, antibiotics are not effective as a growth promoter. And then you can't withhold treatment for illness.

MR. LOCKWOOD: Here are living conditions, and we get into containment. We must provide for the adequate exercise and

swimming behavior, minimize potential injury. Biomass density, it must be appropriate for the animal, and as you saw earlier in one of the slides, organic systems have reduced animal densities.

But they're also, you can have, since fish tend to school, you can have too low a density in some cases. We require a predator management plan without the use of lethal measures.

Aquaculture facilities. Pond berms must withstand a 100 year flood. Effluents must be assimilated between a 25 meter distance of the facility. A waste management plan must include recycling. It must have an escape prevention plan.

Net pens in public waters must avoid migratory routes of native species, must grow in strains of native species, be spaced from conventional salmon or conventional net pen operations. The control of fallowing must be by physical or biological and not by

chemical means.

Nets that are in the water have all sorts of other things that grow on them. We can't use chemicals to do that. We cannot -- we require the use of multiple species outside the pens for recycling, as you saw on the earlier slides, and for the net pens, we require a conversion period of less than one year or one growing cycle. Earth ponds have a conversion of 36 months if prohibited substances have been applied.

The bivalve mollusk standards are very complex in themselves. One of the challenges we had was to prove that we have a managed system. Some bivalves are harvested from the wild, and we certainly don't want those coming into organic markets.

Again, a detailed environmental assessment with maps is required. An oceanographic technique of defining the hydraulic zone of influence is required, which really describes the whole hydrodynamics of

the growing area. We require an expanded sanitary sewer survey. We require hatchery-produced seed only, with one exception.

Monitoring requirements for indicator organisms, and we use sentinel animals. In the case of sentinel animals, we require four times a year that these animals be sent off for evaluation of about 200 different contaminants that exist in the wild.

Chemicals that control predators are prohibited, and we have restrictions on how bivalves are harvested, and we require extensive traceability.

Aquatic plants, again earth ponds must not have prohibited substances for 36 months. Dissolved nutrients must not exceed the minimum nutrients that are necessary for that particular crop. Berms, boundaries and buffer zones are all required to prevent contamination. Organic starter cultures are required when available. Right now, there are none, but hopefully that will develop.

Compost manure is allowed if it complies with Section 205.203, but prohibited in public waters, and again we have continuous organic management after five percent.

As Sebastian indicated earlier, a unique contribution from our standards, compared to terrestrial, is the humane slaughter of our fish. We want to minimize stress to the animals and minimize environmental impacts during harvesting.

Transport conditions must consider water quality, duration of the trip, density of the animals and metabolite formation, to minimize adverse effects. This, we think, is very critical.

Usually before slaughtering fish, they are fasted, and that period must be limited to that necessary to provide good clearance and can be no longer. Finfish must be stunned to be instantly rendered insentient and maintain insentient until death by concussion to the head, which you saw

apparatus that does that, electrical stunning or electrocution.

Prohibited means of slaughter include ice slurry. You saw ice slurry in that Bell Aquaculture picture. This will be allowed for warm water fish for five years, because the enhanced methods aren't quite there for catfish, for instance.

Carbon dioxide suffocation has been a standard practice. That causes stress and we are proscribing it. Suffocation, letting fish die in the air is proscribed, synthetic anesthetics and bleeding without stunning is all proscribed. Ice slurry is allowed for animals that are non-sentient, such as shrimp.

Well that ends our presentation, and we've allowed for questions, comments you may have, Mac.

CHAIRMAN STONE: Okay, very good.

MR. LOCKWOOD: Thank you for your attention.

CHAIRMAN STONE: Thank you. I think the images helped me to see, just to have a little bit of a visual to go along with. So just to remind the Board, so that aquaculture working group represented here was appointed by the program back in the day.

So they are agents of the USDA, if you will. They work, there's 12 members, I believe George, of the working group, representing the various aspects of the industry. So they've made their recommendation. The program has accepted that and the program has a proposed rule to come out.

So we thought that this would give us an image and get our thought process working. So I think that now our work has revolved around the petition materials, which is primarily vitamins, minerals, which are exactly the same as in terrestrial feeds and a few other items.

So first before, and I know Tracy

or Jean or some on the Livestock Committee may have some questions. It would be nice if we could have a copy of this PowerPoint maybe, so that we can provide that to the committee members or anybody on the Board, just in referencing some of this.

So does any members of the Board have specific questions for George or Sebastian?

MEMBER FAVRE: I noticed on the terrestrial-based system you have a requirement for the effluent to be assimilated within 25 meters. Describe a little bit about what that process would be for assimilation.

MR. LOCKWOOD: Do you understand that?

MR. BELLE: Yes. Actually, that's a requirement that applies to all systems, including net pens, and basically depending on what your culture method is or what your containment method is, if you will, there are different ways to handle that.

In land-based, you can actually capture solids and compost, and then for dissolved nutrients, there are a number of other ways that you can deal with that. But it's basically, what we're seeing is within 25 meters of the facility, the nutrients that are coming out of that farm have to be assimilated or handled some way.

So in the case of net pens, which would be the worst case scenario, where you've got an open system, whatever is coming out of that farm has to be assimilated either by the mussels or the kelp or the carrying capacity of that site.

So when you, and again, in the case of net pens, when you begin to work a site with a net pen, just like a field when it begins to have cows on it, you begin to have an ecosystem evolve locally in that farm.

What we're seeing is that that ecosystem, including the kelp or the mussels that you have on that farm, have to be able to

process the nutrients that are coming out of that farm, within the 25 meter distance.

MEMBER RICHARDSON: Morning. Question for Sebastian. One of the standards that we need to be thinking about and, you know, just for us to know how we're going to be dealing with these petitions, is that we have to be able to verify that biodiversity on the farm, which is one of our criteria, is being appropriately addressed.

That means because we're using, you have wild fish feed included, as well as just the location, which is some distance from your farm per se. How will the issues of biodiversity be able to be measured by the inspector who comes around to do the inspections once a year or whenever?

MR. BELLE: You've said -- you've used the key word, which is near and dear to my heart, which is inspection. I'm very involved in auditing of best management practices for a bunch of other groups, and you

can have the best standard in the world, and if it's not auditable, it's worthless.

So I think that's, and you've actually put your finger on probably the most difficult piece of the standard to audit, the biodiversity piece.

There is a requirement -- on the finfish side, there's a requirement about the fish meal and fish oil inputs, and if you actually sit down and kind of do the calculations of what those ingredient levels are, and what the conversion levels are. You'll see that we end up in a place where you're actually producing more marine protein than you're consuming.

So that's -- we're actually driving the farmer in a direction where they are actually forced to use other protein and lipid sources in their feeds, and that will mean they will use less and less to eventually, under the current proposed standard, virtually no fish meal and fish oil.

So that would, from the biodiversity point of view, that would be one piece.

But the other piece, I think, is particularly by forcing open system farmers to go to a multitrophic approach, you're actually -- you can actually document the numbers of species both in the sediment around the farm, and in the water column around the farm, and it's a very -- we have been doing this in Maine for 15 years. It's a very predictable evolution, if you will, of the farm.

What happens is initially when you start the farm, biodiversity actually goes up, not down, and you go and basically as a manager of that farm, you are looking at the numbers of species, flora and fauna, both in terms of the numbers of family and taxa, but also in terms of the numbers of individuals with each, within each of those categories.

You manage the farm to maximum biodiversity. If you go beyond that, you're actually in the process of crashing that site,

and you would have exceeded the standards. So there will be -- you will have to have, as a farmer, you will have to have data that the auditor will look at, to show numbers of species, taxa and what's happening around the farm.

MEMBER RICHARDSON: That actually is very reassuring and really interesting, and I was fascinated to see -- one of the questions I had asked during our many conference calls was to see if there were any of the fish farms that were using a range of species being grown on the farm, and that would certainly make a difference.

So just to clarify, so before -- if we, if there's a fish farm that starts up that's organic, will there be an analysis of the biota in that area prior to the beginning of it, that will then show up in the organic system plan as the months, years go by, so that the inspector can then verify that there have been no radical changes in the benthic

biota, and that the combination of taxa remain relatively --

I mean they're going to change obviously, but that they remain a relatively sustainably balanced way.

MR. LOCKWOOD: The organic system plan requires an environmental assessment, with all of the detail that you just mentioned, before the organic production can begin. It's a comprehensive environmental assessment.

MR. BELLE: So you have a baseline to compare it against over the evolution of the farm.

CHAIRMAN STONE: Tracy.

MEMBER FAVRE: Talk to me about the difference in density between conventional versus organic in, for instance, a net pen system?

MR. BELLE: Typically, at least overseas in currently certified organic farms, the densities on organic farms are probably a

third of what you would see. Ironically, and this is -- I may open a can of worms here, but ironically, there are many people who believe that net pen systems should not exist, and that they should -- and those finfish production units should be moved to land.

The densities in land farms are several orders of magnitude. You might have 90 kilos per cubic meter in a land farm, versus 25 in a conventional salmon farm, and versus 15 in an organic farm.

So as with anything, there are tradeoffs you have to make as a farmer, and the density issue, I think, is going to be a much bigger issue for land-based farms than it is for ocean-based farms.

MR. LOCKWOOD: Tracy, there was a study a few years ago done in Norway of salmon density in net pens, and they stocked salmon at 30 kilograms per cubic meter, at 20 kilograms per cubic meter and at 10 kilograms per cubic meter. Some standards in Europe

required ten.

Turns out that the optimum, measuring a number of variables, was 20. So you can get too low, and of course you can be too high.

MR. BELLE: Can I just add one thing? You have to remember in the case of fish, they are social animals. These are schooling animals. So if you have one fish in a cage this size, that is not a very happy fish. It is a very nervous, very stressed out fish.

There is a -- there's a minimum density which you don't want to go below, because it is unnatural for them.

CHAIRMAN STONE: Zea.

MEMBER SONNABEND: Thank you. Switching gears just a bit, we on the Crops Subcommittee have been tasked with approving some of the petitions for aquatic plant culture.

The Department has told us that

while they're working on aquaculture standards for fish, they're not planning to do separate standards for plants, aquaculture plants, and they think the existing standards should be able to cover plant culture.

So we're grappling with things like petition for micronutrients to use, and I'm assuming that aquatic plants is primarily algaes and kelps in both open and closed systems.

The micronutrients annotation says "must be a documented deficiency." So we're going to be grappling with how do we apply that type of annotation to the situation for organic plants, aquaculture, and could you comment a little bit about how you perceive that would work?

MR. LOCKWOOD: Well, I've not heard that the program is not proposing aquatic plants. It would be very difficult to grow many species without having organic microalgae, for instance, or macroalgae.

MEMBER FAVRE: Well, they didn't say that they weren't going to allow organic plant aquaculture. They just said they weren't going to write a separate standard for it, and we have to accommodate it into the existing plant standards.

MR. LOCKWOOD: Well, we don't know what the program's final rule proposal is going to be. Nobody knows except the people working on it. But I can't imagine having organic shellfish, for instance, without having organic feed to feed those shellfish.

So they're probably, I don't know. I would guess that they are going to accommodate that somehow, that we have to have organic feed to grow organic animals.

MEMBER FAVRE: Right, they are. But for instance, you know, my example of a micronutrient. How, like do you test your algae to make sure, to see if it's deficient in nutrients, you know, before applying a micronutrient and are there steps so you don't

apply too much in an open system so it gets out?

Like we're concerned about copper or zinc or something getting into the environment at too great of a concentration, and what checks and balances are there for that?

MR. LOCKWOOD: All right. In our proposal, we contemplated -- we did not contemplate open algae growing, other than what you see around the net pens.

MEMBER FAVRE: What about kelp?

MR. LOCKWOOD: Those are not been providing nutrients, other than coming from nature or from the pens themselves.

MEMBER FAVRE: Okay.

MR. LOCKWOOD: But the kinds of ponds you saw, that is the type of algae growing that we are contemplating. Yeah, sure.

MR. BELLE: Just to take a little different tack on that, there was an awful lot

of work put into, at the working group level, put into the standards for aquatic plants, and so, you know, if the Department is choosing to go a different route, at a minimum I would hope they would look to what came out of that working group, and use that to guide how they develop what they're going to propose.

I think that would be -- because it was a pretty thoughtful group that included a bunch of folks who had aquatic plant expertise, and they did look at the whole issue pretty carefully.

MEMBER FAVRE: Okay. Do you think it was the intention to eventually allow kelp culture in the open oceans to be certified too, or in some sort of controlled way?

MR. BELLE: Yeah. No, I think it was. You know, in an open ocean situation, I can't think of a situation where you would actually be physically adding nutrients to the water for those plants. That's not a -- to me, it's a very unlikely scenario, because how

would you -- first of all, how would you control that?

Second of all, how would you know whether you were having the appropriate effect on the plants in an open system or not? It might be very difficult. It would be very difficult to literally operationalize it, I guess is what I'm saying.

MEMBER FAVRE: Thank you.

CHAIRMAN STONE: Colehour.

MEMBER BONDERA: Yes, thank you. I do want to thank George and Sebastian for what you've presented, and the working group for all of the time and energy, and I don't want to be beating a tired drum.

However, I would like to raise a question that I have tried to bring up before, but to be frank, for me at least, isn't, I guess, answered yet.

I guess from a background perspective, I'd just like to comment that I am a farmer, but I just want to point out that

all of these members of the NOSB that are sitting here, like George said, we're all new in terms of this whole topic.

That's one of the reasons that you were invited here and that we're doing this, because after Barry Flamm left, nobody that was on the NOSB had dealt with any of the Aquaculture Working Group's presentations and discussions, even though many members had.

That leads to my question, which is related to getting us up to speed. But it's something that came up in both of your comments in different ways, and I think Sebastian, I even wrote down, when he said this is evolving very rapidly.

I think that we're all aware of that, but I think that it leads me from a, I think, I don't like to describe myself as conservative, so I won't use that word, but from an understanding perspective, to try to say, to think are we --

Do we have our brains around this

whole picture well enough to really be making judgments about specific petitions or -- and I guess that I'm slowly getting to the question.

But I think the question is what has changed research-wise or information-wise since the working group put forth its conclusions? I think that frankly, I am aware that some things have happened. There are published studies on some of these things that did not exist when the working group did its work.

I'm just wondering from the perspective of us all being able to understand this, if you could either direct us or tell us or summarize for us the changes in information and understanding that have occurred, how they could or should be affecting either the NOSB or the NOP or this rule that isn't even finished, in terms of, you know, is there reconsideration necessary of some of the details, that kind of thing.

Because you're presenting things that are at this point old, and so -- and I don't know. I hesitate to use the word "old," but we have a sunset system where five years is considered, we are forced to reconsider things every five years.

So I just want to bring that topic up and ask you to respond as you can. Thank you.

MR. LOCKWOOD: Let me just touch on a couple of areas, Colehour. The area of fish nutrition is an advancing science, and one of the objectives is, in conventional aquaculture as well as organic, to get away from fish meal consumption for a number of reasons.

So the frontier has been to replace more and more fish protein with plant grain proteins, for instance. Right now, the state of the art is such you can grow fish without fish meal, for instance, if we could use poultry byproducts or mammalian

byproducts, or synthetic methionine.

The simple facts is those aren't compatible with organic principles. So that is one frontier. There are serious doubts, if we can ever get completely away from fish meal, but people are working on that.

There certainly are advances in animal health. One area where there are new discoveries is in the growing of aquatic plants, particularly oceanic plants. There are certain trace minerals that have been identified for many, many years, that are essential for plant culture.

Another finding is they go out into the, further out to sea. There are some species that have additional trace element requirements.

That's one of the reasons why we want to remain flexible with the petition we have for trace elements, that there are new discoveries being made in those areas. Maybe you have something to add.

MR. BELLE: Well, the only thing I would say is that, you know, you can draw a line in the sand at any point in history, and look backwards and say things have changed. I think that's true for any field, and one of the things we did, we were very cognizant of when we were discussing and developing and working on the standards, was that the standards had to be constructed in a manner that allowed for innovation, but was true to the organic principles.

So we worked very hard to try to recommend standards that achieved that, and I, you know, I mean I'm sure that terrestrial organic sciences is evolving probably as rapidly as aquaculture sciences. I suspect they're both very dynamic, very innovative fields.

So we did, we recognized that when we were working on it, but we really tried to make sure that we were allowing for innovation, but not drifting from the

fundamental principles.

MEMBER FAVRE: Thank you for your forbearance. I'm sure this has felt somewhat like an interrogation. But I think mostly it's that we're so eager to capture the knowledge in your heads while you're here.

One last question. I know we've got a very compressed schedule. I noticed in your slide presentation, one of the photos showed a fairly arid landscape in the background of a pond siting.

So when you're doing an environmental assessment, are you taking into account the siting of a location, based on things like water use and its impact on the local area?

MR. LOCKWOOD: Yes, and a lot more. It's a very comprehensive requirement.

CHAIRMAN STONE: Calvin.

MEMBER WALKER: Thanks for y'all presentation. Could you share with the group and those who are in the audience the

importance of materials that the Livestock Committee have, the importance for those materials being passed, like the vitamins, minerals --.

MR. LOCKWOOD: Well, in the case of aquatic animals, we have vitamins. Vitamins are well-established for health requirements, trace elements. We have petitioned for a disinfectant, chlorine, chlorine materials, vaccines.

A major revolution in terms of technology has occurred in the last 30 years with the development of vaccines for specific diseases that otherwise had to be treated with antibiotics. But all our petitions, you know, are directed towards raising healthy fish, so that they don't have to be treated.

That's a principle of organic management that we've copied, and we want to remain faithful to it.

MR. BELLE: I think when we, as a group, looked at what should be petitioned and

recall that we were asked to be petitioners, it wasn't our idea to be petitioners. We were asked to be petitioners.

We went through the list of things that are currently approved on the National List, and then we looked at what would be the bare minimum that we would need, in order to maintain animal welfare, plant health, the things that we as farmers felt we had a stewardship responsibility about.

That was how we came up with that list, and there was a lot of debate about what we should or shouldn't petition for. I have no doubt that we probably haven't got it totally right the first time through. I'm sure we haven't.

But it was our best effort at the time to match what was already currently approved for other uses, and then also what we felt we needed as a bare minimum from a stewardship point of view.

MR. LOCKWOOD: And when we started

out with the list, we had 30 different substances that we were going to petition, and we whittled it down to ten.

CHAIRMAN STONE: Jean has an itsy-bitsy, teeny-tiny little-bitty question, I think.

MEMBER RICHARDSON: Very small question. As you phase out -- in terms of fish food, as you phase out of using wild fish and fish oil and fish meal, will you be replacing those oils primarily with things like soy and corn and what else?

MR. LOCKWOOD: Well, soybean oil is made of omega-6 fatty acids. Fish oil is omega-3 fatty acid. In human physiology, they are entirely different. In fact, there's a number of scientists who believe we have an overload of omega-6's.

It's going to be very difficult to find other sources of omega-3 fatty acids than fish oil. There may be algae developments in the future that will do that.

But right now, the world supply of fish oil is limited, and if we're going to be selling salmon with omega-6s, it's really fraud, because people expect the healthy components in the fish.

CHAIRMAN STONE: Miles.

MR. McEVOY: Yeah. I just wanted to clarify a few things that were brought up. Let's see.

First of all, we have many old NOSB recommendations that we haven't gotten to, that are older than these aquaculture recommendations that we're still working on, with either rulemaking or guidance that will go forward with notice and comment.

Whether it's a rulemaking or guidance, that's part of the process. So more comments will be necessary for some of the older NOSB recommendations.

The other thing, on the farmed aquatic plants, when we've looked at that, we already have existing certified organic

operations that are certified under the USDA organic regulations, that are doing farmed aquatic plants.

We haven't seen a need for rulemaking around this. There might be a need for some guidance around farmed aquatic plants.

We'll continue to evaluate that, to see if we need to change our perspective on that. But there's already currently certified organic operations that are doing farmed aquatic plants.

Then on the issue of organic aquaculture labeling in the U.S., in the past the NOP had a fact sheet that indicated that if aquaculture products were certified to a third party standard, that they could be sold in the U.S., as long as they didn't reference the USDA organic regulations or use the USDA organic seal.

That fact sheet has been removed from the website and archived. We had looked

into potentially doing an interpretive rule, which would prohibit the labeling of organic aquaculture/organic seafood in the U.S., until we established organic aquaculture standards.

That project has been stalled. We're still considering that possibility, that under the existing regulations, we could issue an interim rule to prohibit organic seafood labeling until we have standards.

Then we have taken enforcement action against operations making organic seafood claims that are not certified to any standard whatsoever, and we'll continue to do that.

So if you're aware of any organic seafood claims that are being made, that are not certified to any standard, then please file a complaint so we can take enforcement action against that.

CHAIRMAN STONE: Okay. Just one really itty-bitty question, Gene. If you'd like to make a couple of closing remarks, we

are out of time. But what percentage of these farms do you think might go organic, based on the marketplace, feed costs, changes that they would have to institute to meet the organic standards?

MR. LOCKWOOD: Well, that's an interesting question, Mac. Obviously, we have no real knowledge of what will happen. My guess is one or two percent of the farm fish will be, will qualify for organic certification. Of course, that will depend on the species too, and the growing systems.

But it's not a large number that I anticipate. The additional costs are very high to meet our standards.

CHAIRMAN STONE: Thank you very much. Would you like to make quick closing comments. We appreciate your time to be here, but you're welcome to make a closing comment, if you'd like.

MR. LOCKWOOD: No. Not other than we are prepared to work closely with your two

committees that are working on our petitions. As we developed, as the NOSB developed their recommendations, they work very closely with the Aquaculture Working Group, and we are prepared to continue to work with you as we can provide information you need.

MR. BELLE: I'd just say come to Maine. Come to Maine and visit our farms. Any one of you that wants to come to Maine and go for a bunch of farm tours, more than willing to do that.

We'd love to have you down. The farmers would love to have you down, and we'd be delighted to show you through the operations. None of them are organic yet, but we hope some day they will be.

CHAIRMAN STONE: All right. Thank you very much.

MR. LOCKWOOD: Thank you very much, Mac. We appreciate this opportunity.

CHAIRMAN STONE: Very good. So I've got 12 -- not 12:48. That would be 9:48.

We're pretty much right on schedule. We'll come back at five after 10:00 for the Livestock Committee. Promptly five after 10:00.

(Whereupon, the above-entitled matter went off the record at 9:48 a.m. and resumed at 10:06 a.m.)

CHAIRMAN STONE: We're going to call the meeting back into session. We're moving into the Livestock Subcommittee place on the agenda. The plan is this will last up until the lunch break. We have several people to present, public comment as well.

So as Tracy settles into her seat, I'll turn it over to Ms. Tracy Favre.

Livestock Subcommittee

MEMBER FAVRE: Thank you, Mac. Livestock Subcommittee, as you might imagine, we've been spending a fair amount of time on aquaculture.

But for this meeting, we have one proposal and one interim report. I would like

to go ahead with no further delay and turn it over to Mac for the pet food amino acids petition.

CHAIRMAN STONE: All right. The Board was petitioned by the Pet Food Institute to allow the essential synthetic amino acids to be allowed in pet foods. Just sort of a brief rundown.

So the pet foods currently, there are organic pet foods being marketed. First let me say the program, as Melissa said, the program is working on pet food standards. I think they're going to be out December the 3rd.

But currently, they're being produced under the livestock standards and labeled under the handling standards. So it's consistent with the existing rule. It's a great way for, you know, to utilize byproducts and add a little value to certified organic agricultural ingredients.

MEMBER FAVRE: Excuse me, Mac?

CHAIRMAN STONE: Yes.

MEMBER FAVRE: Not to interrupt your flow there.

CHAIRMAN STONE: Yeah.

MEMBER FAVRE: But I think what we were going to do for the petition materials was have Dr. Brines introduce them first.

CHAIRMAN STONE: Oh yeah. Excuse me, that's right. Yeah, sorry.

MEMBER FAVRE: And then go on, if that is okay with you.

CHAIRMAN STONE: Forgot that part, very good.

MEMBER FAVRE: Okay, thanks.

CHAIRMAN STONE: Thank you. Ms. Lisa.

DR. BRINES: Thanks, Mac. I'll keep it brief. The petition for amino acids in pet food was submitted by the Pet Food Institute on January 30th, 2012, and it requests the inclusion of 13 individual amino acids to Section 205.603 of the National List,

for use in organic pet food.

In support of the review of this petition, the Livestock Subcommittee did request the development of a third party technical report, and that report was completed in 2012, and both the petition and the technical report were posted on the NOP website in advance of the opening of the public comment period for this meeting, and this petition was also on the agenda for the last meeting, although there was not a vote at that time. Thank you.

CHAIRMAN STONE: Thank you. Sorry about that. I made a note here for later this afternoon or tomorrow.

So the -- in the petition, the Pet Food Institute noted that many of these essential amino acids can be derived from agricultural ingredients, but there are certain amino acids that are not readily available through normal agricultural ingredients.

So the committee spent, Subcommittee spent a fair bit of time working on the sentiality. It's known that in the normal manufacturing process, the heating especially of dry dog foods or cat foods can degradate the amino acids that are within these agricultural ingredients, so they may not make it through the processing phase of the, in the production cycle.

There also are issues of seasonality and geographic availability of some of these ingredients, to make the organic ingredients to make these pet foods. So through the public comment period at this time, so the committee -- back up one step.

So pet foods are regulated. It seems that I would want to get into it. Maybe Dave will respond. So there's a National Research Council that establishes the baseline. It's administered or regulated through AFCO, American Association of Feed Control Officials.

So it's odd that it's a little bit outside of a true government regulation, but the states agree to this Association of Feed Control Officials, so that the interstate commerce is facilitated.

But each state, because of their legislative and regulatory systems, administer it a little differently, but they do have one standard that they all agree to.

So the committee looked at, we looked at lots and lots of pet food labels, ingredient panels on labels, and seemingly, and again maybe public comment and written comment told us this as well, but there's variability of what synthetic amino acids we were seeing on the ingredient panels.

Seemingly, the rations that had more grain, foreign grain of some sort, they were adding synthetic methionine or lysine. Several of the products had synthetic threonine. Several had taurine, and carnitine, which I guess is not actually an

amino acid but it's also a fifth, sort of often-added synthetic amino acid, if you call it that.

So in our investigation, in looking and discussing seemingly the higher end, if you will, pet foods that mimic the natural diet of dogs and cats, had less addition of the synthetic amino acids. But there was one dramatic trend that all cat foods had synthetic taurine added, essentially all cat foods.

We obviously didn't see every one, but essentially all cat foods had synthetic taurine because they can't be synthesized by the animal, and they do get overly degraded in the manufacturing process.

So in the public comment, written comments, the Pet Food Institute reiterated what was in the petition, that taurine for dogs was also problematic or lack thereof would be problematic, especially in the large breed dogs. Many of the pet foods, they do

sort of market as young animals, older animals, large breed, small breed, et cetera.

But the large breed dogs were sort of particularly, they have bigger concerns, that those would not be -- manufacturers couldn't have a uniformity in the dog foods. They also asked that, said the methionine, lysine and threonine were the other three that were particularly problematic, again getting back to this availability of organic ingredients.

The written comments also referred to that raw diets, that raw diets are not functional, if you will, in the marketplace. Homeowners can in fact, could put together their own raw diet, but in the marketplace it would be very problematic and food safety issues and animal health could be compromised as well.

We did receive one public comment of a pet food manufacturer that said they can source and supply these complete diets without

synthetic amino acids, and several public comments from individuals that said keep synthetic amino acids out of pet foods.

The basic difference here these are not food animals, so is there a slightly different standard. That's why the program is putting together a separate standard, whereas now, as I said, they're being produced under the livestock standard as far as vitamins and minerals, et cetera, and labeled under the handling standards for marketplace as far as made with and use of the organic seal.

I guess that's my summary. If there's any questions from the Board.

MEMBER FAVRE: Thank you, Mac. We had some conversations about, as Mac indicated, some of the other amino acids, and I think we would prefer to wait on voting on this proposal until after we've had a chance to hear the public comments, if the Board is agreeable to that. Okay. So we will come back to that.

Thank you, Mac. Next on our agenda is a report, the interim report for the vaccines made with excluded methods. So Jean.

MEMBER RICHARDSON: Thank you, Tracy. I will not be going through the entire report in minute detail, since it's highly complicated. But let me just sort of review where we are headed with this work, in order to help producers be able to know which vaccines are made with excluded methods and those which are not.

So just as a reminder is that those producers that are growing livestock must take care of their animals. It's required in the rule, and biologic vaccines are permitted. However, it is important to note that the regulations prohibit the use of excluded methods.

However, there is specific reference to vaccines in the section on excluded methods. The regulations provide an allowance for vaccines produced through the

use of excluded methods if, and please note the word if, those vaccines have been reviewed and recommended for addition to the National List by the NOSB.

The review needs to be conducted in accordance with Section 205.600 in the regulations, and those specify the criteria that the NOSB would have to follow, in order to allow prohibited substances or methods in the ingredients.

To date, the NOSB has not recommended any vaccines made with excluded methods to be added to the National List. This provides a real challenge for producers out there, because farmers and certifiers still need to determine if the vaccines they're using are made with excluded methods or not.

And as we all know, the general practice is just to use the vaccines, without really addressing those, either by the certifiers or the farmers. So some farmers

are using vaccines that probably include those that are made with excluded methods.

So in a way, we're not really enforcing what needs to be enforced, and it turns out a lot of it is because of the complexity of the way in which the vaccines are listed, described and presented on the marketplace. So we lack the necessary information.

As you know, we've spent several months with a working group that spun out of the Livestock Subcommittee. We've been working with members of -- Patricia Foley from the Center for Veterinary Biologics, and Melissa Bailey from our NOP staff, and Nick Maravell and I from the NOSB, and Scott Updike also from the program, to try to see what light we can shed on this very complicated situation, because there is not a clear understanding of which vaccines the farmer and the certifier could easily identify.

Obviously, vaccines are an

extremely important of many organic farmers' work protocols. So we put out the working report that went out for public discussion. This is a document that has not gone through the Livestock Subcommittee or been approved by it, because it's only a working group document.

We received some -- we came up with a summary of findings, which is what is being put up on the screen there by Michelle. We came up to summarize our findings is what we saw, was that it is you can't identify certain vaccines as being produced by excluded methods with wood, such as chimera, vector or subunit.

But these are not always clear to the producer or to the farmer, or to the -- in terms of the marketplace. And we know that the scientific veterinary biologic society product codes of D to DNA vaccines and R to recombinants.

However, there is an enormous

amount of confidential business information involved in going into minute detail, that would essentially end up in a way with labeling, labeling one product as being "GMO," which is not a word we use for these, but is one genetically modified and one isn't.

And so because there's a considerable amount of manufacturer confidential business information, we could not, the working group could not end up with getting this list that we would like to have for producers, that would allow them to easily identify which vaccines to use and which not.

We then explored it further, and as gone into in an enormous detail on our conference calls as to what in fact constitutes an excluded method. It got more and more complex as we went into it in more and more detail, and I do not have my Ph.D. in Cytology or Cytogenetics.

So like many of you here, I also have to work through to try to understand what

it all means. The bottom line is that the definition of excluded methods really no longer fits, as Zea said, in the GMO Ad Hoc Committee, no longer really fits what our level of sophistication, ten years after the rule, is in place.

So we need to almost certainly work on a new definition of excluded methods, and the challenge even becomes more complex, is how far back in history do we go, in order to start the analysis of which vaccines presently on the market are okay and which are not.

Do we take a deadline of 1969 or 1975 and then work forward from there? We don't know. We didn't come up with an answer to that question. We simply got more and more complicated as the weeks went by, talking about genomes and transposons and stuff like that.

So we did come up with two ideas that we would have a proposal that we could

look at all technologies that could be used to create a targeted change or mutation in the genome, that would be considered excluded methods.

The second proposal, we would look at every technology on a case by case basis. So that if a given technology can induce genetic mutations randomly or targeted, that technology would be allowed, if mutations were random for the material in question. So those were the two sort of general concepts that came out of that discussion.

So we sent this material, as you know, out for public discussion and comment, and we got some excellent and detailed feedback from a number of organizations. We got eight detailed responses that had a certain amount of consistency in them, from crop, NODPA, OMRI, MOSA, Northern Vermont, Beyond Pesticides. Cornucopia will be submitting detailed comments later, and some from poultry folks.

There was a general consensus that indeed yes, the working group needs to really look at the definition of excluded methods and to continue its work to try to develop a new definition that would be more appropriate for our modern understanding of what excluded methods are.

Let's just look at some of these comments. OMRI made an important point, I think, that as we -- assuming we go forward with the working group, manufacturers and the NOP to look at a definition, that we consider the international implications of whatever recommendations that we come up with, because we need to be able to work in the global marketplace, especially with all the equivalencies.

I think all of them, all their comments included the need to look at this definition. The Crop Cooperative considered that the second proposal, of taking every technology on a case-by-case basis, they

thought that that was the best of our options for the proposals to be looked at, and everyone understood the problem of going -- how far back do we go in the development of manufacturing, to look at the excluded method issue. Crop Cooperative commented on that in some detail.

Other of the comments, definitely they wanted us to be sure that we, the NOSB definitely understands that vaccines are an important part of the tools used by many producers, and indeed we certainly recognize that.

I'm just looking at some of these other comments. Is it MOSA had one. Oh, and OMRI also considered that it was logical to look at, to suggest that a given technique should be declared excluded or allowed, and the International did that. Other things.

Okay. There is also the issue to be sure that we keep on the table and that is the concern for the fact that we know that the

salmonella vaccine for poultry is genetically modified vaccine.

We're aware of that, and that that certainly is one of the serious issues that we have to keep in mind, no matter what recommendations we come up with over the next few months.

So where does this leave us? It leaves us that we still don't have a good list for producers to be able to determine whether the vaccines they're using are made with excluded methods or not.

We heard the other day that dairy farmer Strauss, who has a, I believe he has a closed herd, manages to determine by his own actions, to determine which vaccines are appropriate or not made with excluded methods.

Although I didn't ask him in detail exactly how he's doing that, we know that some farmers try to do it, but the majority still it's so complicated that they can't do it. So we still don't have that list

and we need, we do need it. It is something that's very important.

We hope over the next few months that we can continue work with manufacturers, to look at how such a list may be developed, and also to work on the how we can develop an updated definition of what made with excluded methods really means, and probably some of that work will overlap with what Zea's group is doing with GMO, because obviously there's an overlap there in how we'll come up with a definition over the long run.

So hopefully this working group report can now be absorbed and be part of the work plan of the Livestock Committee over the next few months, as we see what, if anything, we can do to move this along more quickly.

Melissa, is there anything from the program point of view that you'd like to add at this point.

MS. BAILEY: Sure. Thanks Jean for that background and information. So last

night at dinner, Jean said to me well Melissa, you're going to come up with something brilliant to say on this topic tomorrow, and I said well, I'll think about it.

So I don't think I have something brilliant, but I guess what I would share with you is my experience working on this group, which has been a collaborative process, and this topic area is something that I often have posted in my office, which is nothing is ever simple.

As we know, and if you look at the information in the interim report, this is a technically complex and complicated issue, and I guess I would have three points that I'd like to share with everybody, the first being about the process; the second about implementation; and the third being about collaboration and kind of where we go next.

So the first on the process is, you know, we've been working as a team on this issue, on calls kind of around the table. I

think it was appropriate to move into this phase, to kind of break out from that vacuum, put something in front of the public for them to react to, rather than trying to solve this issue independently in this group.

So from that standpoint, I'm glad we got something out that folks can react to. I imagine people will want to provide us additional feedback, given the technical complexity of the document. We've worked with people all along.

We've had great collaboration from some of the poultry folks, kind of letting us know where they're at in their production, what kind of vaccines they're using.

So I would just like to say that I think this, and I hope it continues in the spirit of collective problem-solving.

The second thing about implementation is wherever we end up on this issue, I would say the key is going to be implementation. Whatever we do, I would hope

that we try to embrace the concept of sound and sensible implementation, that we do so in an orderly fashion to minimize the burden on the producers.

As Jean said, the ideal outcome would be some sort of list, so they're not pouring over labels on vaccines, which can be quite burdensome and kind of against the principles that we're trying to move toward.

The consideration of foreign operations is important, as Jean mentioned. So people operating -- this is a global program. People operating in other countries may have additional concerns from their own foreign governments about what are being used.

So that should be considered, as well as I appreciated Mr. Strauss' comment yesterday about his dairy operation. We'd like to learn more about that and what verification is going on.

But we do need to remember that this will cross species as well. So dairy,

poultry, goat, sheep. All of those things need to be considered in whatever implementation we do.

The last point is on sort of personnel and collaboration. So I do want to, even though he's not here, give a great thanks to Scott Updike, who's on my staff. He's done, has a background in some of the technical aspects of this issue and has been really able to provide that input to the group. So that's been valuable.

The working group members, including the staff from APHIS, and in terms of next steps in this collaboration, I think having the Livestock Subcommittee take a look at the interim report, since this was sort of a passthrough, just to get it in front of the public, would be a logical next step, to have those members be able to react to some of what's in there, as well as to continue to work with the GMO Ad Hoc Committee on their work about sort of what those excluded methods

mean.

We'll also put this in front of, as I do with a range of things we worked on, to the USDA Biotech Coordinating Group, who is a coordinating group across the Department, of people involved in biotech issues. So any input we get from that group could be shared as part of this process.

So that's all I have to say, and thanks very much for the NOSB's participation, Nick as well, on this issue.

MEMBER FAVRE: Thank you, Jean and Melissa. I think that's actually a good plan for the Livestock Subcommittee to take it up. I'm fairly certain we're all going to need further advance degrees and a science to English dictionary to be able to interpret the report, but we will do our best to do that.

That concludes the report from the Livestock Subcommittee at present. Yes. Nick, you had a comment? Go ahead.

MEMBER MARAVELL: Yes. I'd just

like to acknowledge some of the comment we got said that we should have additional stakeholders participating in this process, and what I want to say is that this is not a -- this group here is not an NOSB committee or ad hoc committee.

This is a working group of the Department, and I fully endorse additional stakeholder participation. That would have to come at the appropriate time in the appropriate way.

Sometimes industry forms its own working groups, which I think would be fully appropriate in my personal opinion. But I have not checked that out with the Department, and the industry may wish to approach the Department and see how they could best participate in this working process.

But so far, I've been encouraged that we've gotten nothing but positive support from industry in trying to address this issue, and they have a lot of the information that

would be helpful to sorting it through.

So I simply pass that comment onto the Department and to the Board that, you know, we may find that's an appropriate thing to do.

MEMBER FAVRE: Thank you, Nick.

CHAIRMAN STONE: Thanks, Tracy. I believe we have nine people signed up for public comment in this section of the agenda. So I have Leslie Hancock is up first and Dave Carter is on deck.

Public Comment/Livestock Subcommittee

MS. HANCOCK: Well thank you so much for allowing us to make public comment here as we get the presentation together. Just a brief history of who I am and why I'm speaking here today.

I'm a veterinarian from the University of Georgia, and I have a postdoctorate in clinical nutrition from the University of California-Davis. I have ten years in clinical experience and six years in

cell animal health nutrition, and I'm currently the Director of Global Scientific Affairs and Research and Development with Natural Balance Pet Food.

Thank you for inviting the comment, so I can share with you why I feel it is incredibly important that amino acid supplementation is permissible in all pet food.

So certainly we recognize that methionine is an essential amino acid for dogs and cats, and if you're paying attention to the recommendations by the NRC and idiosyncracies within food, the requirements are going to be elevated over the next year. So I'd encourage you to pay attention to that, as well as taurine.

We know taurine is essential in cats. Culmination of data over the last ten years shows taurine is also conditionally essential in dogs.

It's been staged from a non-

essential amino acid to a conditionally essentially amino acid, without which we'll see heart disease, blindness, reproductive failure and death, and as a veterinarian, I've seen many, many sick animals and I've nutritional deficiency far too many times. We know better. This is a preventable disease.

All right. So how can we have complete and balanced pet foods that have complete -- that meet those requirements set forth by regulators, and we still see disease?

The issue there is we're trying to meet litmuses for each individual ingredient, as opposed to looking at -- I know this is a crazy -- a holistic approach to nutrition, where we look at how the different nutrients interact with each other.

So we're seeing trends in pet food formulation, what the consumers are looking for. Whole grains, high fiber. Guess what? That reduces sulfur amino acid bioavailability.

We're using different ingredients, compared to what traditional AFCO recommendations and NRD, and the research and what the NRC based their recommendations upon. We're using ingredients with lower bioavailability.

We know that meats, such as ruminant, beef, venison and bison have lower sulfur amino acid content and lower availability. So we need to take this into consideration.

When you're looking at a formula, it might meet the requirements on paper, but what happens if you put it into the chaotic system of the body? The biology is very different.

Vegetable diets, a trend away from byproducts. Guess what? That's where these sulfur amino acids, are highest concentration, the heart, the liver, lung, brain. Certainly, as the trend goes towards formulating for higher protein diets, that higher protein also

relatively increases the methionine requirement.

So we have a very complex system here that's not being taken into consideration when you look at have you reached a benchmark? Have you formulated to meet a diet that hits, you know, .33 percent methionine. Yep, I hit it. The science is going to be fine.

We know that doesn't work. In the mid-80's, a diet was formulized, a standard AFCO diet, and guess what? We saw lots of nutritional deficiencies, zinc deficiency, copper deficiency, amino acid deficiency.

So we need to be able, as formulators, to look at a diet and understand the way we're formulating, understand the biology of the different animals and ensure that that one meal is going to provide consistent nutrition and not hurt the animal.

The pictures of the dogs here, and you notice they are all large breed dogs, these are cases that I treated myself from a

taurine deficiency on complete and balanced dry, expanded diets. So I want you to take that into heavy consideration as we this disease all the time.

My fear is my colleagues, my friends that are still in practice at universities, if we prohibit sulfur amino acids from being in pet food, they are going to see more disease. They see it enough. It rarely comes to the attention of the nutritionist, because the cardiologists deal with it enough. They know how to handle it.

All right. We know that there was a major problem in commercial kibble using an exotic meat and a whole grain back in the late 90's. Sorry. So that's my four minutes. I tried to get through it, but again to summarize, we have to prevent disease and suffering.

We see it and I think it would be a huge mistake to prohibit sulfur amino acids in pet food, and I won't show you the case

reports of ones that I've seen.

CHAIRMAN STONE: Thank you. Is there questions from the Board? Jay.

MEMBER FELDMAN: I'm trying to sort through the technical review document that we received in look at this, and they do cite manufacturers who sell cat food made without synthetic amino acids, and then there is a company there that apparently does this as well, that actually produces, I guess, a high quality protein, animal protein product.

So when you're talking about adverse impacts on pets, are you talking about specific diets, or are you talking about high protein diets as well, animal protein diets?

MS. HANCOCK: Yeah. So we do see a trend. I believe one of my colleagues has a report of the taurine status, plasma taurine status and whole blood taurine status on different diets of different protein level inclusions.

But you know, you start doing a

product comparison when you try to look at it outside of the box that way. I know that there are certain diets that we do have more attention, because we have seen an increased number of dogs with taurine deficiency on them.

But as a general rule, as you increase protein intake, because you need methionine and the methionine products of the sulfur donors or methyl donors to run the metabolic protein metabolism, those requirements are duly increased.

You can see how if you meet the benchmark, you know, of accrued protein requirement, you don't have a sliding scale for all the other nutrients. Does that make sense?

MEMBER FELDMAN: Thank you.

CHAIRMAN STONE: All right, thank you. I guess I should declare an interest in going through this and evaluating this material.

I recognize that my wife and I feed two Great Pyrenees an organic diet that has synthetic taurine added. Dave, you're up, and Sharon Sherman is on deck. So before you start, Dave, and I'm sorry I didn't do this before for Leslie.

The green light goes for three minutes; the yellow light goes for one; and then the obnoxious red beep.

MR. CARTER: All right, thank you. Just figure thanks to you friend, a little levity here. Mr. Chairman and members of the Board, I'm Dave Carter, a refugee of this group. For a time with National Bison Association, itinerant consultant here today on behalf of the Pet Food Institute.

I don't want to go through the whole ten-year history of where we've been, but let's go to 2008, when the NOSB unanimously adopted the Pet Food Task Force report, and as a part of that, there was a list of ingredients that would likely have to

be petitioned.

On that was essentially the list of amino acids, and that was really the genesis for us taking a look at if those amino acids were going to have to be petitioned, could we petition them as a category, particularly knowing that the pet food standards, when they come out later this year, would be in the livestock area, and in livestock you are allowed vitamins and minerals which FDA allowed.

So that was sort of the genesis of trying to approach that as a category. Obviously, the TAP report and the Livestock Subcommittee took a different view of that, much narrower view, and the recommendation for taurine only for cats came forward.

When we saw that, we convened, then, a group of nutritionists and formulators, to really say okay, if it's not going to happen as a category, what really are the ones that we got to, got to have, that we

just are so essential that we would otherwise be compromising the health of the pets?

That's where we came up with the taurine, the methionine, the lysine and the threonine as really the ones that are critical to being able to make a complete and balanced formulation.

I just want to go through the TAP report. There were, you know, several areas there. You're right. They did cite some companies that make complete and balanced formulas.

But if you look at those companies, they are either a conventional product or organic and are very limited for a specific life stage of a specific species. They don't have a full range.

That's because specifically when it comes to formulating pet food, the organic industry has a lot more limited than the conventional. It comes down to the fact that there just isn't certified organic meat meal

out there.

Chicken meal is the basis for a lot of pet food formulations. It has a lot of bioavailability. It's very dense. When you formulate with fresh meat, you're starting off with a product with 80 percent moisture, a lot more seasonality. It's very difficult.

The taurine for dogs, I think Dr. Hancock mentioned that, that there's a lot of literature that talks about large breed dogs really having problems if they don't have taurine in there. The amino acids have to be bioavailable, and if you look at our written comments, it goes through yes, the TAP report lists the food sources.

But we go through there and talk about they're either not available, or they are not good sources, and that's very difficult. It talks about the raw diet, and if you look in the TAP report, it talks about the fact that pets can die sometimes when they eat that. That's not really a reason to move

forward on that.

So formulators have to be able to do the right balance or the right nutrients for all sizes, for all life stages for both species. That's where we feel that those four amino acids at least provide the tools for them to be able to do that.

We have to have a chance. Pet food owners or pet owners have one chance every day, one or two chances every day to get it right. Those animals get all of their nutrients from that bowl of food.

It's not like us, that if we eat a product and it doesn't have everything we need, we'll be eating a banana or an apple or something later on in the day. That has to be a complete and balanced nutrient-dense diet.

Then finally, growth in the organic pet food sector really helps all organic farmers. As a livestock producer, you can't make a living selling only organic tenderloin strips and ribeyes.

Unless you can get some premium out of hearts, liver, trim, those other things, you can't just make a go at it. So it's very important for the pieces of the puzzle. Thank you.

CHAIRMAN STONE: Thank you, Dave. Questions. Tracy?

MEMBER FAVRE: Is the situation on amino acids mitigated at all you combined a canned food with like a dry kibble?

MR. CARTER: The difficulty is the most in the dry kibble, yeah, because of the heat processing and the degradation. That's where if you look at some of the products, that it's very either limited, that it's not for all life stages, or it's simply in a canned product. So yeah, the degree of difficulty is harder in a dry diet.

MEMBER FAVRE: Just to clarify. So you're saying if you combine a dry and a canned together, you sort of offset some of the impact of that?

MR. CARTER: You offset some of the impact of it, yeah.

CHAIRMAN STONE: Francis.

MR. CARTER: Some is the operative word.

MEMBER THICKE: Thanks Dave. I was looking on the petition. On page 44, it lists the various ten essential amino acids, and it has sources. I see that for threonine, methionine, lysine that are plant sources. Can you explain what the difficulty is in using those?

MR. CARTER: Well, if you look, you know, those, some of the sources that they have on there are the meals, the meat meals, chicken meals that we have. Gluten is a source of those, but if you take a look at our written comments, we talk about the balance of that, it's very difficult to achieve the right balance.

You know, the problem that we have is that not only do you have to have those in

there; you have to have the right balance of all of those, and that's the degree. The other thing is that right now, and the reason that we have focused on the NRC and not AFCO, is that NRC is the basis for those.

There's six different tables in the NRC that talk about different species and different life stages. AFCO is being updated as we speak to reflect the 2006 NRC. A lot of what is in AFCO right now even goes back to 1974 NRC. It's being updated.

If you take a look at the proposed updates, those levels are being increased, and that's part of the reason we say yes, we need to have that, because the levels of lysine and methionine and threonine are being increased under the new proposed AFCO regs.

MEMBER THICKE: So it's easier just to balance those if they're synthetic, because you can just put the right amounts in.

MR. CARTER: You can put the right amounts in and achieve that balance you need,

because one some of the amino acids, not only do you have to hit the minimum, but if you go too high on them, you start to run into some problems as well.

So it's a real delicate balance these folks are doing that and when they're dealing with the, you know, the whole muscle meats and those types of things rather than the meals, it's really a challenge. By the way, welcome to the NOSB. Congratulations on your appointment.

CHAIRMAN STONE: Thanks, Dave. For those of you who weren't aware, Dave's the former chair of this group. So again, I have appreciation for what this little thing means here. Sharon Sherman is up, and Mohamed Mousa is on deck.

MS. SHERMAN: Thank you very much for the opportunity to meet with you this morning, and I want to tell you how much we appreciate it.

I've been a member of the Pet Food

Task Force since 2004. It's been my passion. Animals are my passion. In 1978, my husband and I co-founded the first natural food pet company, and we used as guidelines to create our natural food the AFCO guidelines, because we were of the mind of do no harm.

So we followed that information. Our ingredients were a little bit different, in that we used no byproducts, that we wanted to have whole foods, and we wanted to use chelated minerals, an alternate source of minerals, and keeping in mind it was always do no harm.

With the complete understanding, as Dave mentioned, this is their food. Like an infant ingests this formula for a certain period of time, or lucky enough to be breast-fed. So it's a certain period of time.

But these animals, it's their entire life. They must have a supplemented diet, because they simply do not have the ability to synthesize some of the amino acids.

We seem to learn by our mistakes. In the 80's, many people came home. They would have the spontaneous instances where their cats had heart attacks or they were going blind. In the 80's, they discovered they have a taurine deficiency.

So automatically, it was the demand of AFCO to add taurine to commercial pet food. That was a mandate and we did it, and it relieved those symptoms.

So I'm here today to basically say the same situations exist today. We must have these nutrients. Everybody knows that organic is the gold standard and they moved towards that. Why did they move towards that? Because they want a better diet for their pet.

A lot of people are having results with the change to the organic diet. But we just need to make sure that they're able to have the essential nutrients, so that we don't have a blow-up with a person that's committed to using organic pet foods.

So I'm just asking you to please reconsider and study the use of the essential amino acids in pet foods. Thank you.

CHAIRMAN STONE: Thank you. Are there any questions? Sharon. Harold?

MEMBER AUSTIN: If the proposal that we've presented were to go through as it's written today, what impact would it have on your business and other organic stakeholders such as yourself, long-term?

MS. SHERMAN: Not having the amino acids? Is that what you're saying?

MEMBER AUSTIN: Yes.

MS. SHERMAN: Well, we're of the mind do no harm. I don't know karmically whether I could actually create a food that I would know, that there could be issues, because how can you do something like that? I mean knowingly, you know, with all the information, all the scientific data, how can we do that?

You know, if the people knew that

the gluten was contaminated, would they have put it in the food, you know? There's so many examples. If they knew they needed taurine, they would have put it in beforehand, without so many cats dying and becoming blind, you know, or other issues.

CHAIRMAN STONE: All right. Thank you very much, Sharon. Mohamed is up and Daniella Steiner is on deck.

MR. MOUSA: Good afternoon or good morning, ladies and gentlemen of the NOSB, and Mr. McEvoy and NOSB, thank you very much for letting me talk.

I have so many thousands of chickens I couldn't be here today, so they send me here to talk to you. I also need some methionine, like everybody else before me.

Methionine is very essential amino acid, like what you see. Its component is hydrogen, nitrogen and carbon and sulfurs and oxygen. There's two types of methionine manufactured, the L-methionine and hydroxy

analog. It's a limiting amino acid.

We used to be at four point, four pounds per ton of feed. It's .2 pounds from -- .2 from the ration. It's very, very essential to the welfare of the birds.

History. The NOSB recommendation were at four bound, when to two bound from October 1st, 2012. One thing happened here that who made the recommendation or applied the ruling missed a big, big factor in the animal production, and animal health in general.

Birds have different need in different stage of life. That was neglected here, and I ask the Board and I ask the program to correct it. It's really not good. We see a lot of bad things, and animal welfare is a major, major concern of mine and other producers.

The start-up birds needs a higher level of methionine. Hence during production, sexual maturity, I can tell you right now I

have birds that are four weeks behind in their maturity. They eat their feather. Birds at 17 and 18 weeks don't have any feather in their necks, don't have feather in their tail.

I don't want to give the pictures there because it's really depressing. Methionine is very, very essential to the birds, because the birds is omnivores. It's just like cats and dogs. If you don't feed them their amino acid, it's a sulfur amino acid. It's restricted. It's a limiting factor. All the other amino acids will work to the level of methionine.

Just like you have a barrel and you make a hole in the middle. You're not going to fill that barrel with water. You're going to fill only where that hole is. Methionine is very important for the bioavailability of the other levels of amino acids.

So the heart, pancreas, immune system, feather follicle. Birds like, I look

at them as a very beautiful young lady. If they don't have their feather, you see, you look at them, they feel very sad. I see that. I completed today 50 years and five days working with chickens. I'm 59 years old, so I started from very, very young age.

Well what do we need to do. I ask the Board and the program, I'm not asking for more methionine, but I ask it only for putting the word average, and let me handle that and get the certifier to talk to me when he comes to audit my farm. Keep it for five years. Encourage research. Let's get some science and data to support future regulations.

I was approached by two scientists, two universities to serve in a board for overseeing their research. There's two over here now is was working with USDA, was getting some grants, and we will help them.

CHAIRMAN STONE: All right. Thank you very much. If there are questions?

Calvin.

MEMBER WALKER: Thank you, Dr. Mousa. Could you share again some of the impact of the step-down on your operation, as far as animal welfare?

MR. MOUSA: The birds have a very minimum recommendation or requirement they need, according to the other ingredients. It's a holistic approach for what we put in.

Organic ingredients, which it will be soybean meal and corn. That's, you know, there's not too much stuff available for organic we use, contains a high level of protein.

So when we use, let's say the maximum from everything, and we still have deficiency, what happens, the birds cannot grow when there are babies by the same rate which they are supposed to grow. The other thing is during the sexual maturity, from 12 to 18 weeks, the birds need that amino acid.

Not only methionine, but the

better of amino acid, and because methionine is a very limiting amino acid, they can't do it. So the oviduct and the ovary developed was less.

The oviduct and the ovary is the machine which makes the eggs, which give the production for the farmer. The farmer don't get the eggs. The bird's behavior, I can tell you, I've seen birds very aggressive. When feather falls from a high place from the perch, the birds, 100 or so, jump on there, try to pick up that feather.

In our houses, there is not a single feather in the floor. The birds eat the feathers from each other and from the floor also. I'm really asking for the animal welfare issue and not the production issue.

This recommendation over here are calculated by Dr. Willy Williams, and this is the bare, bare minimum for requirement of the bird. I would like to give him his thanks for his help to me on that.

CHAIRMAN STONE: Wendy.

MEMBER FULWIDER: What about ammonia in the buildings?

MR. MOUSA: Wendy, I thank you for that questions. We have Amish contractor growers in Indiana, and when we visit their farms, and forgive me, because I am going to tell you that with sadness, I've seen a lot of ammonia level exceeded the animal welfare guidelines of what we use, and also I've seen several blind birds.

You know, in winter time, I call those guys and I ask them to what I call it perch the house. They turn all the fans on. Temperature sometimes goes to 50 degrees and less on the birds. There are other birds that lost most of their feathers. I don't like that at all, and sometimes they pile and suffocate.

CHAIRMAN STONE: Nick.

MEMBER MARAVELL: Yes. Could you just explain why it's not necessary to make a

recommendation for the first 17 weeks?

MR. MOUSA: Can you repeat the question, please?

MEMBER MARAVELL: I looked at your -- if you want to go back to your recommendation slide. Just explain why it's not necessary to make any methionine recommendation?

MR. MOUSA: No, it is very necessary. When I start, when I start my presentation, I said from baby chick up to 18 weeks, it's different stage of growth. But over here, that's when the birds suffer the most, because they start to develop their egg machine, you know. That's when they need it the most.

MEMBER MARAVELL: But did you have any specific recommendation, because the feed is different during the first 17 weeks as well?

MR. MOUSA: Yes. The recommendation will be as it's stated, it will

be about 2.95. But during the 17 weeks, let's just take from 12 weeks, because that's the time we start to increase a little bit. Between 12 and 18 weeks, you come to about the middle, and it goes up to approximately 2.8, 2.7 and that, and all that, the added methionine will depend on what's in the soybean meal and also in the other ingredients.

CHAIRMAN STONE: Thank you, Mohamed.

MR. MOUSA: Thank you very, very much. Appreciate it.

CHAIRMAN STONE: Daniella Steiner is up, and George Kimbrell is on deck.

MS. STEINER: Hi. My name is Daniella, and I'm just a regular person. I'm not a scientist. I don't work in the food industry. I don't usually talk to people in suits sitting around the table like that, but I eat every day, usually a couple of times.

I'm really interested in what my

food is and where it comes from, and I feel like I'm more curious about it than most of the people I know. Even I don't have time to read all the articles, and I don't understand all the science behind it.

I don't have a car. I'm not going to go to all the farms that my food comes from, so I have to trust somebody to give me appropriate information.

I have an awesome co-op. I really trust their guidelines there. They send people to all the farms that, the farmers from the farmers market there, and they actually visit them several times a year.

So I totally trust that, and I feel like for an advisory board and a regulatory board, that I want to really trust the guidelines that you're laying out, and that it's not advertising, you know, that it's actually just information.

Because advertising is to give you permission to believe what you really want to

believe, even though it's probably not true, right. I just want the real information. So if I'm at the store and I'm thinking about buying some eggs, and there's two cartons of eggs, and one is $2.50 and one is like $6.00, I'd rather buy the cheaper one if it's just as good. And look, they both say they're organic and they have access to the outdoors, right?

But the one, the access to outdoors is a little tiny door in the way back of the henhouse that none of them are ever going to find, and the outdoors, it's like a little tiny patch of dirt, which like maybe if they took turns, they could each go out there for like two minutes ever, right.

But in my mind, there's a picture on the front of the carton. It's a third, it's outside, and that's what I'm picturing. And so, and that's probably the reality of the expensive eggs. But why am I going to spend three or four dollars more if I'm led to believe it's just the same?

So the organic chickens should have reasonable access to outdoors, and a reasonable amount of space once they get there, so they can all go outdoors for as much of the day as they want, and eat bugs like they're supposed to, yes?

And something like carrageenan, like no independent research has suggested that it's safe for human consumption. I'm going to assume that something like that isn't in some food that I'm buying that says organic. But it's in there. Only industry has suggested that it's safe. The people that are going to make money from me eating it.

For antibiotics, organic animals aren't allowed to have antibiotics. Who's going to think that organic plants are getting antibiotics on them. So why are the antibiotics allowed on organic apple and pear trees?

And now we're talking about farming shrimp, yeah? So it's just another

feedlot. The animals are too close together. They're eating food that's not what they're naturally supposed to eat.

What happens to all their waste? It's totally polluting the water. But it says "Oh, like this is organic shrimp. Now I can feel good about eating it, and I'm not going to look into all the information and find out what's really going on, yeah?"

So me and all the other regular people out there, we're all trusting you guys to give us useful information, so we can make the decisions that we want to make, and not just let us believe something and then give us whatever. Thank you.

CHAIRMAN STONE: Thank you very much. Questions. Tracy.

MEMBER FAVRE: Were you here during the presentation on the aquaculture about an hour ago?

MS. STEINER: I was not, but I heard a little bit about it.

MEMBER FAVRE: Well, the reason I ask is because there was some discussion about where the waste products go in aquaculture, that it's actually very similar to what the natural biology would be anyway, or the biosphere would be anyway.

So you might want to read up on that. It's actually fairly interesting.

MS. STEINER: Well, just like what I've read from feed lots for land animals, it's just so many animals in such a small amount of space, that there's a huge amount of waste and it has to go someplace, and I think that nobody really wants to live near the pig feed lot. Yeah, there's just so much waste.

So it can't disperse naturally, and I feel like it would probably be the same for animals in the water.

CHAIRMAN STONE: Thank you very much. Oh, I'm sorry. Ma'am, one more question, real quick ones. What's your co-op that you love so much?

MS. STEINER: People's.

CHAIRMAN STONE: Okay.

MS. STEINER: And our farmers market is this afternoon, if y'all want to come.

CHAIRMAN STONE: Okay, thank you, and how did you hear about the meeting?

MS. STEINER: From the Cornucopia Institute.

CHAIRMAN STONE: Okay. Thank you very much. George Kimbrell is up and Richard Fulton is on deck.

MR. KIMBRELL: Good morning. Thanks for the opportunity to testify. My name is George Kimbrell, and I'm the senior attorney with the Center for Food Safety. You know us. We're a non-profit. We work on a lot of different organic issues, and today I am here to talk about aquaculture.

So you heard quite a bit about it this morning. As Paul Harvey used to say, this is the rest of the story. In four

minutes, I'm not going to be able to counter some of the things that were said in the 25 minute presentation that you got, but I have a five-page testimony that I'm submitting with about 20 footnotes.

We've also, I've testified on this since 2005 going forward. All of that is integrated here and in the record. So I'll try to summarize a few main points in the limited time I have, and I want to be clear that what I'm talking about here is finfish, predatory, carnivorous aquaculture that's going to be in net pens.

I think our position is with regards to production of herbivorous fish that would be in closed systems, we think that could be organic and in line, in accordance with the law and the principles of organic, but not with regards to open water net pens, and not with regard to wild feed used for the main -- wild forged feed used as the main source of fish meal for these animals.

The first one I want to make is that this was a very acrimonious process back in 2006-2007, when it began. If you're not aware of that, you should be made aware of the history of it. I believe the only protest demonstration in NOSB history took place at a meeting in 2007.

There were numerous sign-on letters from broad coalitions of fishing groups, as well as environmental groups and consumer groups like mine, opposed to the recommendation.

Of course, the recommendation originally prohibited net pen aquaculture as well as wild feed from foraged fish to be used, and then did 180 degree reversal on those two issues.

So I think the bottom line for us is that this is contrary to sound science, to good policy, to good governance and to OFPA. It's unlawful. I'm going to talk about why. First, with regards to net pens, just like in

agriculture, not all types of aquaculture can be organic.

Some are inherently unsustainable and inherently unorganic. Net pen aquaculture is one of those systems. The escape of fish into the wild is an unavoidable consequence, and part of the business model for net pen aquaculture.

I'm passing out a chart here that I've introduced into the record, that shows, lists just the reported escapes from the last several years you can see there.

So this has a dramatic, negative impact on biodiversity. Ms. Richardson raised the point of the mandate to conserve biodiversity as one of the OFPA fundamental standards here, and net pen open ocean aquaculture is the antithesis of that.

Escapes cause, threaten native wild populations. They spread diseases and parasites, among other things. We talked about the waste issue and the pollution issue

here as well. I think one of the best stats I've seen on that is such that, for example, the farms off the coast of Scotland in one year produced more waste than all the cities in Scotland.

So they produce a tremendous amount of waste that goes into the environment. So when you talk about the standards of promoting ecological balance and conserving biodiversity, I think that's a big problem here.

The other is the natural behavior standard. Again, we're talking about salmon here, which is an anadromous, migratory fish. If you're ever seen a salmon run, it is one of the most breathtaking things you'll ever see. The idea that you could pen them up and that would be natural behavior, I think, is a ludicrous one.

Finally, I see I've got the yellow light now. The other major issue I wanted to talk about here is the feed issue. Now it's

clear that feed for organic animals, livestock has to be 100 percent organic. There are no exceptions to that. We've got case law on that. That is well-settled.

What the recommendation does instead, and by the way we talked about how the foraged fish are the irreducible. That is the main course for them. That is what these fish need, the predatory ones, to live. They have reclassified them in the recommendation as, quote, "a feed supplement."

Now that reclassification is not going to withstand judicial scrutiny, I'm going to tell you now. So that is, I think, underscores, that this activity, when it comes to these fish is inherently unorganic and should not be certified.

CHAIRMAN STONE: Thank you. Questions? Harold.

MEMBER AUSTIN: You made a comment and then just kind of blasted past it. I'd like you to clarify it just very briefly, that

this process would be based off of acts that are unlawful. In a nutshell, could you describe what you made that comment based on?

MR. KIMBRELL: Thank you. That last point I think I made about the feed is very clear. Feed for organic livestock, 100 percent organic. We can't certify the Pacific Ocean's forage fisheries.

So instead, we've made an allowance here, similar to the Harvey case, where they've said okay, 25 percent, doesn't have to be organic. We're going to call it a feed supplement. That's unlawful.

Natural behaviors of the fish, unlawful. You must conserve biodiversity. This is an inherently unsustainable activity, unlawful.

CHAIRMAN STONE: Zea.

MEMBER SONNABEND: Thank you. Could you explain a little more detail what the problem is with the escaped fish into the environment?

MR. KIMBRELL: Absolutely. Well first of al, as you might imagine, you've got the competition with the native populations that are already on the precipice of extirpation, right? So you've got the takeover of their habitat. You've got competition for food from them, among other things.

When they interbreed, you have the reduction of their genetic diversity, and they are less likely to survive in the wild, because of course farm fish are not bred to be able to survive in the native ecosystems the way wild fish are.

It also spreads diseases and parasites to these fish such as sea lice. We've seen this time and time again in every country that has had salmon aquaculture. It's destroyed the fisheries in Canada, for example, the native fisheries as well as Scotland.

CHAIRMAN STONE: Francis.

MEMBER THICKE: Is your organization against all forms of organic farm fish, or do you have others that you approve of?

MR. KIMBRELL: Thank you. I tried to make that clear at the outset. But I'll absolutely reiterate it, which is that my comments are intended only for finfish or carnivorous, predatory aquaculture.

So closed systems, tilapia, catfish, that the waste is contained, they are fed vegetarian feed rather than wild, foraged fish. Those things, I think, we would be in favor of an organic standard for, absolutely.

I think when you talk about net pen, open ocean aquaculture, and you talk about predatory fish that require smaller forged fish, by the way a dramatic negative protein ratio. To grow one pound of salmon takes between three to six pounds of ground up, tiny forage fish.

So we're not solving any fisheries

crisis here. We're robbing Peter to pay Paul from the oceans. Those are the types of things that we do not think are organic, and cannot be made to be so.

CHAIRMAN STONE: John.

MEMBER FOSTER: You made a reference that the one salmon operation in Scotland produces more waste than all of Scotland, and I really find that tough to buy. So I'm wondering what the citation is. I can look that up.

MR. KIMBRELL: Yes. It's in my -- I'll give it to you right now. It's not just one. It was all 350 marine salmon farms in 2000 produced more sewage waste, in terms of nitrogen and phosphorus, than the country's human population. It's footnote 9 in my remarks, and the study is -- yes, footnote 9. So you have a copy of this.

MEMBER FOSTER: And so if I look at that, I'm going to find a reference that --

MR. KIMBRELL: You'll find a

scientific paper that confirms that, correct.

MEMBER FOSTER: Thanks.

CHAIRMAN STONE: Jay.

MEMBER FELDMAN: Thanks, George. I'm wondering what you think this Board should do in terms of revisiting all or a portion of the underlying policy that is, that we're relying on here.

MR. KIMBRELL: Well, Mr. Feldman, I think the Board should do whatever it can here, you know, in terms of rethinking it.

I think it needs to go back to the drawing board and offer to the people an organic standard that actually can be organic, and to the extent we're talking about herbivorous, closed systems operations, rather than trying to put an organic label on essentially conventional, you know, operations when it comes to net pens.

So I leave it to the Board's expertise about how you might rethink that. But I think it's imperative that you do so.

CHAIRMAN STONE: Calvin. All right. Thank you very much, George. Richard Fulton is up and Brennen Herbruck is on deck.

DR. FULTON: Good morning. My name is Richard M. Fulton. That's what my mother calls me when she's mad at me. My friends call me Mick Fulton, Mick kind of like Mickey Mouse.

The reason, first of all, I am the -- have been a veterinarian for 32 years and have been active in the poultry industry as a veterinarian for 28 years. I am currently a faculty member and associate professor of avian diseases at Michigan State University.

I actually work at an animal disease diagnostic laboratory there, and I see anything from somebody that has one or two chickens in her backyard to commercial poultry producers that have millions of chickens.

So my reason for being here initially was my concern that there's a possibility of eliminating all vaccines from

poultry, and after I've been here to observe what's going on, it appears to me that you guys are just struggling with definitions.

I applause you for trying to figure this out. It's very complex. Even me as a scientist, sometimes I don't understand some of those things, and the other thing I've seen is I've dealt with some of those backyard people.

They want to also raise what they call organic. They chose not to use vaccines. Their birds die from diseases that are easily preventable, especially with vaccines. So the thing that I would recommend that you do is please don't forget about the resources that you have.

We have a great number of universities of higher learning with veterinary faculty and scientists on staff, who have nothing to try to sell. They're there for information, and I'm sure that they'd be glad to work with you and be able to

help that process.

The other proviso is that I do know of one vaccine that is actually genetically altered. It's a vector vaccine. That vaccine is excellent, and I recommend it to people because it does not spread the disease.

There are some vaccines, and most vaccines are derived from finding something in the wild, changing it by either growing it at different temperatures, something like that, and putting it in chickens to protect the chickens.

But if there is one disease called infectious laryngotracheitis that is caused by herpes virus, if you use that vaccine in chickens, it will spread and it will cause disease. So there is a good use of that vaccine, which is there's a vector vaccine that has just a small protective portion of that.

So anyway, that's my, the end of

my presentation. If you have any questions, I'll be happy to answer them.

CHAIRMAN STONE: Very good. Questions from the Board? Jean.

MEMBER RICHARDSON: Not as much a question as a comment. You could be absolutely certain that we're all on the Board very much aware of the fact that the poultry industry is one of our areas of complexity, and there's no way that we're going to prevent the use of vaccines in poultry, because obviously it is important to have healthy stock at all times.

So it's working it so that it -- coming up with something that works overall is what we're trying to do over the long run.

DR. FULTON: Very good, thank you.

MEMBER RICHARDSON: Thanks very much for your comments.

CHAIRMAN STONE: Nick.

MEMBER MARAVELL: Yes, just another comment. Jean and I served on the

Working Group. This Board does not try to take action, which would be overly disruptive to producers, so that anything we did would have to be taken and take industry practice into account.

Our intention is to have a safe food supply here and a healthy livestock. So we're going to take those things into account.

DR. FULTON: Very good. Sounds like you're working with me.

CHAIRMAN STONE: All right. Thank you very much. So Brennan Herbruck is up, and David Will is on deck.

MR. HERBRUCK: Hello. My name is Brennan Herbruck. I'm a fourth generation egg farmer from Michigan. I'm responsible for approximately 100,000 organic-laying hens located across several small farms.

Over the last few months, I have seen young hens being affected by the two pound per ton limit on methionine. Some of the symptoms I have encountered are hens

pecking the feathers off each other. I've seen resulting injuries where they've actually died from that.

The hens are also eating all the lose feathers that they can find on the ground. This indicates to me that they are not receiving enough methionine in their feed, and are trying to get it from any other source that they can.

They've also been eating their own eggs that they can find. They kind of peck at it, and then they try to get something out of that. The welfare of the hens is being jeopardized by the lack of methionine in their early life. They will find methionine from other sources like the bodies of other hens if they cannot get it in their diet.

This really concerns me about the welfare of my hens, as it seems like abuse to arbitrarily restrict the important nutrient from them at a critical stage of their life, and the resulting pecking is definitely a

welfare concern, because it will lead to higher death loss in my houses. That's it.

CHAIRMAN STONE: Very good, thank you. Questions? Calvin.

MEMBER WALKER: Could you give us a rough, maybe a percentage of your birds that shows that feather-picking tendency and percent death?

MR. HERBRUCK: Probably about ten percent of the ones that died.

CHAIRMAN STONE: Harold.

MEMBER AUSTIN: If we don't make a modification to the methionine ratios that are on the books now, what long-term impact would that have on your operation?

MR. HERBRUCK: I think this will just continue, and just, if there is no step-down especially, it will make it much worse. Yes, it will just keep continuing like this and make it worse.

MEMBER AUSTIN: Make it worse. Would you be able to continue to do business?

Would you choose to continue to do business with the effects that it would be having on your stock?

MR. HERBRUCK: I'm not really sure. I can't speak to that.

MEMBER AUSTIN: Okay, thank you.

CHAIRMAN STONE: Nick.

MEMBER MARAVELL: What did you think about the recommendations that were put up, in terms of stepping up and stepping down the use of methionine through different stages of production?

MR. HERBRUCK: I think that's a good recommendation. They do have different requirements throughout different stages of their life. So I would support something like that.

CHAIRMAN STONE: Could you briefly describe the general management practices that you use for your birds, your housing, their access to the outdoors, the type of feed they have available to them?

MR. HERBRUCK: Well, they are certified organic. They have access to the outdoors, to sunlight, to the ground, to grass and dirt, and they have areas that go inside. We are in the north, so they do have to be inside in the winter, so they don't get any access in the winter.

CHAIRMAN STONE: All right. Thank you very much. David Will will be the last presenters in the livestock session.

MR. WILL: Hi. My name is David Will. I'm the general manager of Chino Valley Ranchers, a Southern California-based organic egg producer. I'm also the chairman of the United Egg Producers Organic Egg Committee, and I am one of the founding members of the Methionine Task Force, at which my comments are directed towards.

I want to thank you first for the time and for hearing our public comment, and I also wanted to let you know that the Methionine Task Force is a group based of

about 15 like-minded producers in the broiler, layer and turkey industry, and of those 15 producers, we represent about 200 organic family farms, anywhere from 1,500 to 18,000 layers, single family farm businesses in addition.

That includes everything from a pasture-based system all the way to an organic-based system. In the past, the Methionine Task Force, we've been here since about 2007 presenting to you.

Things that we've done and looked at in the past is we funded a high methionine corn study. We did our own trial within our company of 15,000 sister birds that we fed zero additional methionine to. Those were in a cage-free operation. They were not organically fed.

We've done a literature review of all literature out there on methionine in the world, and I have just passed out to you a current study that we funded through the

University of Pennsylvania and University of North Carolina.

While the Task Force funded the study, we have retained absolutely zero editorial rights on the study, and they intend on publishing it in Poultry World magazine.

We wanted to thank you from the Task Force for delaying our petition from this meeting 'til the October one, mainly because we'd agree with you. There is no time to really look at the total impact of the step-down.

We've only had 27 weeks since the step-down went into effect on October 1st of 2012, and if you look at that, it takes 24 weeks to get an organic layer from day of age to realistic egg production.

So we anticipate that only about five percent of the eight million plus organic layers have been raised and are actually in full lay, based on just the timing of replacement of flocks with the 70-week

replacement cycle.

We think that we will have a lot more information to give you at the summer. We will have the conclusion of our study. We're also now feeding a much higher level of feed, because in cold weather, birds eat more and so they are in direct getting more methionine.

Throughout the summer, we anticipate some of the effects being a little bit more severe, from the fact that they're being fed less methionine, because they'll be down about 25 percent in total feed consumption.

Right now, we're having producers tell us they've had no issues to, or having minor or moderate issues which have ranged from bird health issues and the ammonia levels in the farms due to overfeeding of protein, a wetter dropping, feather issues.

Also at the Anaheim Expo, I had two different organic certifiers come up and

talk to me, and both of them said that their certifiers going into the farms have noticed issues with the birds, just from the last time they were there, on either environmental or physical appearance.

In fall of this year, we will present the study for you, and we will also bring a large group of individual family farms to take a look at everything, and so that you can hear firsthand from them what the change has been.

What we're mainly asking for is the change, that we go to a two-pound average, because we don't feel you should feed an infant the same rate you should feed a teenager, that you should feed a senior citizen.

We want to work with our certifiers in order to get a method that they feel they can certify on the farm level, that guarantee that we still have that two pound average over the life of the bird, instead of

the hard cap.

That's our goal. Thank you very much for your time, and I didn't make it. Oh well. Thank you.

CHAIRMAN STONE: Sorry. I think -- oh Tracy, questions?

MR. WILL: Yes.

MEMBER FAVRE: Not so much a question as a request. Since we will be addressing this issue at the fall meeting, I'd really appreciate if you guys do communicate with us as much as you're able to prior to the report coming out, so that we can use that as part of our deliberations.

MR. WILL: Yeah. The contact information for the professors is on here. I can get you information. Like I said, we just funded the study. After that, we're completely hands-off.

So we have invited them to come and have offered to pay for them to come to this group, to make a presentation. Any time

that would be allowed for their presentation, we'd be appreciative of as a group.

CHAIRMAN STONE: Thanks, Dave.

MR. WILL: Thank you, sir.

CHAIRMAN STONE: So Terry Shistar, just so you know. You're still at top of the list of the timing, and we're just figuring out what the prize is at this time.

Madam Chair, that concludes the public comment for the Livestock session.

MEMBER FAVRE: Okay. Thank you, Mac. I think that next on the agenda is actually a break for the Subcommittee, to modify proposals as needed. Mac, do you have any -- since you're, really have the only proposal, do you have any feedback on that?

CHAIRMAN STONE: Yes ma'am. I'd like to get the committee together and evaluate a recommendation based on public testimony, and maybe we'll bring something back tomorrow for a vote.

MEMBER FAVRE: Okay. So basically

everybody, it looks like we're going to postpone the vote on the pet food amino acids until tomorrow, if everybody's okay with that.

CHAIRMAN STONE: So maybe we can either meet at lunch or tonight or something and discuss what we've heard. Jay.

MEMBER FELDMAN: So we'll -- can I ask a question about it, so that maybe the Subcommittee could consider it? I'm still a little unclear as to whether a high animal protein diet that is available on the market currently, maybe not as organic, does not require the addition of the amino acids and specifically the taurine.

If that is the case, I'd really like to get clarification on that. I've been on their website, Nature's Logic. I don't know if that's one of the ones you looked at when you did your survey.

But I really think we need an answer to that question, because if it is available, it's really, I think it's difficult

to make an essentiality argument. Thanks.

CHAIRMAN STONE: Okay. Okay. So that concludes the morning session. It's 11:30. We will break for lunch. I think because this afternoon is so tight, we want to have as much time as we can. We'll take an hour and 15 minutes.

Before you leave, a couple of notes. They are going to lock the room, because there's another conference across the hallway, and access to outdoors. So your computers and all your things will be fine. They'll open it up obviously a little while before we come back.

But let's come back at 12:45 promptly to start the Crops Committee. Thank you.

(Whereupon, the above-entitled matter went off the record at 11:29 a.m. and resumed at 12:50 p.m.)

A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N

(12:50 p.m.)

CHAIRMAN STONE: If I could have everyone's attention, we'll get started for the afternoon session. We broke a little earlier for lunch.

The panelists are here. They're prepared for the presentation. We just want to give ourselves as much time as we can for this spirited debate that we're engaged in at this time.

I want to remind the audience as well as Board members that we've had the luxury of time to ask numerous questions of various presenters. We've had the luxury of time for the presenters to give lengthy answers.

But in the effort, we'll have to just watch the clock and if presenters, don't be offended if I have to cut you off or Board members not be offended if I encourage you or I don't call you in the effort of time. So

just a reminder that we have this luxury the last couple of days and don't get spoiled at all.

So, so. I'm excited. We're scheduled to quit at 5:30 or something, but certainly 5:40. Certainly, if we're doing good and having the right kind of conversation, we'll certainly let it -- I'm not opposed to letting it run a little bit long.

But at some point, there's diminishing returns or not new information and that kind of thing. So Jay, I'll turn the program over to you.

Crops Subcommittee

MEMBER FELDMAN: Thank you Mac, and welcome back from lunch everybody. We have an exciting panel to help introduce a discussion on the petition for tetracycline use in apple and pear production.

We have four speakers on the panel this afternoon, and we've asked each speaker

to present about a ten minute introduction of the issue from their perspective, and then we as a Board will follow up with about a half hour of questioning, and then we'll go into our presentations.

The first speaker will be Dr. Ken Johnson. Dr. Johnson is a professor of Botany and Plant Pathology and has been since 1999 at Oregon State in Corvallis. He has a Ph.D. in Plant Pathology from the University of Minnesota, an M.S. in Plant Pathology and a B.S. in Plant Health Technology.

Dr. Johnson's major research interests include plant disease, epidemiology, with emphasis on disease and innocular dynamics, management, strategies, disease impact assessment.

We know Dr. Johnson from his work with the e-Organic webinar, which we really appreciate you holding over the last year or so, and we also know that he drives a mean van and took us around the Mount Hood

neighborhood. So thank you, Dr. Johnson, for being here.

DR. JOHNSON: I guess speaking to the Board is pretty easy, because I think most of you have probably seen my webinar, and I drove you around for a day in Hood River. So we went out and looked at different orchards.

For everybody else, my part in this has been to look at the development of alternative approaches to fire blight control in organic orchards, and we have had a several year project now, a research project through the OREI, to investigate just that.

I actually go back in fire blight in looking at alternatives to antibiotics for about 25 years. So I've got a long experience in this area.

Our project the last three, four years has sort of been to take a systems, we call it a systems approach, and we're looking at a lot of different issues in fire blight. When does the pathogen become active. Can we

use sanitation to suppress the pathogen early before bloom.

Things like interactions with bloom thinning, and then products that would be effective during the mid to late bloom periods, that are when you need to protect flowers from fire blight and to prevent infections in your orchards.

In that regard, we've become interested in two products. There's lots of products that give some activity in fire blight control, and many of them are organic. But two of them that we've been especially interested in has been this yeast material called Blossom Protect. It was registered by the EPA last year.

It comes from Europe, some German scientists. It was very limited in supply last year and this year, it's much more available, and there's quite a few people that are going to use it in Washington State this next season or right now, in fact. So we're

learning a lot, and about that material this year.

The second material that we've been interested in has been a copper material made by the Gowan Company, and it's a new formulation of copper sulfate that Gowan has sort of been staking their formulation -- Gowan's very interested in formulation, and they've got this mix of copper sulfate with seaweed and things that they think is safer to the finish of fruit.

Just to back up a little bit, copper bactericides are pretty good materials for fire blight control. The problem that they have is that they're a little bit phytotoxic.

So that if you spray copper bactericides to control fire blight, you risk damaging the finish or the skin of your fruit, and it's a cosmetic thing.

It doesn't affect the nutritive value of the fruit. But if you are trying to

sell fruit in a grocery store or in some place where you're competing with a lot of other products, if your fruit doesn't look just right, just so, then you've got a problem.

So part of the reason that antibiotics are useful is that they are so safe for fruit, and they don't do these things.

We look at the alternatives, and the alternatives then give us this risk that our fruit won't finish as well, and when it doesn't finish as well, it's not worth near as much, at least downgrading and it becomes hard to make money selling organic fruits.

So those are the big issues, and that's also an issue with the Blossom Protect too, although in the drier climates like central Washington, we don't think fruit russet from Blossom Protect will be an issue, and the testing that's gone on with this new copper material that we think is safer, this new formulation of copper that we think is

safer, also shows that in the drier climates on apple, it appears to be a fairly safe material.

The copper material does not have an EPA registration yet, and it's just being submitted this year. So the first year that it could potentially be available would be the year 2014. I guess I've still kind of got my fingers crossed about that. I've seen things take longer than that to go through registration processes.

I think that the 2015 season would be the first season that this copper material would be widely available. The company has said that their ingredients for the formulation have been accepted as organic. You know, they've run it through the preliminary screening that it needed to have to get that.

So they are reasonably confident that they can get an organic OMRI certification for their material, but they

still are, you know, a year to two years from widespread use of the material in organic orchards.

So I think that's sort of my summary. I guess the other thing about it is that biocontrol agents like yeast are useful during the flowering period, and they're pretty much restricted to being useful during the flowering period.

If we look at our fire blight problems that we have in industry, that yes, we have problems in the flowering period, but we also have problems in the post-flowering period. We have problems when fire blight breaks out in the summer, due to a hailstorm or some event like that.

And so the yeast is not going to have any value to the type of fire blight that you get, say after the primary bloom period. This copper material does have value for that, and it is another reason that we're interested in it. We would look at it as the best and

the direct substitute for oxytetracycline, and I'll stop right there.

MEMBER FELDMAN: Thank you, and we will have a chance to ask questions again after this. Our second speaker is Dr. Virginia Stockwell, who is a research Assistant Professor in the Department of Botany and Plant Pathology also at Oregon State University.

She has a Ph.D. from the Department of Botany and Plant Pathology at Colorado State University, an M.S. as well, and a B.A. in the Department of Biological Sciences from Rutgers.

Her major research interests include biological control of plant diseases, antibiotic resistance mitigation, microbial ecology, epidemiology, bacterial pathogen diversity, and her research focuses on sources and variation in biological control efficacy at the population molecular level. Thank you so much for joining us.

DR. STOCKWELL: Thank you, Jay, and thank you for the opportunity to talk with y'all today. It's a rare opportunity, and I appreciate it.

As Jay indicated in my introduction, I have been interested in antibiotic resistance and the use of antibiotics in orchard environments, and trying to do some risk assessment as far as what are the dangers or potential risks, putative risks associated with the use of antibiotics in orchards.

I want to say that one thing we have looked at streptomycin more so than tetracyclines, because streptomycin's used in more countries around the world than tetracyclines. But some of that work is applicable to our work on tetracyclines.

For example, there was concern that maybe plant grade antibiotics would be contaminated with their fermentation products. So they grow the bacterium that produces them,

and then they, in the case of plant-created antibiotics, they do purify the antibiotic from the culture fluid, and then they add that to a clay material like kaolin, to make the final product.

In animal agriculture, there are some cases where they're just spinning down the entire broth culture, resulting in both the producing strain being present in the antibiotic formulation, and also the resistance genes, which could be a problem when they're using it for growth promotion.

In plant-created antibiotics, we did look at, look for DNA in those products, and we did not find any from products collected from around the world. So at least we know we don't have bad products. We don't have contaminated products. The products are human grade and fairly clean. So that's one thing.

I was given three questions to address, and I'll do those briefly. I'll take

the second one first. Please explain the breakdown in tetracycline in an orchard, after it's used for fire blight management, and how likely is it to persist in soil or contribute to resistance in soil microbes over time.

So with the tetracyclines, the form that's used in plant agriculture is actually the oxy form, oxytetracycline. It's still a natural product, but it's -- the oxy form is more heat-tolerant.

If you buy tetracycline from a chemical company like Sigma Chemicals, and store it in the lab, it will degrade just due to air temperature. So you have to freeze it. The oxy form is room temperature-stable. So that's one reason it's used in plant agriculture.

There is some instabilities, though, with oxytetracycline. For example, these tetracyclines absorb light strongly, and they're degraded by exposure to light or sunlight. They're also labeling basic

conditions.

So there was some work done by Christiano and all on oxytetracycline persistence in the orchard canopy after sprays on peach, because it's also used for bacterial-spotted peach, and they found that first of all, sunlight and UV radiation does degrade the compound very rapidly.

They also found that some rainfall would wash the compound quickly off of the leaf surfaces, and they also demonstrated that there was no absorption into the leaves by the oxytetracycline applied on the surfaces.

So they found that if you had a rainstorm within say a day of application of the tetracycline, it pretty much would be washed off and not present on the plant surface anymore for inhibition.

Which is why we recommend that you time your sprays, so you don't hit bad weather. I have applied tetracyclines onto flowers in a screen house so it's protected

from rain, and found that the activity, the bioactivity of the compound lasts for about four days.

So that's the duration of the inhibition of bacterial on plant surfaces. It's about four days. You could be generous and say less than a week. So it's not persistent as far as its selective capabilities.

Also antibiotics are not mutagenic. They're just selecting for resistant strains amongst the population. So I just wanted to make that point.

As far as what happens when it falls on soils, it's rapidly absorbed by soils and loses its activity. Actually, if you just add iron to tetracycline, it loses activity. It's a kelator, so it kelates iron and loses its antibiotic activity.

So they found that even just most of the work on soils and tetracycline stability's actually been done with animal

manures, because they estimate between 40 to 90 percent of the tetracyclines administered to animals is excreted into manures. So that was the interest there.

They found that even with overloading soils with heavily contaminated manure, the tetracyclines were absorbed, and only in rare cases did they even see an effect on the -- only in cases where it was really heavily loaded with antibiotic resistance genes and also tetracyclines did they see a change in the soil community.

So generally with the spray, 200 parts per million per acre, you'd get many two micrograms landing per square centimeter of soil. That would probably be bound very quickly and activated by both -- if it's on the surface by sunlight, and also by natural hydrolysis, and also by the binding to soil particles.

The other two questions I have is what's my analysis of horizontal gene transfer

in bacteria from orchards to human pathogenic organisms, and has this actually occurred. We have no evidence that it has actually -- that is has occurred to human pathogens, first of all.

Now I've done a lot of work on -- we've looked in orchard fruit and flowers and leaves. Work's been done by Temple in Johnson's group, Larry Pusey up in Washington.

I've worked on pear flowers and Patty McManus did work in Wisconsin, using culturable and non-culturable techniques, and we have not found any human pathogens on these plant surfaces. So at the time when we're applying antibiotics, human pathogens aren't there.

Now I had done a lot of work on acquisition of plasmids by the fire blight pathogen, erwinia amylovora, and we have found some years that up to 60 percent of the isolates during epidemics have acquired plasmids, which is amazing.

So we know that plasmid exchange can happen on flower surfaces. The interesting thing is we are sequencing those plasmids and we're assembling them now, and we have not detected any antibiotic resistance genes on these plasmids.

So although we have plasmid exchange with the fire blight pathogen, which is a distant cousin from e coli, erwinia amylovora is an enterobacteriaceae, which is similar to e. coli. We have not seen any acquisition of antibiotic resistance, just acquisition of plasmids.

So yes, if human pathogens were present on flowers, yes, they could probably acquire plasmids. But that's the problem. We lack the recipient. We don't have the human pathogens on flowers. So there's no evidence that we have horizontal gene transfer directly from bacteria to human pathogens in orchards.

Finally, what's the possible risk to human health or the environment with the

current use, cycles, and rates of tetracycline used in the Pacific Northwest?

There's a couple of things I want to say. First of all, when we think about antibiotics as selection agents, most of the cases that are brought from the literature deal with subtherapeutic uses and chronic exposure to antibiotics.

Here, we're dealing with an acute exposure. The spray is present for a couple of days, and then it loses its selective capability. The amount found on residues on fruit, when present, are extremely low. So they'll be sublethal doses, and we could talk about that later.

Honestly, we've looked at fruit from sprayed orchards and non-sprayed. Patty McManus at Wisconsin just finished up a huge metagenomic study, where they looked at orchards that have been sprayed for ten years with streptomycin, which is more selective than tetracyclines, and orchards that have

never been sprayed with antibiotics.

The bacterial communities on the fruit, the leaves and the flowers, or the fruit and the leaves and also the flowers in late bloom, were indistinguishable. They had the same level of naturally-occurring streptomycin resistance, but the population structure was not changed over time.

Fiona Walsh in Switzerland has also done similar work, looking at leaves, flowers and soils, and again right after a spray, she does see a shift in antibiotic resistance genes. But within a week, it's indistinguishable between soils that were treated with streptomycin or -- streptomycin primarily, and non-treated.

Then we've also done work using culture-based studies, where we also sprayed flowers with streptomycin, tetracycline or a combination of the two, and we do see a change in populations on antibiotic treated trees. The populations are lower for about a week.

But within 14 days, 45 days and also in fruit, you cannot tell the difference between fruit that were sprayed with antibiotics during bloom, and those that were not.

So if a human did obtain an antibiotic resistance gene from eating a fruit, I wouldn't be able to tell you if that fruit was from a sprayed or non-sprayed orchard, because if I just looked at the bacteria present on fruit from sprayed or non-sprayed orchards, or the number of antibiotic resistance genes on those fruit, there's no difference.

So there's not a clear linkage between antibiotic application and what ends up on the fruit at the end, and it's really -- there's no direct linkage with human pathogens at this point. So I'll stop there and turn it over to Jay.

MEMBER FELDMAN: Thank you, Dr. Stockwell. Our next speaker is Brenda Book.

She is the program manager for the Washington State Department of Agriculture's Organic Food Program. Brenda holds a B.A. in Sustainable Agriculture from the Evergreen State College and studied botany at the University of Iowa.

I guess you've been with the Washington Department of Agriculture's organic program since 2002. Ms. Book oversees all aspects of the agency's organic certification services and staff.

She's a native of Central Iowa and grew up on a family farm, third generation, grain and livestock farm that has been involved in the organic industry since 1996 as a farmer, researcher, retail, produce manager, farmers market regulator and regulator.

In addition to managing the WSDA's Organic Program, Brenda currently serves on the Board of Directors for Tilth Producers, and is the past president of the National Association of State Organic Programs. Thank you Brenda for being here.

MS. BOOK: Thank you. I really appreciate having the opportunity to provide technical information on the certification process, and I truly hope I can be some assistance to your work and the organic community.

I would also like to add, as far as my introduction, that I -- so you know where I'm coming from, I'm also a mother and a dedicated organic consumer. My family eats organic apples and pears every day, literally.

A little bit about Washington State Department of Agriculture Organic Program. We have a long history of organic inspection and certification services. 2013 marks the 25th year of certification for our agency. We are the oldest and largest state-run certification agency in the country, in terms of acreage and number of clients.

The mission of the WSDA Organic Program is to protect consumers and support the development of the organic food industry

by ensuring the integrity of organic food products. All of our 24 staff, the agency and our organic stakeholder advisory group take this mission very seriously.

So a little bit about tree fruit in Washington. Washington state produces, is the number one producer of organic apples. We produce about 65 percent, and we're also the number one producer of organic pears, about 61 percent.

You know, if you're interested in more statistics about Washington State agriculture, the Center for Sustaining Agriculture and Natural Resources utilizes all the WSDA certified organic producer data to produce reports, specifically on organic tree fruit in the state.

As we reported in our public comments in Seattle, in 2010, WSDA certified 719 producers. Of these producers, 361 are certified for organic apples and/or pears. Of these, 136 farmers included the use of

tetracycline in their organic system plan.

I do want to make a clarification, though, that that data was taken from the plan and not from the actual inspection findings of confirmed use. In 2012, a year that was particularly high in fire blight incident, 76 of our 333 certified apple and pear producers used oxytetracycline.

Of these 76 growers, 34 of them or 45 percent also produced apple and pear varieties that are in compliance with the EU export restrictions, which means they produce them without oxytetracycline.

I do want to note that that total, as far as number of apple and pear producers, also includes those producers that may just have one apple or pear tree in their backyard. So we have a wide variety included in those numbers.

I should mention too, about 736 producers total; we certify over 1,100 certified operations, handlers and processors

that are all part of that chain of custody for those certified organic apples and pears.

So I want to, in my introduction here, go through the certification process, and explain what we do to evaluate the use of material on an organic farm, and specifically the use of an antibiotic.

So Section 205.206 of the National Organic Standards is the crop, pest, weed and disease management practice standard. Within the standard, the requirements are outlined. The requirements that have to be met prior to the use of any material are outlined.

The practice standards require producers to use management practices to prevent crop, pest, weed and disease including, but not limited to, crop rotation for annuals, biodiversity for perennials, soil and crop nutrient management practices, good sanitation to limit the spread of infection, and cultural practices such as pruning for air flow and selection of varieties that are

resistant to prevalent pest, weeds and disease.

Resistance to one disease may mean high susceptibility to another. We find that our growers are continually put in the position of making the choice of what disease they can best manage, when they are selecting varieties.

205.206 also goes on to state that disease problems can be controlled through management practices which suppress the spread of the disease, and the application of non-synthetic biological, botanical or mineral inputs.

So it's only after all those different preventative practices have been in place, and that first level of preventative practices, if they've been implemented and they're not effective, then 205.206(e) goes on to state that a material listed on the National List, specifically 205.601, may be applied to prevent, suppress or control pests,

weeds or disease, provided the conditions are documented in the organic system plan.

So 205.601 materials such as oxytetracycline may be applied and are explicitly allowed as a component of multi-level preventative plan.

The National Organic Standards do require confirmed -- do not require confirmed detection of fire blight in an orchard prior to an oxytetracycline application. Use of models to determine risk and prevention needs are consistent with the regulation.

So that's the standard that we are focused on when we are evaluating materials. So I want to put that into practice a little bit and go through our application review and inspection process, so you see how we apply that.

So in the application process, USDA National Organic Standards Section 205.200 require an operation to develop an organic system plan. Requirements of this

plan include description of practices and procedures, a list of all the substances to be used, a description of monitoring practices, and a description of record keeping system.

In the WSDA organic system plans specifically, we require a narrative disease prevention description. We also provide checkboxes to indicate practices that are utilized to prevent disease, such as crop rotation, resistant varieties, vector management, plant spacing, companion planting, soil balancing, composting, field sanitation, timing and planning of cultivation.

Our system plan is not just a tree fruit operation system plan. So it's the wide variety of those different practices that may be used.

We also require a self-assessment of the effectiveness of a producer's plan, and a question about whether disease control materials will be used if preventative practices are ineffective.

Then on an annual basis, the certified operation is submitting an update of their plan to us, and within our update form, we require again a description of the monitoring, an evaluation of the effectiveness of that plan, and we ask for plans to improve disease management for the upcoming year, that continuous improvement that we're all looking for within certification.

So then once we get either that initial application or that renewal application, then our staff are doing a review of that. Section 205.402 and 205.406 are the parts of the regulation that pertain to this.

After receipt of a new or renewal application and an organic system plan, then our trained certification specialists review the paper work for compliance with the entire regulation. The review includes evaluation of both the practice standards and the National List compliance for those material inputs.

All of our producers must

implement an integrated preventative system with regards to pest, weeds and disease. These preventative systems are dependent on current cultural practices such as trellis systems versus standard planning, site-specific conditions and risks.

Practice must foster biodiversity of the production sites. We see permanent grass, row cover; we see insectory hedgerow plantings, crop species, diversification, all those ways that a producer may be meeting these requirements.

So reviewers are also looking in the system plan for references to models, or confirmation of work with crop consultants. These are established and well-tested industry norms that are used widely in both organic and conventional tree fruit production.

We will return a system plan to a grower if the required preventative practices and monitoring techniques are not outlined or implemented prior to the use of a synthetic

substance.

In the situation of oxytetracycline, this is a rare occurrence, given the fact that management practices required by organic standards are simply good farming practices, with monitoring built into the widely-used models.

So I'm going to move onto inspection. So the inspection takes place, and it's 205.403 that we're focused on now, and during the on-site inspection, the inspector's job is to verify compliance or capability to comply.

They're also there to verify that the information submitted in the system plan accurately reflects the practices, and that prohibited substances have not been applied. So our inspections are a combination of interviews, field observations and records reviews.

WSDA, we specifically hire inspectors that are experienced in the

agriculture systems in which they will be inspecting. Experience in tree fruit is a requirement for tree fruit producing territories.

We have a robust training program and provide ongoing continuing education opportunities such as webinars, attendance to industry conferences, so that our inspectors are up to date on current preventative strategies and control methods.

The report that our inspectors fill out require observations as well as the verification of records to support the use of any input material.

We rely on our expert inspectors to observe and verify that preventative disease management strategies have been implemented. And when fire blight is active in those different inspection territories, our inspectors are well-informed of the conditions and situations.

For the most part, our inspection

staff is located right in the territory that they work, so they are very familiar with the industry that they are inspecting.

The tree fruit industry is very diverse in site selection and acres and varieties grown, climate, elevation, soils and management practices, and that's just in Washington state. The occurrence and risk of fire blight infection varies widely from year to year and is dependent on many of those environmental factors.

Regardless of this diversity and variation, the current disease management practices and standards are effectively implemented. I'll stop there for now.

MEMBER FELDMAN: Thank you very much. Our next speaker will be Dr. Glenn Morris, who is the director of the newly-established Emerging Pathogens Institute at the University of Florida, where he is also Professor of Medicine, specializing in infectious diseases.

He received his B.A. degree from Rice University in Houston, and his M.D. and Master's degree in Public Health and Tropical Medicine from Tulane. His residency training was at the University of Texas-Southwestern and Emory University, with service as an epidemic intelligence service officer at the Centers for Disease Control and Prevention in Atlanta.

He is board-certified in internal medicine and infectious diseases. From 2000 to 2007, he served as chairman of the Department of Epidemiology and Preventive Medicine at the University of Maryland-Baltimore School of Medicine, and from 2005-2007, was interim dean of the UMB School of Public Health.

From '94 to '96, Dr. Morris worked with the Food Safety Inspection Service, USDA, on development of the new hazard analysis and critical control project regulations, created and directed by FSIS Epidemiology and

Emergency Response Program, the forerunner of the FSIS Office of Public Health and Science, and was responsible for the establishment of FoodNet, the national surveillance system for food-borne illnesses.

In 2005, he was awarded the James D. Bruce Memorial Award by the American College of Physicians for distinguished contributions in preventive medicine, in recognition of this and subsequent work in food safety.

He has served on seven National Academy of Sciences expert committees dealing with food safety, and served for four years as a member of the Institute of Medicine's Food and Nutrition Board. He has published over 200 papers in peer-reviewed journals, and has had continuous federal grant funding since '84.

He currently serves as the University's PI for the Florida Integrated Food Safety Center of Excellence, one of five

such centers established nationally under the Food Safety Modernization Act. Thank you for joining us, Dr. Morris.

DR. MORRIS: Thanks. It's a pleasure being here. After that introduction, I'm not sure I can say anything else. But, again, it's a pleasure to be able to meet with the Board today.

What I'd like to do is perhaps bring in a perspective from that of an infectious disease physician, and I will say that I continue to see patients in infectious disease, and that one of the major problems facing medicine today is the rapid emergence of resistant strains.

As you may be aware, we have significant problems in terms of development of new antibiotics, and we are seeing rapidly rising levels of resistance across multiple pathogens.

Speaking as a clinician, there is a strong motivation to do everything that we

can to try to minimize the risk that further resistance genes, resistant strains may move into human populations, because right at the moment, we've got a problem on our hands which we are having a lot of trouble handling.

What I'd like to do just very briefly is to run through some basic concepts which I think are applicable to this particular discussion. And again, to kind of come back to the basics, to get antibiotic resistance, you really need two things.

You need the gene. You need a resistence gene. Resistence genes may arise spontaneously within strains due to mutations. But generally, resistance genes move among bacteria, and they move very easily and very readily on a variety of different transposable elements.

Bacteria are highly promiscuous. They spread their genes all over the place, and as I will talk in a minute, many of our studies have clearly shown that when you have

a situation where there is selective pressure, that movement of genes is something that happens with great ease.

And again, the second point here is the presence of evolutionary selective pressure, specifically the presence of antibiotics, which provide an evolutionary survival advantage to strains that can resist killing by antibiotics.

And again, in these instances, probably the most critical thing is the presence of antibiotics at sub-therapeutic levels. In other words, just enough to give a little bit of a survival advantage to strains that do carry resistance genes, as opposed to strains that are either killed by it or, you know, strains that have, you know, are not able to really compete as well as those that do carry the resistance markers.

If somebody could advance these slides. Sorry about that.

Let me just give you an example,

and again I recognize that here we're talking animals and not plants, orchards as we are here. But nonetheless, just to give you a flavor of what we tend to observe, this is a study we did a couple of years ago in a Hog CAFO, where there were sub-therapeutic levels of tetracycline being used as part of the feed.

What we did was go in and essentially culture everything in sight. Soil, water, you name it, we cultured it, up to a half a mile radius away from the CAFO. What we found was tetracycline-resistant bacteria from all sites at all time points sampled, including samples collected half a mile away from the CAFO.

We found that among E. coli, 77 percent were tetracycline-resistant, and among enterococci, 68 percent were tetracycline-resistant. We then said, okay, where are these genes moving? What strains, species?

What we found was the tetracycline

resistance was present in strains from 26 bacterial genera and 60 species. Basically, the tetracycline resistance had moved into virtually everything. We were able to identify ten known tetracycline resistance genes, which accounted for approximately 60 percent of the resistant strains identified.

We found that strains carry up to five different tetracycline resistance genes at one time. I would point out that this means that there were 40 percent of the resistant strains where we did not identify a known resistance gene, where we actually -- we did not go through and attempt to sequence the strains, so we're not sure what the basis was for resistance in those particular strains.

I guess the picture I want to paint here is that when you have a setting where there is sub-therapeutic use of tetracycline, what you get is within the entire, you know, sort of within an island around the area where the tetracycline is

being used, you get high levels of tetracycline resistance, because for the bacteria in those areas, even very, very small levels of sub-therapeutic tetracycline, are sufficient to select out for resistant strains and to facilitate the movement of resistance genes.

The fact is there are lots of tetracycline resistance genes, and a lot of unknown tetracycline resistance genes. In fact, one of our major concerns is the development of new resistance genes, that then have the potential for moving into populations of bacteria in that environment.

So how do you get resistance from the environment into something on four feet, or in particular on two feet? And I think that there have been, at this point, multiple studies that it occurs readily among persons with exposure to animals or animal environments, where sub-therapeutic antibiotics were used in feed.

Stuart Levy's original studies 30 years ago were still some of the best around, and basically what he did was show that when they started use of tetracycline in feed in chickens, that basically for the majority of families on farms where tetracycline was used, greater than 80 percent of the fecal coliforms in the intestinal tract were tet-resistant.

This was obviously significantly much higher in the farms where no tetracycline was used. There are clearly now have been multiple studies documenting transfer of specific resistance genes from animals and humans.

I think the point to emphasize here is that I'm really not concerned about movement of a resistance gene, you know, on the blossom into a human pathogen. What I'm really concerned about is the overall generation and spread of tetracycline resistance genes, and ultimately the entry of these genes into the bacterial communities

that are on animals and humans.

Again, I think what we have discovered with the studies that have been done, particularly with the increasing capabilities in terms of genetic studies, you've got more bacterial cells on you than you have cells in your body.

Bacteria are all over you, inside you, and what the real concern is the overall level of resistance that one sees in these commensal bacterial populations. What then happens is that when you are given antibiotics, if the genes are present even in numbers that cannot be readily detected, then they will rapidly expand and move into pathogens, which in turn can cause serious disease.

So again, my concern is not the pathogen. My concern is the overall impact of the resistance genes on the commensal population. And again, there was a very interesting study, again part of the same, I

believe the same cluster of studies that Dr. Stockwell mentioned, where studies were done where pastures were sprayed with streptomycin at concentrations used in orchards.

What they found was that 39 percent of the intestinal E. coli were resistant in animals that were, that were on sprayed fields, versus 22 percent on animals on control fields. And resistant E. coli were in many instances multi-drug resistant.

So again, what this does is simply reinforce this concept that the concern is the overall level of resistance within commensal organisms, and even at the low levels seen in spraying in orchards, it has been possible to demonstrate in animal populations that one sees a dramatic increase in overall levels of resistance within commensal bacteria.

So to kind of pull it all together, anti-microbial resistance is a critical and increasing problem in clinical medicine. And again, speaking as a clinician,

this is going to become, is becoming one of the biggest problems we've got in medicine.

Tetracycline remains an important clinical drug. It is listed as "highly important" by the World Health Organization. There are a variety of pathogens where I use tetracycline on a regular basis.

One that comes immediately to mind is that there are a lot of strains of MRSA, where tetracycline is my drug of choice, in terms of treatment, because again these are strains that have built up resistance to just about everything else.

The major risk for human infection is the presence of resistance genes strains in the body's normal microbial flora, on the intestine and skin. So again, the concern is not the acquisition of resistance genes by human pathogens in the field; the concern is the amplification of resistance genes and potentially selection of new, previously unrecognized resistance genes, and then the

potential for movement of those strains into human populations.

I would point out that we have done mathematical models, looking at, you know, kind of how much does it take. Again, what the models show is that even if it's a very rare event, when one actually gets movement of a gene or a new gene into a human commensal population, once it gets into human commensal populations and, you know, with antibiotic use in humans, one can then get rapid amplification and movement and spread.

So again, even very rare events are important in terms of the overall ecology of resistance in commensal bacteria in humans and in animals.

Finally, the transfer of resistant gene strains from the environmental sources to humans and human microbial flora is well-documented. It definitely happens.

I think, again, a lot of these data are in an animal CAFO situation. As

pointed out by Dr. Stockwell, we have a situation here where applications are less in an orchard setting.

But I think, again, my concern is that, you know, every time you're using tetracycline you are presenting an opportunity for the development of new resistance genes, and/or the amplification of resistance genes and potential to transfer those into humans, either via animals or directly into humans, workers in the area, you know, potentially on product, and again, it's not like you have to have a lot.

What the models say is a very, very rare event is enough to have significant impact in terms of long-term risk within human populations. Thank you.

MEMBER FELDMAN: Thank you, Dr. Morris. So our plan now is to open -- and thank you to the whole panel. We really appreciate you coming out for this. It really helps us as we work through these critical and

serious issues. I guess the point -- we're at the point now in the program where we will entertain questions of the Board members to the panelists.

So the floor is open to anybody who has questions. Do you want me to manage this? Is that -- okay. Okay. Any questions from the Board members?

CHAIRMAN STONE: Harold.

MEMBER AUSTIN: First off, I thank all of you for taking the time out of your busy schedules to come in and be a part of our day today. It's an important decision that we all are going to be participating in later on.

Dr. Morris, this question's going to be directed to you. Looking at your presentation and some of your slides that you had out there, part of the information that you showed showed, you know, hog farm applications made over a covered crop, also using streptomycin.

I mean, really our topic is

antibiotics, but it's really focused on oxytetracycline.

Do you have any working knowledge, firsthand information dealing with our environments in the tree fruit area, physically dealing with, specifically dealing with the oxytetracycline and the effects that it would have, similar as what you've just been talking about?

DR. MORRIS: As Dr. Stockwell pointed out, there are some studies that are beginning to come out. We have not worked directly in the orchard environment. I would say that the concern is that, given what we know about the animal environment, there are concerns that the basic concepts are also going to be applicable to an orchard environment.

You know, the obvious answer always is, well, we need more studies. The problem is these studies are very difficult. As I pointed out, particularly in the CAFO

study, they really have to be done at a genetic level. They take time. One really needs to be sampling both human populations and the basically everything in the orchard environment. And they are very expensive.

So consequently, you know, the question is are there sufficient data extrapolating from other settings to be able to move forward? What I would say is I think that there are sufficient data extrapolating from other settings.

But I will also say it is extrapolating from other settings. And again, as Dr. Stockwell has pointed out, we are beginning to see some data coming out. There is, you know, there is a need for additional data. The question is do we go ahead and move forward at this point and stop the usage, given the data that we do have?

I think if you say we wait for more studies, we are potentially talking years and a lot of money. And again, while I'm not

speaking officially for IDS, for the Infectious Disease Society of America, I believe there is a letter from IDSA in your docket, and again the feeling very strongly from the Infectious Disease Society for America is, you know, it's time to do it now.

MEMBER RICHARDSON: Dr. Johnson, you talked a little bit about the Blossom Protect and the copper-based material that -- one of which is presently available, the first one, Blossom, and we're waiting on the second one.

Are these two materials the same as or similar to the materials that are being used in Europe for fire blight control? And second part of the same question, have these two materials, as part of an integrated approach, been found to be effective in fire blight control?

DR. JOHNSON: Yeah, I think the answer to that is yes. I can't say I'm an expert on fire blight control in Europe. I

have had some conversations with some Swiss researchers about sort of the boots on the ground control of fire blight in apples.

My feeling is that some of the areas that apples are grown in Switzerland aren't at especially high risk for fire blight, but they do have it, and they've learned to fight it.

They have some products that we don't have, and I think I was asked this on the webinar. But they do have Blossom Protect, and they're using it. Coppers, I believe, are not allowed in the EU. I guess I'm just sort of saying that. I'm not positive about that, but my feeling is that I'm not sure that -- maybe Virginia has some closer colleagues who could answer that. But I'm not sure why they use coppers, are in the EU.

They have another product that's actually a ground up stone material, kind of like a mineral material, and they'll put that

on flowers pretty heavily. I think it's fairly expensive and I think it works sort of in, I think, some of the smaller scale organic situations in Europe.

I don't think that in our larger scale farms that we really wanted to go that direction. We do have a -- there is some stone materials used. Kaolin clay is used in apple production in Washington, and it's used primarily as a preseason treatment for insect control, and it works fairly well.

I don't know if you were ever in, say, Wenatchee in the first two weeks of March. You'll see all the trees look kind of ghost-white. It's kind of an interesting and pretty experience, and they put clay on.

And we've done some work with that for fire blight control. It sort of works, sort of doesn't, and it's sort of a lot of material. You have to put on say 100 pounds per acre to get it to work. So that's kind of the extent of my knowledge of fire blight

control in Europe.

When I was up there was a meeting, International Organic Tree Fruit group in Leavenworth, Washington last June, and that's where I really talked some of this with some Swiss tree fruit people. That's kind of how they presented it to me, and they were pretty interested in what we were doing with Blossom Protect.

They did frown a little bit. They said our ability to use copper probably isn't as easy as it is for you. So our ability in the U.S. to use copper is probably a little bit easier than it is to use in the EU.

MEMBER FELDMAN: Other questions? John.

MEMBER FOSTER: So I think, Dr. Johnson, this will be for you. I'm interested, could you talk more about kind of the timing of the EPA registration process -- and that's one thing. But I guess more concern to me is the time it takes from there

to get it into kind of actual use in the field, and what you anticipate relative to these alternatives, which look really promising and I think they will be. But it's the timing issue that I'm more concerned about.

DR. JOHNSON: Yeah. Well, I've been around this long enough to say that the EPA is pretty unpredictable about these kinds of things. Some things take a long time and some things don't.

I would have to say that something like copper sulfate mixed with, you know, seaweed extract, or whatever the exact formulation is, probably will have a fairly fast track because there are many copper sulfates that are already registered through the EPA.

It's not really, I don't think, new chemistry or new molecules, and I think that the toxicology and that kind of thing is going to be pretty well known when the

application is made. So my guess would be that it would go through fairly quickly.

And the company has told me that it would be this summer but, you know, I don't -- I mean, I don't have a more definitive answer than that, and I guess we're just sort of waiting on that.

MEMBER FOSTER: So part is that process, but then also how is that -- it's one thing to have it registered; it's another to get it into use.

DR. JOHNSON: Right, yeah.

MEMBER FOSTER: And in a diverse growing community --

DR. JOHNSON: Yeah. Well, with the Blossom Protect material, we've sort of had the experience with that, though I do think with biological materials, where you have to have a living product in the bag when you sell it to the grower, and they have to spray a living organism, that it's harder to scale up and be ready.

I mean, you're anticipating this day when you're going to get this registration. But you can't have so much inventory on hand, because the shelf life is fairly short with a biological product.

I think the scale-up could be a little faster with a chemical material like a copper sulfate material. I still think you're looking at the first year that they get it, it's going to be new, and they may have limited inventory, and also they're not going to have that much demand, because the information goes out to the people that have their ear closest to all of this. But there's a lot of people that don't have their ear quite so close.

And then -- so I think it really is the second year after the registration, where you see the material start to take off.

MEMBER RICHARDSON: Just to follow up, on the webinar I got the distinct impression listening to you that we can

control the fire blight without the use of antibiotics.

DR. JOHNSON: Well, I think with the materials that we talked about, I think we can get there. Remember, one of my finishing slides was about risks. I do think we change the risks somewhat. I do think that there is some risk that fruit won't finish as well.

I think that's a risk. I do think that there's a risk that some people in some places are going to have a tougher time controlling fire blight than others. So that's a risk, so that I think that who is growing organic fruit, say, ten years from now, if oxytet isn't available, will cause some kind of a shift in the people who do it.

So but do I think it can be done? Yeah, I think it can be done. But I would really like to see those materials that we talked about be available.

MEMBER SONNABEND: My question is for Dr. Stockwell. There's been a bit of

controversy within organic community over whether there is residue of tetracycline actually on the fruit from its use in orchards, and when we surveyed the literature in writing our paper, we just found EPA data from I think 2005 that was used as part of the tolerance-setting process.

It was unclear to us whether the residues actually had occurred in harvested fruit, and I'm wondering if you could just talk about what you know about residue occurring on fruit, from tetracycline not streptomycin necessarily.

DR. STOCKWELL: Right. I also read that EPA report on the registration. That's the information that I have. I don't know of any situations where they had a .35 parts per million detection on fruit.

But if you think about -- I think the highest amount of residue that they found on one apple or something in that study was .25 parts per million, which if you

extrapolate that to like an apple, that would be 35 micrograms, which is -- and if you take an oral dose of like tetracycline, you take 250 milligrams, which is -- I can't remember, it's like 5,000 times more, that you're taking a pill, versus what might be on a fruit. So it's very small. But yeah, possibly.

DR. MORRIS: I also read the EPA report, and I have your similar hesitation about exactly what they're saying. But, you know, and Dr. Stockwell's completely correct, that in terms of the therapeutic dosage, it is a minuscule amount.

But the other side of it is, you know, my concern is really more at an ecologic level, which is that even very, very low doses of an antibiotic are able to cause gradual shifts in population levels of resistance across time, because it means that strains that have some degree of tetracycline resistance have a minuscule, you know, better chance of growing in the presence of very low

levels of tetracycline.

But that's enough to potentially cause long-term shifts in the overall intestinal ecology. So I will say that even though the levels are extremely low, I think one cannot say, in terms of the intestinal ecology, which is really where I'm coming from, that they have absolutely no effect.

MEMBER SONNABEND: Yeah. My question was -- and I do understand what both of you said. But my question was more where did that .25 that they found come from, and is that going to be likely on every apple that was sprayed at bloom time, or could that have been from a spray after bloom, or do we even know those type of things? Has that type of research been conducted?

DR. STOCKWELL: It was not clear in that study exactly when that particular fruit, I think, which orchard it came from. I can't remember. But I remember that there was like no clear correlation between number

of sprays and the residues, and most of the apples were at below detection levels, which was .013, I think, parts per million.

So, yeah, I would like to see actually some really good work done on that. But as far as, you know, the EPA sets their tolerances based on information from the FDA and also clinical studies. And they felt that a tolerance of .35 would cause no harm to the environment or to humans, and that's if every apple was contaminated at that level, which hasn't happened.

MEMBER FAVRE: My question is for Dr. Morris. I'm having trouble reconciling, understanding the process. If we're being told by Dr. Stockwell and Dr. Johnson that oxytet basically degrades within four days of exposure to sunlight in the environment, how is that going to migrate into potential bacterial populations?

DR. MORRIS: Again, even within the window of time that it's sprayed, one can

have fairly substantial impacts on bacterial populations that are in the immediate environment.

The question is how long those effects last, and again as Dr. Stockwell has pointed out, there are starting to be studies that suggest that, you know, populations return back into normal levels within a period of time. A month?

MEMBER FAVRE: Like two weeks.

DR. MORRIS: Two weeks. So there is, with the use of the tetracycline, there is a clear perturbation of the environmental bacterial populations. And again, as I said, what our data suggests and I think what most people would agree is that, one, it's fairly widespread.

But then it sort of trails off. I guess my concern is that what our mathematical models suggest is that, you know, even if one is seeing only temporary perturbations, there still -- what it does is

increase the opportunity for resistant organisms to get into the environment, potentially to come in contact with humans or through various environmental routes.

Again, what I'm in many ways most concerned about is the genetic material, which is the actually the tetracycline resistance genes, and the possibility actually of developing or selecting for new genes, which might not have been previously present.

So most of the time, it will have no effect. But again what the models say is that even in a very, very rare instance they do have an effect, it can long-term have a significant impact on human populations, because once they enter into human populations, then they are much more readily transmitted among humans.

Then once you get somebody with one of those genes and their intestinal tract into a hospital, potentially undergoing cancer chemotherapy, then suddenly what will happen

is that those genes will move into serious pathogens, and one really then starts to get into problems.

MEMBER FAVRE: Okay. I guess sort of a follow-up question to that then is, as we're looking at this specifically for organic production by all accounts is, what, less than ten percent of the overall fruit tree production, the impact that we can make on this board by either allowing this material to sunset in 2014 or extending it, whatever we end up deciding here today, is that going to make a significant impact in the overall use of oxytet in fruit production, not specifically organic?

DR. MORRIS: I can't speak about the overall fruit production. I can say that the approach that we have started to take increasingly, given the significant problems we're encountering in human medicine, is we need to try to limit or eliminate use in all instances, because all of this -- and again,

even though, you know, what difference does it make? Well, there is a remote possibility that one could get selection of new tetracycline resistance gene tomorrow, when you spray, and that that could then move into human populations with devastating impact.

Again, it's a very, very rare event. But what's fascinating is that when you work with the mathematical models, even very, very rare events can clearly have significant downstream populations because of the potential for amplification once they get into the human intestinal flora.

And again, that's our concern. It's not movement into a human pathogen, but movement into the overall ecology of your intestinal flora, where it may not even be detectable until you are in a setting where suddenly antibiotics are administered, and where suddenly you become very susceptible to farther infection.

MEMBER THICKE: I think this is a

very interesting discussion about the levels, low levels, sub-therapeutic. I think, however, if you look at it from -- if you use Avogadro's number and calculate 250 parts per billion, it's interesting.

One part per billion will end up to be that apple will have about 10 to the 15th molecules of antibiotics in it, or about ten quadrillion molecules of antibiotics will be in that. Now, whether that's significant or not, it's astounding, though, to realize that. That's why I wanted to bring that out.

MEMBER MARAVELL: Yes. At the risk of showing my lack of knowledge, I'm going to disclose that I do not produce any tree fruit, but I'm going to ask some questions of the panel.

Dr. Johnson, is there any way, if I were a tree fruit producer, and we were having a quote-unquote perfect storm of circumstances for the development of the fire blight pathogen, is there any way for me to

make a positive ID of the presence of that pathogen in my orchard in time for me to provide sort of a curative or preventative or a static type of treatment?

DR. JOHNSON: Well, yeah. That's another research question that we like to work on. We have developed some techniques for scouting orchards for the development of the fire blight pathogen in flowers, before they reach the really major stages of activity where you would get a major perfect storm or epidemic.

We've developed the molecular technologies to do that. The problem right now is waiting for the detection technology that can implement that molecular technology to catch up, and the simple analogy would be to say can we make this as easy as a home pregnancy test or something like that, and the answer is not yet.

But at some point down the road, I think that that's going to be possible. But

I think we're talking more like a decade or something like that.

There's some instrumentation that's coming down the road that is allowing for portable molecular tests to be done, and it's called Point of Care use of molecular testing.

I think that at some point in the future, that will be done routinely in orchards for the fire blight pathogen, and we've kind of been at the forefront of that in developing technology to do that.

And we do it now in our research objectives, and for example, that work with pre-bloom sanitation with copper in California, we are employing a molecular detection technology to tell when the fire blight pathogen is in flowers.

But right now, the flowers all come to my lab and my technician works night and day to get the samples processed, and we're only working in, you know, a half a

dozen orchards and things like that.

So we don't feel like having some facility where everybody mails their flowers in would be sufficient, because it would overwhelm, and it's very much a needle and a haystack problem to find it.

So the only way we feel that people could do that would be actually to do it themselves, or have a service, a local service do it, and they would need these onsite instruments that could do that.

So I think your question's a good one and I do think it's coming, but I think we're looking probably at maybe ten years down the road.

MEMBER MARAVELL: If that technology were available, and now we're in the hypothetical, would it be ever useful to determine whether or not the treatments that you had undertaken, having gone through all the processes that Brenda outlined for us, were being successful, and you would not have

to treat? I know it's a difficult question.

DR. JOHNSON: Yeah. I've worked with a couple of growers up in Central Washington, where we're doing this for them, and one grower in particular wanted me to say treat or not to treat. Our experience with, it's not so much a technology problem, but it's more of a sampling problem.

So if you're looking for needles in haystacks, and fire blights, if the temperatures -- the bacterium itself, if the temperatures are such, it can double two, three, four times a day, and the number can jump, and your flower pickers are out there in the cool of the morning and by mid-afternoon.

So it's a little bit nervous to say that yeah, we could just, you know, give you a prescription for an orchard and say "treat," and I guess I don't feel like we're confident enough in the science at that point. I think the technology would be useful for looking at say sentinel orchards, or knowing

when it's active --

You know, we've learned a lot in the last say three, four years, just kind of this understanding of when it's active and what's the pattern of build-up in the flowers. I think because of that, we've actually changed not just organic but conventional practices in fire blight control somewhat, and gotten people to kind of, you know, hang on a second.

It's not going to be exploding on you today or tomorrow. But as we get near the end of bloom, that's when you're really going to have a serious issue.

So we've done a lot of that kind of work, and so I think we'd have to do a lot more sampling and get a lot more confidence in our sampling protocols before we would be saying okay, today you could spray, you know, copper, or today you could spray oxytetracycline or even the harder question to us, no, you don't need to spray, you know.

What we've really found by doing these surveys and doing this, running these molecular acids is that the models work. The models are pretty good, and in terms of telling people when they have a risk problem.

In the areas we've been working in in California, this is now in California primarily, you know, the pathogen builds up in those orchards most every year, but it doesn't get to really high numbers until you get to fairly late bloom.

So you know, at some point I think that people would say, you know, I don't know if I want to do that test, because I know what's going to happen, and I probably would agree with them. So but it's been very useful to do it as a research problem.

MEMBER FELDMAN: John.

MEMBER FOSTER: Brenda, I think this might be your deal here. I'm fuzzy on how copper is handled in the EU, relative to certification materials approval. Can you

clarify that for me? How is that done differently, and what lessons can we learn that might be applicable here?

MS. BOOK: I don't know how much I can expand on it, because we don't evaluate to the EU specifically. But when we did, the EU standard for copper is an absolute. It's a certain amount per hectare that you can apply, which differs from our standard.

What Ken mentioned earlier, talking to the folks that are in the EU, it is more difficult for them to use a copper product over there, because they have an absolute, versus ours is as long as there's no, you know, accumulation in the soil.

MEMBER FELDMAN: Dr. Morris, I wanted to ask you a question about the World Health Organization rating of tetracycline in specific, because it sounds like we're talking about this chemical as if it were a normal pesticide that didn't intersect with protection against human diseases.

Could you put that into context for us, in terms of how this specific material is viewed in the world context of protecting human health?

DR. MORRIS: Tetracycline is a -- it's an important drug. It's an older drug. We have a great deal of experience with it. It is a drug that we use here in the United States for fairly selective instances, particularly as I say, I probably use it most commonly in something like MRSA, because for outpatient treatment, sometimes our options are limited, and most of the other drugs that are currently -- are still available tend to be relatively toxic.

At a global level, tetracycline is an extremely important drug. There are a variety of diseases where it is either the only agent which is effective, or it's an agent which is by far the preferred agent.

A fair amount of my research deals with cholera. For cholera, tetracycline is

clearly the number one drug. It's not something that we're necessarily going to get here in the United States.

But nonetheless, what I would say is here, on a global level, tetracycline is an important drug, and consequently, at least within the professional community, within those of us who practice infectious diseases, it's one of those drugs, and again based on the WHO ranking, is a highly important drug.

It's one of these drugs that we want to try to do everything in our power to try to minimize further enhancement of resistance.

MEMBER AUSTIN: Ken, Dr. Johnson, most of the research is -- that you've been working with is really it's been looking at the Blossom Protect and then looking ahead at that later stage of development with the copper that Gowan's coming with, the Previsto.

I was just informed at lunch time by Glenn Foster with Gowan that EPA has pushed

the registration process for that back into August 2014. What impact will that have with our proposal, you know, more of an organic approach to replacing tetracycline in your trials and actually then with the growers themselves?

DR. JOHNSON: So that's August 2014 now is the -- or 2013.

MEMBER AUSTIN: August 2014.

DR. JOHNSON: Oh, okay. Well, so now we're talking about, if the sunset is at the end of 2014, then if the product is registered, we would have a very short period of time to have people ready for the 2015 season.

My own feeling about all of the things that we've worked on is that that copper material is fairly essential to being able to control fire blight, and as I said in my opening remarks, not so much -- well, both during the primary bloom period.

But I said a lot of our problems

in fire blight extend beyond the primary bloom period, and the biological material like Blossom Protect or the other materials that are out there like Serenade and things like that, they have value during the bloom period, but they don't have that much value in this post-bloom period and the period during the summer when, if you get fire blight in your orchard and you're trying to get it back in check, you need a material that you can spray out there, that will kill bacteria.

This Previsto product has that potential. It's a good bactericide in the testing that's done and has been primarily done by Tim Smith up in Wenatchee, is that the Previsto has done a better job than this new formulation of copper sulfate. It's doing a better job than the older formulations of coppers.

So we think it's a good material and would have the best fit in that period of bloom, when or after bloom when fire blight

gets kind of messy and can do a lot of damage. So we'd have a real short period of time to get people up to speed, and I think that --

I mean here again, we're talking about a chemical and not a biological. I think that the company would have a better chance of being ready itself, and I think that the word would have to go out very quickly in the sheds and all that, that supply growers with material would have to get ready.

You know, I think, you know, we've been on the trail on this, out there speaking quite a bit, and I don't think it's going to be a problem of not, of people not really knowing about it. You've just got this kind of logistical issue, getting people up to speed and knowing and being ready.

MEMBER FELDMAN: Final questions. Yes.

MEMBER SONNABEND: Dr. Johnson, we heard from some people's testimonies that Dr. Sundin in Michigan did research for several

years, showing that Blossom Protect did not work very well at all in Michigan, and we were wondering, I was wondering if you knew what they're going to do, what they're going to try next or, you know, what options they have.

DR. JOHNSON: That was the question I forgot to answer during the first part. So there's a couple of ways to answer that question.

Just if you have an apple flower in Michigan or if you had an apple flower in Washington, I don't think there's a reason that Blossom Protect wouldn't work in Michigan, as opposed to Washington.

I mean there's not a difference in the flowers per se. I know George pretty well. I know that he worked with it in 2011, and he did publish a report, and he had fairly good results with it in 2011. In 2012, they pretty much got froze out in Michigan, so they didn't get any, really any data last year.

Biologicals have never been a real

strong emphasis of George's program, so that their testing with Blossom Protect has been fairly limited.

I think the bigger issues for Michigan growers are climatic ones, and the two things that affect fire blight control in Michigan are the speed at which spring happens, and it's faster than it is out west here. They have warmer nights and bloom happens very quickly, and so they have to be ready to go and they have to move fast.

That's number one, and the second one is that they have apple scab, and apple scab is probably a bigger problem for them than fire blight. So all through the bloom period, they are putting on materials for apple scab. So they're putting on materials that are suppressing the growth of fungi, and as yeast is a fungus.

So they're very concerned that if they're in the middle of an apple scab program that if they put this yeast on, that they're

going to have difficulty establishing effective populations of the yeast on flowers.

I can't say that I've seen any research to say one way or the other what the result of that is, and I do think it is a concern. I got some trials out that I'm going to put out here in a couple of weeks, looking at sulfur before and after Blossom Protect, to see if we can get a little better understanding of that.

But again, we're still really just learning about the material. The advantage that we have in the west with Blossom Protect is that it's dry, and we don't worry about scab very much in most of the production areas.

MEMBER SONNABEND: In the Northwest, not in California though.

DR. JOHNSON: It's true, yes, and in California and in pears in particular, we do worry about scab more, as we saw from the Mount Adams guys telling us about pear scab

the other day.

In pears in California, Dan Goff was a grower down near Lake Port. He's an organic grower of pears, and I had an email exchange with him just the other day about this, him and Brock Soller about this, about how to put on sulfur and try to integrate it with Blossom Protect.

It's still, we're just kind of feeling our way through it, and we're actually going to get the samples after I'm a little less busy, and look and see what his success was in establishing this yeast on his pear fruit, on his pear flowers.

MEMBER FELDMAN: One last question, and it goes to this question of persistence. We, in our technical review, and I guess this is for anyone on the Panel that can touch it, but tetracycline, it says "Tetracycline can persist in soil for long periods of time, without showing antimicrobial activity, and high concentrations can be

achieved. Upon later release from soil components, it can exhibit antimicrobial activity."

So it gets bound up in the soil, and it says "factors that may result in release of tetracycline from soil includes changes in organic material composition, shifts in microorganism populations, or changes in soil pH." Is that, does that make sense? Anybody?

DR. STOCKWELL: No. You'd expect some degradation through hydrolysis of the compound. I mean it could be bound to soil particles, but through exposure to microorganisms and other things, it should degrade.

MEMBER FELDMAN: Well, I'm just citing. There are a couple of citations here on that point.

DR. STOCKWELL: Yeah. That was a -- I think you're talking about the Chandler study or something.

MEMBER FELDMAN: Agar Poposka.

DR. STOCKWELL: Oh, Poposki? Okay.

MEMBER FELDMAN: Well, Poposka it says here, et al.

DR. STOCKWELL: Yeah. They didn't actually study that. So they're just speculating. So that's a comment on the discussion, but they actually didn't -- I don't think they actually looked at the -- they didn't do any chemistry in that study. So --

MEMBER FELDMAN: Okay. Thank you all very much for participating in this. Appreciate it.

CHAIRMAN STONE: Thank y'all very much. We appreciate your coming and attention to help us with the, wrestle with this decision here. So Jay, just a little bit of a time check. The way we have it outlined, we've scheduled 30 minutes for the Board to discuss three proposals, and then the balance

of the afternoon is basically three hours that's scheduled for public testimony, at five minutes each.

So just depending on how that goes, if we have some -- if it went like yesterday, we may have a little time for some questions, but not very much. So if you want to go work through this 30 minute Board discussion and go part-way into public comments before we break at 3:15.

MEMBER FELDMAN: Okay. So as y'all know, we have a majority/minority position, and Harold is going to present his slides, right? So Harold's going to present the majority opinion with the --

MEMBER AUSTIN: Yeah, Jay. I'll present the proposal, a brief history and then I'll start the majority, and then Zea will finish that part of it. We're going to do it together.

MEMBER FELDMAN: Do you want to read the petition?

DR. BRINES: I can do the brief introduction, sure. So the tetracycline petition was received on June 11th, 2012. It was a joint submission by three parties, the Washington State Horticultural Association, the California Pear Advisory Board and the U.S. Apple Association.

The petition requests an amendment to the annotation for tetracycline at 205.601 on the National List. So the current listing is under paragraph (I) as plant disease control. Number 12 reads tetracycline for fire blight control in apples and pears only, until October 21st, 2014.

In support of the review, the Crops Subcommittee reviewed the previous technical report that was available for tetracycline. So there was no new report, but the previous report was completed in 2011. There was also a previous report done in 2006.

Both the petition, the previous technical reports and the Subcommittee

proposals were all posted on the NOP website in advance of the opening of the public comment period for this meeting. Thanks.

MEMBER FELDMAN: Thank you. Before we jump into the conversation and presentation, I guess there are maybe some members that want to talk about their potential conflicts of interest, or address disclosure of interests. So who wants to start with that? Go ahead, thank you.

MEMBER SONNABEND: Okay. I do, I know there's a lot of debate about conflict of interest, but I do feel it's important for the public to, at least for me to be transparent to the public about my interest that I may or may not have on the subjects before the Crop Subcommittee.

So with that in mind, I do want to state that I work for a certifier who may or may not certify products that have any of the materials that we are considering before us today used on them, and I do grow apples. But

I do not use tetracycline in my orchard, nor do I plan to.

To accuse me of a conflict of interest when I do not use the material I feel is inappropriate. Thank you.

MEMBER FELDMAN: Thank you. Harold.

MEMBER AUSTIN: Yeah. I have two points to make the public aware of, as my declaration, and I do not feel that I do have a conflict of interest, because I'm here to represent stakeholders. That's what we're all here for.

First, as part of the petition, prior to being appointed to the Board, there is a letter of support on behalf of my company, written by myself, that is there, and that's posted and that's full public disclosure.

Also, my company that I work for, we are organic and conventional apple, pear, cherry, blueberry, wine grape growers, and we

use tetracycline on part of our acreage. We use it not on a lot of our acreage.

We brought this up in discussion with the full Subcommittee, Crops Subcommittee. It was decided that we did not have a conflict, I did not have a conflict at that time. But we moved that forward. Jay moved that forward to the program to make a decision, and the decision came back that they saw no conflict, as far as they were concerned.

MEMBER FELDMAN: Thank you. We've gotten all those administrative matters -- okay, go ahead.

CHAIRMAN STONE: Let me just confirm that the Executive Committee also vetted the decision of the Subcommittee, the lack of those conflicts.

MR. McEVOY: To just reiterate, from the Program's perspective, the members of the Board are here to represent their stakeholders. There's no disproportionate

benefit that the members receive. So therefore, all the members of the Board do not have an interest that constitutes a conflict that they need to recuse themselves.

So we looked at specifically Harold's and Zea's situation, and they do not need to recuse themselves on this particular topic.

MEMBER FELDMAN: Thank you. The floor is yours, Harold.

MEMBER AUSTIN: All right. We're a little tight on time, so we'll try to move this along as rapidly as possible. We do have a proposal on oxytetracycline. We did receive a petition to remove it from the, with the October 21st expiration date.

The original petition was to actually relist it back into the sunset process.

The Crops Subcommittee decided that since it had already been removed, that we would -- we did not like that option or

that we did not like that as an option, and we chose to, based off of the knowledge that we had, that there was research being done, knowing that this Committee, this Board actually in 2011 in Seattle, challenged the industry to go forward, start to make changes, come back to this Board with a petition, if they felt that they needed an extension, which is essentially what had taken place.

So we moved forward with a new proposed expiration date of October 21st, 2016, and this would be used for both apples and pears for control of fire blight. We've got a resolution, which I'll read in a minute, as we get down further into the motion.

The petition to the National Organic Standards Board was received for the removal of the expiration date, and we just described that. Because this is such a -- this subject is so complex, we presented a proposal that was essentially 40 pages, I believe. That thing changed and morphed about

16 times with the Subcommittee.

But I think we ended up with a document that got posted, that read at about 40 pages, trying to lay out for the community and the stakeholders. It's a little bit complex. It's a little bit big. But we tried to take and lay out a history of what has happened with oxytetracycline, and streptomycin was a part of that decision previously.

Also, after the history then we went into a strong presentation with both the majority opinion and then also a very indepth description of the minority opinion. We felt that that was the proper way to approach this, because this is such a complex issue. There's a lot of dynamics in play, and we needed to make sure that all of the stakeholders felt that the information being presented to the public represented each and every side of this discussion.

So we hope that that was achieved,

and I probably, I don't know. The Program hasn't told us, but it was probably the longest proposal that they've ever received. If not, it gives us something to shoot for. I just don't want to be a part of the next one.

Okay. All right. Moving down into the actual motion itself, Crops Subcommittee moved the motion forward to amend the listing of tetracycline to remove the expiration date of October 21st, 2014, add the following annotation: That 205.601, synthetic substances allowed for use in organic crop production, as a plant disease control, 12 tetracycline for fire blight control in apples and pears only until October 21st, 2016.

That moved out of the Subcommittee to where we are today by a motion of five yes's, three no's and no absences and no abstains.

We did further accompany that with a resolution, and the resolution reads that

"The National Organic Standards Board is committed to the phase out of this material. The Board urges growers and certifiers between now and the 2016 proposed expiration date, to encourage an annual increase in the extent and/or number of alternative practices that are trialed for controlling fire blight.

"In addition, the Board strongly supports increased support for the research in these alternative practices and materials." That carried out of Subcommittee to the full Board, 7 yeses, 0 no, 1 absent.

Here we go. Okay. Written public comments that we received back, 320. Supporting the majority position for an extension of the expiration date, 35, and that included Bluebird Coop, which had 27 growers on their petition.

Supporting the minority position against an extension of expiration date, 281. We had several large petitions that were submitted electronically. OCA, 24,016

signatures; FWW, 6,544 signatures; CFS, their petition had 24,545 signatures.

Supporting the centralist proposal that was proposed by NOC, Co-Op Partners Warehouse, Organic Produce Wholesalers Coalition, Organically Grown Company, Veritable Vegetable, Northwest Organic Dairy Producers Alliance.

Organizations for and/or agencies supporting the majority opinion for some sort of an extension include MOSA, OFTA. Just for the sake of saving a little bit of time, I'm not going to read through all of the groups, but I will read a little bit of the comments.

"OTA is committed to the use of antibiotics in organic apple and pear production. 2017 expiration date will support current research and testing, allow for grower education and success. Expiration dates need to be based on research-based time lines, not political compromise.

"OTA supports the Subcommittee

resolution. OTA also recognizes the role organic agriculture can play in developing an approach that will ultimately be adopted in conventional orchards as well."

Organizations, agencies supporting the majority opinion or type of extension. "MOSA believes that the proposal to extend the expiration date to 2016 doesn't go far enough, in allowing time for development of equivalent alternatives for fire blight control." Recommends that "the NOSB consider grower input."

NWHC. Acid oxytetracycline be retained on the National List or relisted until viable and proven alternatives are identified. Arbitrarily established expiration dates do not provide a solution to the organic industry and its various stakeholder groups.

Oregon Tilth urges the NOSB to consider a sunset date that is based on realistic expectations for current research to

draw statistically significant conclusions. They do not support the inclusion of annotations that reiterate existing standards.

UNFI, representing 7,000 associates, 27,000 customers and I will say that this is a statement that they gave us. This is not a signed petition that they submitted, supports a 2017 expiration date, based on research-based time lines, not political compromise.

Albert's Organics 2012 sales for Northwest organic apples alone were almost $16 million. This is a critical organic sales category for them.

CF Fresh. This is not a debate about substances used to grow prettier or larger fruit, to increase storage life, or for the convenience of organic growers. This is about actual life of the trees, and by extension, the livelihood of growers and workers, their families and the communities.

OTFA. Long term solutions

discussions should include currently no viable alternative to antibiotics for post-blossom infection fire blight control. Blossom Protect does not work in Michigan's climate. Blight resistance, root stocks and tolerant cultivars are not a solution to this problem at all.

Objections to the use of antibiotics for fire blight control tend to be philosophical, rather than scientifically based.

Organizations, agencies supporting the majority continued. California Natural Products, a very promising research program, OREI, will not be ready for use by the organic farmers and conventional farmers until 2017, giving these pioneering farmers and researchers the time they need to bring this to a successful organic conclusion.

General comments. "We apple growers cannot grow organic apples on a commercial scale without antibiotics at this

time. After testifying at the Seattle meeting, Spring 2011, I walked away losing faith in the democratic process being a good, fair and compromising system, which makes regulatory decisions based on good science and common sense instead of politics.

"I returned to my farm. I started preparing to transition my food production and processing back into conventional food stream. We are now a split operation."

"Fire blight is one of the principal limiting factors of pear production in California. I'm a producer of organic pears in the Lake County district in the North coastal mountain areas of California.

Supporting the centralist position, NOC had proposed a three point centrist proposal. Co-Op Partners, Warehouse, I've already mentioned those a little bit. Specific use annotations to document grower's movement upward in the disease management and add a resolution detailing how oversight from

certifiers in the NOP would be carried out.

Alternative proposal.

Cornucopia's position. While opposed to the majority opinion and in full support of the minority opinion, Cornucopia is willing to consider another proposal.

They recognize that due to the high susceptibility of fire blight that pears have, that the fact that there has been relatively little research done on alternatives to antibiotics on pears, that the regulations may need to be different for pears compared to apples.

They would support removal of antibiotics from apples production 2014 expiration date, without impacting pear growers, while more continued research could be conducted. There wasn't a time frame submitted to that. I don't know if you guys will make further comment on that or not. Okay. Support of the minority opinion. Opposed to an extension of the expiration

date.

Consumers Union. The goal of OFPA was to apply consistency to the organic label. Food and Water Watch. The prophylactic use of antibiotics contributes to the growing reservoir of antibiotic resistant bacteria in the environment, which has been identified by medical authorities as critical threat to public health.

Advocacy groups supporting Minority Opinion 20, Consumers Union, BP, CFS, PIER, several more, Cornucopia and several more. Support of the minority opinion, continued. Beyond Pesticides stresses the importance of antibiotic resistance. They state that the majority opinion is contrary to prevailing medical and scientific opinion.

Tetracycline use poses significant health and environmental threats. It is incompatible with a system of organic and sustainable agriculture. There are numerous individual comments submitted in support of

Beyond Pesticides, and we have several supporting that position.

Johns Hopkins University. To protect public health, the NOSB should allow the authorized use of oxytetracycline to expire next year as scheduled. General comment. Please keep antibiotics out of apples and pears, and any other organic fruits and vegetables.

Antibiotics should not be in or used on any food, especially that which is marked as organic. No synthetics should be allowed of any kind.

Continued support of the minority. There were many individual comments stating that antibiotics do not belong in organic production. Keep all synthetics out. Please keep our food safe, and numerous generic and form letter types of these comments were presented to us.

Key points of discussion. Zea, when I get to your slides, yell at me so I

don't -- I may just keep going.

OREI. Research will not be completed by the current 2014 expiration date. What impact will the 2014 expiration date have versus allowing for specific extension, in allowing completion of the trial work and transition of these programs physically out to the grower spray programs for actual use?

So taking them out of the trial status and moving them out physically into the real world, out into actually growers putting these materials on. There are several suggestions to extend the date that we have received, ranging anywhere from 2017 all the way out to 2023.

Does the current system provide adequate oversight? Annual inspections, organic systems plans in place. Certifiers ensuring that all the necessary steps leading up to the use of the tetracycline have been met prior to an application being made.

If an extension is agreed upon, is

any further restrictions truly needed, and would they even be able to be implemented in a timely enough manner to be of any help? What are the actual facts of antibiotic use in tree fruit on human health and the environmental impacts, and I think our panel was able to take and give us a little disclosure on some of that.

Do they exist, don't they? At what levels? What could be done to help mitigate these concerns, if an extension is granted to help with consumer confidence in organic?

All sectors of the organic community agree that antibiotics need to be moved from organic use, and are committed to doing so? It's just a matter of when the phaseout should be.

Can a compromise be made that allows all organic stakeholders to share in the decision, and ultimately the victory that OFPA worked as it was intended to? Allow a

substance of use added to the National List, reviewed as required by law, and ultimately that material then was removed when the appropriate organic replacements became available.

Are we truly there yet? Arriving at that point in time is something that all organic stakeholders will be able to take pride in. OFPA worked, as designed.

MEMBER SONNABEND: Okay. I'm offering some talking points in support of the majority position for an extension.

OFPA clearly stipulates that the NOSB review each material by specific use and application. Provisions in OFPA against antibiotics are only stated for animals. Nowhere in OFPA is there a prohibition against use in crops.

It's never been a secret that tetracycline has been approved for fire blight, that has been public record since 1995. We posed the question whose

responsibility is it to notify consumers of what the organic rules actually are? Perhaps it's the groups that represent them.

Satisfying consumer expectations is not on one of the criteria in OFPA, nor in the federal rule, although it is one of 12 criteria for assessing compatibility in the NOSB policy and procedures manual. But there are 11 others. How does this work? Thank you.

The claim that every time someone bites an organic apple, you take in tetracycline is not true. Many organic apples each year are grown without tetracycline. Other statements in both the majority and the minority position can be challenged and debated at length, without anyone changing their mind.

So in the spirit of moving forward, we've laid out all of our positions in both minority and majority in the written document, and we all agree that finding the

best way to remove tetracycline from use, while trying to create a viable way for fruit growers to continue to produce organic crops is our goal.

Right now, there are not suitable alternative practices that work in all locations for both apples and pears.

Blossom Protect has shown to be works well in Washington and Oregon, has not been tested enough in California, and does not seem to work in Michigan, and we don't know about New York, North Carolina, Wisconsin and any number of other states where apples and pears are grown.

There was 2,000 acres available for 2013 and we're not sure of the availability in the future. The new copper product, Previsto, Harold has just talked about. It's not registered, seems to be pushed back.

Limited years and locations of trials means limited information on the timing

of applications between these products and other materials used for scab or other pests. Limited experience and differing weather patterns and microclimates and limited experience to small test products and not major acreage.

The industry does not plan to submit any further petitions. The NOSB majority investigated how to indicate this by resolution, but the NOP was not able to support such a resolution because in the rules, anyone has the right to petition at any time.

Therefore, we are simply stating this clearly on the record. The industry does not plan to submit future petitions.

The NOSB Crops Committee discussed possible annotations to put further restrictions on growers and ACAs for alternative practices and oversight, but could not agree that being redundant to what is already part of the ACA and grower procedures

would be worthwhile in an annotation.

Therefore, a second resolution has been proposed to address oversight as well as research needs. What we are looking for is a level playing field for growers in all states. We want to provide U.S. consumers with USA-grown organic fruit.

The majority of the NOSB Crop Subcommittee believes that an extension to 2016 is a good compromise between the needs of growers for alternative materials and practices, and the expectation of consumers that organic fruit be grown without antibiotics and produced in the USA. Thank you.

MEMBER FELDMAN: Thank you. So a time check here. We have a minority position as well that you should have access to in written form. I'm not going to go through these slides at this point, given the limited time. I hope everyone has a chance to look at these.

But I do want to say, I think Dr. Morris really did capture the urgency of the need to evaluate the impact of continued tetracycline use.

Yes, we have to balance the need for this material, but we also have to really seriously evaluate the impact of the material on human health and the environment, compatibility with organic practices and essentiality.

This is a complex issue, as you've said Harold and, you know, there are multiple complex factors that come together. The confluence of these issues is almost extraordinary, and you know, starting with the impacts on the environment and contribution to horizontal gene transfer, how that makes its way up the chain, across the chain and ultimately affects our ability as human beings to deal with human pathogens and respond to them in a clinical setting.

The subtherapeutic uses are

actually the worst uses in this context. We can't rely on the typical scenario that we think about when we're introducing a synthetic material into the environment, that dose makes the poison or it's very little, or we're an insignificant percentage of overall agricultural production.

We really have to look at the mechanism at work here, as was described to us. When we're talking about actual exposure direct through the finished fruit, we have nothing else to go on but what the EPA utilizes as part of its protocol for evaluating residues.

The document that's referenced in our technical review is not a study; it's an EPA protocol for setting tolerances. That's what we do when we determine that we need an enforceable level in the fields and after production, to determine whether something is violative of the level that the agency, for better or worse, determines is acceptable.

And by the way, when EPA registers a pesticide and allows an acceptable level, they don't call it safe. It's not allowed to be called safe. It's allowed to be called, as having an acceptable risk. This is where the Organic Foods Production Act differs significantly from the Federal Insecticide, Fungicide and Rodenticide Act.

We have a very different standard. We're trying to advance systems that don't integrate hazards, and the conventional side is trying to integrate hazards by mitigating risks. It's a totally -- it flips everything on its side.

So when the minority looked at antibiotic resistance in human pathogens, ultimately as a result of commensal bacterial resistance at very low levels for short periods of time, for long periods of time in other cases.

Even if there's disagreement on some interpretation of some of the studies, we

still have use in the fields, exposure to bacteria, identification of bacterial resistance as a result of its use in the field, and then the cycle of impact on human health down the road.

I close by saying that we're not just dealing with another input in agriculture. We're dealing with an input that is unfortunately related to a world crisis in bacterial resistance, and organic needs -- the minority believes that organic is the sector of agriculture that must lead on questions like this, always must lead.

It can't hide in the shadow of being a small percentage of overall agricultural production. It must serve as a leader for where agricultural production needs to go. So that's the underlying premise and Mac, I apologize. We are now behind schedule.

We have two other materials to get to. As you know, we have polyoxin D zinc. What I'd like to do, if we could just take

five minutes at this point, is have the leaders on that, if it's acceptable to you guys, to just break down what the vote was, and a couple of sentences on where the majority and minority is on the particular issue.

So for IBA, if you could just tell us what the vote in Subcommittee was, and then give us a sentence or two, and then Harold, John will go first, if that's okay? Give Harold a break or - okay, Harold. You're ready now? I didn't want to impose on you further. Lisa, I apologize.

DR. BRINES: That's all right, Jay.

MEMBER FELDMAN: Okay, go ahead.

DR. BRINES: Thank you. The petition for polyoxin D zinc salt was received by the Program on March 4th, 2012. There were a couple of updates in the interim. It was submitted by Conn and Smith, Inc., on behalf of Kaken Pharmaceutical Company Limited.

The petition requests the addition of polyoxin D zinc salt to Section 205.601 of the National List, to control and suppress fungal diseases in organic crops. The substance does not appear elsewhere in the National List.

In support of its review, the Crops Subcommittee requested the development of a third party technical evaluation report. That report was developed and provided to the Subcommittee in 2012.

Both the technical report, the original petition and two subsequent petition addenda were posted on the NOP website in advance of the opening of the public comment period. Thank you.

MEMBER AUSTIN: Okay. We received, the Crop Subcommittee received the petition to list polyoxin D zinc salt as a synthetic substance to be allowed for use in organic crop production under 205.601.

It's a material that's derived

from streptomyces, classified as a fungicide rather than an antibiotic. It's a funginistic form of action. The Crops Committee, voting to classify it as a synthetic, 8 yes, 0 no, no abstentions, no abstains.

The listing motion to add polyoxin D zinc salt to the National List 205.601 as a synthetic substance allowed for use in organic crop production. 3 yes, 4 no, 1 abstention.

The rationale behind the majority vote to not list it was that it was not essential, that it was a broad spectrum fungicide, and that there were concerns with its impact on soil, biological and fungal activity and also predacious predators.

The minority position was that it was a FRAC-19 fungicide. It was funginistic, fungistatic activity, so it did not physically kill the fungi. It inhibited cytokine development.

We did have some concerns, though, on its impact on beneficials, that I still

think that even the minority did not quite get all of their questions answered as well. So I think that's all I've got for the moment. We'll hand it over to Lisa.

MEMBER FELDMAN: Thank you, Jean, and thank you Harold. John, you're up next, but I'm going to go to Lisa first. Thank you.

DR. BRINES: Thank you, Jay. The next petition on the agenda is indole-3-butyric acid, also known as IBA.

This petition was received on August 8, 2012, and was submitted by Hortis, and as some of you in the audience may recall, this substance was previously petitioned before the Board in 2009, and the Board made its recommendation on the previous petition in November 2011.

The petition requests the addition of IBA to Section 205.601 of the National List, for use in plant propagation from cuttings. It is not currently listed elsewhere on the National List.

In support of its review this time, the Subcommittee did not request the development of a new technical report, and instead referred to the technical report that was developed in response to the previous petition. So the current technical report that's available is dated 2011.

Both that technical report, the previous petition and the petition that's before the Board today were all posted on the NOP website in advance of the opening of the public comment period for this meeting. Thank you.

MEMBER FELDMAN: Thank you. John.

MEMBER FOSTER: Thank you. Melissa, I think you said about half of what I was going to, so I'll just summarize. The change here over the previous petition was to the method, to limit it to the purpose of plant propagation via dipping this time around.

That was the difference. We voted

to classify it as petitioned as a synthetic material, 8 to 0, and then to list. The listing motion was to list indole butyric acid or IBA, with its CAS number 133324 as petitioned on 601 for the purpose of plant propagation via dipping. That vote when 3 yes and 5 no, and 0 absent, abstained or recusing.

In general, it met the criteria for lack or negligible impact on humans and environment, and then had, on the whole, no's for essentiality and compatibility of consistency. Then the commercial supply was not applicable.

MEMBER FELDMAN: Thank you, and I turn the gavel back to you, Mr. Chair. Thank you.

CHAIRMAN STONE: Okay. So I think the plan is we'll have a little further discussion about each of these materials as we go through the voting process tomorrow. We'll engage public comment here this afternoon. So we'll further discuss this tomorrow. With

that in mind, we remind you that we're here to listen to the public.

So I want to work through these questions. Again, it's scheduled at one minute per person for questions, including the time it takes to ask the question.

So public commenters, if you see me going like this or like this, that means you're going like this, and you need to be going like this, if you get a question. So it's just in fairness to those that follow you is where this is going.

So again, the process is if you're just getting here, there's a little stoplight system on the podium. It's green for three minutes, then yellow for one minute, and then a red light with a beep that indicates time. Everyone's been very respectful of that, and hope you'll continue to do so.

I'll call one person to be at the podium, and then the second one is on deck, which means if you'll go ahead and come up

towards the front and stand behind Michelle, so that we can rotate in and out of the podium as quickly as possible. I appreciate your assistance on that.

So first we have Gerald Davis at the podium, and James Adaskaveg. Excuse me, you can help me with that when you get up here. Gerald.

Public Comment/Crops Subcommittee

MR. DAVIS: Good afternoon. Gerald Davis, Grimmway Farms out in California. I am ex-NOSB Board member from 2005 to 2010, and Crops Subcommittee chair for three years.

I reviewed a lot of materials during that time, and voted sometimes to list, sometimes not. I felt I was fair-minded and willing to consider each material, and not just automatically vote one way or the other.

I've encouraged that out of this Board. I see the vote on the polyoxin D in the Crop Subcommittee was relatively split.

If everyone had voted, I'm sure it would have been exactly split. So I see that the vote for this material will probably be the same for the full Board.

Been a long-time crop advisor for Cal Organic, Grimmway, 20 years or more, and a lot of experience with 30 or more crops. What I like about this material is that it's, you know, it is a naturally derived fermentation type product with a twist, which is why the Board is reviewing it. Otherwise, it would just be allowed, because it is a natural. The addition of the zinc salt makes it become synthetic.

I like that it works differently. As a grower, it works differently than the other organically approved materials that are already on the market. A lot of the materials on the market are preventive fungicides such as copper or other things, that you pretty much have to predict what diseases you will have and when they will be a problem, and put

the material on, if you really want to get control in an area where you have disease pressure.

Copper is a problem. In some areas, not in our area in California, but we do use copper. In some areas, they use a lot of it, and it's an environmental problem for organic growers, to be putting on a lot of metallic copper every single year. I see this material as a potential aid in cutting down on that usage of copper.

Another thing I like about it, it controls certain diseases that none of the other materials already certified will touch, like Southern blight or sclerotium rolfsii, which is a pest in potatoes, in carrots and potentially in onions. I hear it's a pest in peanuts.

This material, from research I've been made aware of, works really well for a disease called alternaria, which would be alternaria leaf blight in carrots is a serious

disease, and we deal with it all the time. Alternaria leaf spots in almonds and stone fruit is also a problem for organic growers in certain areas. So this material would be very helpful.

Another disease it controls is botrytis in stone fruit and tomatoes. Our farm grows greenhouse tomatoes. Botrytis is not a usual problem. We manage it, you know, environmentally mostly, but it would be nice to have a material to fall back on if we needed it.

But I just come as a grower to ask you to seriously consider the material, and not just rule it out based on your biases one way or the other or vote it in, if you're biased towards voting in more materials. Just consider it carefully please. Any questions?

CHAIRMAN STONE: Thank you very much. So James and Richard Conn is on deck.

MR. ADASKAVEG: I'll thank you for the opportunity to come here today and speak

to you about polyoxin D. My name is pronounced Jim Adaskaveg, and I appreciate your concern with pronouncing it. Anyway, I'm a professor at the University of California-Riverside.

I study epidemiology and management of fruit and nut tree diseases, and I basically developed the disease management programs for a lot of the tree and fruit nut commodities in California.

I work with the statewide UC-IPM pest management program and develop guidelines, and that includes for organic tree fruit and nut production. Thus, I work with the Boards, and Boards still think that I should be developing new products and those products include organic products for that segment of our industry.

We do a lot of screening of materials, and identifying organic products is part of our mission goal. Although there's numerous products labeled for tree fruit

production that are under organic product listing, things like many different copper formulations and many different natural products.

Many of these products have, do not, they represent limited modes of action and are not necessarily, a lot of them might be redundant to each other under the concept of FRAC, of listing materials by mode of action.

Many of the products have limitations. Low to moderate efficacy is one of the major concerns. There's potential phytotoxicity with certain products like copper on tree fruit crops, and there's also labeling limitations.

So although there's a lot of different products listed, and if you go through the labels, many of them have constraints that prevent their use in a high performance level.

Many of these products are

overused in my opinion, and so therefore having alternatives will prevent environmental contamination and/or allow for better worker safety. We're concerned with workers and overuse of sulfur products on tree fruit crops and again, this is a concern of why we will need to develop these types of products.

So part of our, to get to the point, I've screened a lot of products, hundreds of products over the years. Polyoxin D represents one of the first new biofungicide registrations I helped develop with other companies here in the U.S. or under the EPA registration.

As mentioned by Gerald Davis, it's a fermentation product, which is a natural product, and fortunately it was actually evaluated critically for toxicological characteristics and has been recently listed last year as exempt from tolerance by the EPA.

It has broad spectrum activity, as most people have recognized, with activity

against alternaria, which even conventional materials have a hard time controlling, and for almond production this is essential in California, even for the organic production.

One of the revolutionary ideas of using polyoxin D is that we're developing it also for potential use for post-harvest disease control, which there are no materials available in the organic segment for managing post-harvest decays once a crop is harvested.

This material, again, has that potential with outstanding efficacy against brown rot and gray mold, which is botrytis. So in summary, I fully endorse the registration of polyoxin D, even under the segment of the synthetic materials approved for organic use. Thank you.

CHAIRMAN STONE: Thank you. Questions, Jean.

MEMBER RICHARDSON: Yes, I have a question. The technical report, I'm here.

MR. ADASKAVEG: Oh, okay. There

you are.

MEMBER RICHARDSON: The technical report says that this material has the potential to have a negative impact on the beneficial materials in the soil, as it says, beneficial.

MR. ADASKAVEG: Fungi.

MEMBER RICHARDSON: Fungi in the soils. Do you have any research experience that would help us to better understand that?

MR. ADASKAVEG: We deal mainly with foliar diseases, but from our experience, I mean most of these pesticides, including polyoxin D, at the rates we're using them, they are organic compounds in the strict sense of carbon-based. They are degradable, and we don't see long-term persistence or detrimental effects on the vast majority.

There is, all these materials, including polyoxin D, has a range of materials or a range of efficacy on different diseases, and it's not going to be a broad spectrum

fungicide killing all fungi in the soil. There are microbes that degrade it, and it does not last in a persistent environment.

MEMBER FELDMAN: The technical review also says it's long been regarded as an antibiotic because of structure and function.

MR. ADASKAVEG: I failed to mention that we actually screened this product. We're also involved with screening, looking for new bactericides such as kasugamycin for fire blight control. We've identified that material, and it's going through the EPA registration.

We looked at polyoxin D, and it had no bactericidal effect on the bacterial diseases that occur on tree fruit crops in California. I obviously don't screen against all bacteria.

CHAIRMAN STONE: Harold.

MEMBER AUSTIN: With the rotation of a new mode of action, fungicide into the organic program if this one was approved, what

impact would that have on soil health in quality, because this would then, as you stated, would replace the overuse or the heavy use of coppers, sulfurs, those types of materials.

So what would this -- inclusion of this for use, what would this do to soil health and quality?

MR. ADASKAVEG: The concerns here are that we don't want to use this exclusively. Resistance, as we know with any product, whether it's antibiotics or fungicides or potential organic materials, resistance can develop, even to copper materials with over-usage.

So we're not promoting the exclusive use of polyoxin D, but rather using it in an integrated approach, and we definitely can see that as we screen new materials for organic usage, we want to start with, you know, a foothold with polyoxin D for organic use, and then potentially develop

other materials that can be coincidal, other organic materials, fermentation products, other plant extract materials that can be used in concert.

As I said earlier, I don't think it's going to have a long term effect. It is degradable material, and with toxicology looks favorable as something that will not persist in the environment and not be totally effective against eliminating soil fungal flora.

It's not that broad spectrum. It's broad spectrum in the sense of foliar fungal diseases of and certain diseases of roots on tree crops that I've tested. So I don't think it has that type of long-term persistence and broad spectrum activity to ruin the microflora of, the fungal component of soil microflora.

CHAIRMAN STONE: Francis, if you'll finish up.

MEMBER THICKE: Yeah. It said in

the technical review that the mode of action is that it inhibits the formation of chitin in the maul of fungi, and that makes basically broad spectrum. Would that also affect the beneficial fungi in the soil as well?

MR. ADASKAVEG: Yes. The question is exactly correct. That's been the studied mode of action. But there's different types of these chitinases that are being developed by different fungi.

They're not all -- chitinase is a general term. They're not all exactly the same. So we do see degrees of activity of polyoxin D against different types of fungi.

So for example, we see that it works very well on alternaria and ground root botrytis, but it has no activity on rhizopus, mucor, zero activity, and they're all chitin-producing fungi.

So the chitinase, synthase molecules are different between different fungi, and that's the extent of our research

on that.

MEMBER THICKE: And then relative to persistence, the TR said the half life is 32.5 days at pH 7 at 25 degrees Centigrade. Would that be a fairly long persistence?

MR. ADASKAVEG: That's considered fairly short, I mean in the sense that depending on how you want to look at it, it's not persisting very long, and your mode of action would be basically if it's a half life, you'd be expecting that to work for disease control, maybe seven to ten days.

MEMBER THICKE: I was referring to in terms of soil food web, 32 days of effect on fungi in the soil, food web adapting.

MR. ADASKAVEG: Well that's considered very good in microbial beneficials and support, that these things do degrade. That's the time line that was I was suggesting.

There are products out there, not to mention anything in specific, but that

lasts months in the soil, and this is obviously in that much shorter 32-day time frame. So that's the mind set that I'm coming from, that it is a very short persistence with that type of half life.

CHAIRMAN STONE: Thank you. Richard Conn and Cynthia Smith is on deck.

MR. CONN: Good afternoon. My name is Richard Conn. I'm the president of Conn and Smith, Incorporated, and Cynthia Smith and I will be speaking today in support of polyoxin D zinc salt.

First, I'd like to call to your attention the five submissions that Conn and Smith, Incorporated has made on behalf of polyoxin D zinc salt. First was the revised petition that was submitted March 4th of last year, 2012.

Second, was the reply to the technical report that was submitted January 18th of this year. The third item was the reply to the Crop Subcommittee's

recommendations, submitted on March 6th this year, and then there were four reports regarding the safety to beneficials that was submitted March 22nd of this year.

Finally, the fifth item was new data on the safety to earthworms that was submitted on April 4th of this month. So polyoxin D zinc salt is not an antibiotic. The decision to include or exclude polyoxin D zinc salt from organic crop production is a regulatory decision.

Only a regulatory definition of antibiotic or antibiotic drug should be used as part of the regulatory decision-making. Otherwise, the regulatory decision would be arbitrary and capricious. Neither antibiotic or antibiotic drug are defined by USDA, NOP, EPA or FIFRA.

The Federal Food, Drug and Cosmetic Act defines antibiotic drug and requires intended use in humans or animals. Polyoxin D zinc salt has always been marketed

exclusively as a plant protectant. Polyoxin D zinc salt is not and has never been intended for use in humans or animals.

Therefore, polyoxin D zinc salt is not an antibiotic, as defined by the Federal Food, Drug and Cosmetic Act. Regarding safety to humans, polyoxin D zinc salt has large margins of safety for humans. The formulation developed for organic market has such low toxicity that EPA does not require a first aid statement.

Also, polyoxin D zinc salt has an extensive toxicology database, and EPA has determined that polyoxin D zinc salt does not cause mutations, birth defects, cancer or other long-term health effects.

Polyoxin D zinc salt provides broad spectrum control of crop fungal pathogens only. Most of the 73 EPA registered uses are also California registered uses. We request your support for the inclusion of polyoxin D zinc salt in organic crop

production. Thank you.

CHAIRMAN STONE: Thank you. Harold.

MEMBER AUSTIN: We've -- I'm here. We received all of the information that you submitted, the various beneficial data and studies, the earthworm study.

The one thing that was missing and the one thing that we were really trying to get further information and declaration on is in the TR report, there is one study that showed there was an incidence where because polyoxin D is a chitin inhibitor, there was a negative impact on I believe it was some type of a roach.

Our question is on beneficial insects such as ladybird beetles, those types, we've seen your lacewing studies and some of the others. But very specifically, when we're looking at beneficial insects such as ladybugs, the beetle family that are definitely valuable in our crops, is there a

negative impact or not?

Does it inhibit during the molting process? Does it inhibit the chitin formation on those types of beneficial insects?

MR. CONN: I'm going to defer the answer to Cynthia Smith. She's a lot more familiar with this than I am. Hopefully, she has the answer.

MEMBER AUSTIN: Okay, thank you.

CHAIRMAN STONE: All right. That's your cue, Cynthia. You're up.

MS. SMITH: Thank you and good afternoon. My name is Cynthia Smith. I'm here on behalf of Kaken. I'm the Vice President of Conn and Smith, and I'm also the primary author of the petition.

It's probably best to start with the answer to the question that was asked about ladybird beetles. Fundamentally, polyoxin D zinc salt has the mode of action that is specific to cell walls. There are plant cell walls and animals do not have cell

walls. They have cell membranes.

So the study that you mentioned having to do with cockroaches looked at organs of cockroaches that had been put through a blender and it was done entirely in vitro. There's no evidence whatsoever that there is any efficacy for control of insects using polyoxin D zinc salt, zero evidence whatsoever.

Going back to some of the things that were mentioned earlier, the mode of action of polyoxin D zinc salt is it suppresses the formation of chitin synthesis, such that it doesn't kill the fungus; it only stops the growth of the fungus.

This is important when you're looking at the environmental impacts, because if you're looking at the impacts on soil health, that effect is a temporary effect. It degrades in the order of 50 percent in the order of a month in the soil.

So it will have a temporary effect

on the soil microbes, and so you could in fact apply it with something that would be suppressed, but you will get a later beneficial effect. So yes, it might cause lack of growth, but it will not kill the fungi that are naturally occurring in the soil.

Now in the way of other non-targets, I'd first like to point out that it is not toxic to be as defined by the Environmental Protection Agency, and then there were some additional studies that were recently submitted, recently translated, and those were on silk worms, hover flies, lacewings and wolf spiders.

The thing that's noteworthy there is that one, there was no mortality; two, there was no adverse effects on behavior and for the three beneficial insects. There was no negative impact on the development. So they developed normally from larvae to pupae.

Also recently submitted, there's no adverse effects on earthworms. There has

been a lot of discussion within the technical report about what happens within the soil and the soil organisms, but again, no adverse effects on earthworms.

Another issue that was raised has to do with fish and aquatic invertebrates. Because polyoxin D zinc salt degrades so rapidly in the environment, and because it's applied only to terrestrial crops and only at low use rates, EPA concluded that there would be negligible concentrations of polyoxin D zinc salt in, in this case, drinking water, pond water, reservoirs, rivers.

So this is a material that can be very adequately used, safely used with regard to aquatic organisms. Thank you.

CHAIRMAN STONE: Thank you. Any questions for -- Francis?

MEMBER THICKE: A quick question about the essentiality. Do you see this as an essential need for organic? I'm looking at the TR and there are two pages of alternative

products that are approved for organic use, for a whole range of crops and diseases, fungi diseases.

MS. SMITH: Well, I would say that yes, it is essential, and the reason for that is that no matter what fungal disease you're looking at, maintaining an environment where you do not establish resistance or do not encourage resistance is important.

One of the things that polyoxin does it provides a unique new mode of action, and that uniqueness gives it a special position. Now when we were looking at the spectrum of diseases, there are diseases that are problematic to growers, and polyoxin D zinc salt does provide control of diseases that are otherwise hard to control.

Yes, there are a number of products that are registered, but those registered products have only a small number of modes of action, and for those that are registered, there are many instances in which

the control will be described as lackluster.

So this would give growers an opportunity to in fact gain control, not just prospectively, but many of the products are registered only for as a preventative. But polyoxin D zinc salt is also registered as a curative material.

CHAIRMAN STONE: Harold.

MEMBER AUSTIN: Yeah. I think part of your petition, and then also from some of the public comment that we got, stated that there were several diseases like I think gummy stem Southern blight, that there were really no true effective alternatives to it, and that this would give those growers an opportunity to come in and have a material that they could use that would be effective, and also it could be applied after the fact, as a curative material.

So I have seen that in the comments and in your information that you've provided. One comment in written testimony

that raised one concern, and I liked a little bit of clarification, would be on the post-harvest use. What would be the intent, the crops, the timing of the application there, and it looks like it's a fairly safe material.

But I think I'd like to see some clarification of the post-harvest direction of the material as well.

MS. SMITH: Okay. I prepared the petition to EPA to extend the limited number of tolerance exemptions to all crops, pre-harvest and post-harvest. EPA approved that petition. There are no currently registered uses that are post-harvest.

The petition, the tolerance exemption is in place. That gives us the green light to actively develop post-harvest uses, but there are none that are currently registered.

I learned over lunch today that there has been research done by another company, that does demonstrate good control in

cherries post-harvest.

CHAIRMAN STONE: Great. Thank you very much. We appreciate that.

MS. STEINER: Thank you.

CHAIRMAN STONE: We're going to -- we're not too bad, a little bit off. But we're going to take a 12 minute break, be back here at 3:35, and Alexis Baden-Mayer will be first up. If Alexis, you can be here.

(Whereupon, the above-entitled matter went off the record at 3:23 p.m. and resumed at 3:36 p.m.)

CHAIRMAN STONE: It's time to call the meeting back into session. If I can have the Board members -- I see that. I see who get brownie points later today. May get to ask an extra question, for instance. Tracy's here, gets to ask all the questions she wants.

So appreciate everybody. Twelve minutes is hard, and like I said yesterday, the conversation and networking is a big part of our week-long meeting. So if I could ask

those in the audience to have a seat please. Okay.

So we're back in. We're starting. We have a series. The way Michelle worked these out, we have quite a few presenters on tetracycline specifically. So first up is Alexis Baden-Mayer, and Lynn Coody is on deck. Alexis.

MS. BADEN-MAYER: Hello. I'm Alexis Baden-Mayer. I represent the Organic Consumers Association. Most organic consumers do not know that there has been an exception for tetracycline on organic apples and pears since 1995, and obviously no organic consumer would want any organic orchards to be lost.

But it's worth pointing out that since 1995, new orchards could have been planted and could have even reached maturity four or five times already. It's pretty easy to understand why consumers would be frustrated at this point by the industry always being given two more years. This has

gone on too long.

We need to stick to an expiration date for once, and unfortunately honestly I don't believe that that will ever happen if the growers get two years this time, two more years again.

Almost 30,000 people have signed our petition now to get antibiotics out of organic apples and pears. The official count is 28,581, and that's after de-duplicating; it's after taking out anyone from overseas. Those are just U.S. residents that gave us a zip code and a state and a name and a comment.

5,897 people took the time to write unique comments, and I'd like to read as many of these for you today from the record. My favorite is the most succinct.

Blakely Dillar of Ohio says "Antibiotics are for sick people, not for healthy food. But when consumers learn that every time they eat an organic apple or pear, they risk exposing themselves and their gut

flora to measurable levels of tetracycline, this means something for certain consumers especially."

We have three pages of comments from consumers whose comments begin "I am allergic," and they tell a story of being allergic to antibiotics, and specifically, in some circumstances, tetracycline. Lynn Gorski from Indiana says "I am allergic to tetracycline. Therefore certainly do not want that on my apples."

Pat Faith from Michigan says "I am allergic to tetracycline. Since we don't know the producers of the non-antibiotic fruit, I'm in a quandary.

How do I know if the organic fruit I purchase had tetracycline used on it? I buy organic because I don't want to worry about the added stuff that is not necessary for food to be produced. I was horrified to hear that antibiotics are being used."

Michelle Swisher from Oregon says

"I am allergic to tetracycline and all other cyclines, to the point that I can't touch people who are taking it. Now to find out the drug that hurts me is in my food is scary. How often have I been sick from that?"

Crystal Stillman from Vermont says "I am a low income single mother of three children. I buy organic food to protect the health of my children. I am horrified to learn that pears and apples advertised as being organic are not really organic, because the government allows them to be sprayed with antibiotics. Please stop this false advertising."

Jamie Bennel from Tennessee says "I am a nurse, and try to raise my kids as natural and healthy as possible. Medications, including antibiotics, are used on as sparingly as needed basis, and the more exposure we get to them, the less effective they are. Please allow me the right to choose what goes into my body."

Michael Goodman says, from Florida, says "I am a Ph.D. health care professional. For my own benefit, as well as for my clients, I strongly request that my organic food not contain antibiotic residues. This is simply not necessary."

Julie Fox from Florida says "I am a registered voter with a severe life-threatening allergy. Please comply. Keep our medications effective and my gut bacteria intact."

Nora Gottlieb from North Carolina says "I am allergic to antibiotics. I break out in itching spots with a white center. It takes four months to clear my body. No to antibiotics," and there are almost 6,000 comments like that.

CHAIRMAN STONE: Thank you, Alexis.

MS. BADEN-MAYER: And I delivered them printed out. I've got two copies. I tried to print them out as sparingly as

possible, but it fills an entire box and I hope you will rifle through these.

CHAIRMAN STONE: Good. Jean.

MEMBER RICHARDSON: Hi. No disrespect meant at all, but if you have an article, a scientific article that you found that specifically says that there are -- that tetracycline is in the fruit, the pears or apples, I sure would appreciate that reference.

MS. BADEN-MAYER: Well, I did actually include an industry paper, and initially, I didn't realize that residues would be an issue with this, because I was told the blossoms are sprayed and by the time it gets to the fruit, there are no residues.

But in the course of looking at this issue, I did find an industry paper that's titled "Antibiotic residues on plant tissues, and actually this same --

MEMBER RICHARDSON: Is it on plant tissues or in plant tissues?

MS. BADEN-MAYER: Yes, on plant tissues.

MEMBER RICHARDSON: On.

MS. BADEN-MAYER: And the same figure that's mentioned in this paper was mentioned earlier today. It's a parts per million figure for residues of tetracycline on apples, I believe.

I included this along with our comments, and even though this is an industry paper, so it says that there are measurable residues, but it's not a worry, that's not why I'm submitting this paper.

I think consumers are worried about residues, and I was completely shocked having first been told that residues weren't an issue, to learn that industry is well aware that there are residues of antibiotics on our food. Not always, but we do have a risk of those residues, and sometimes they're up to a certain amount, and that's in this paper.

CHAIRMAN STONE: Okay, thank you.

Lynn Coody is up and Jane, excuse me, Bultedaob, Bultidab. You can correct me when you get up. Jane's on deck.

MS. COODY: Hi. My name is Lynn Coody, and I'm commenting on behalf of my own business, Organic Agsystems Consulting, which is located in Eugene, and today I would like to speak about the centrist proposal for tetracycline.

I've worked on the tetracycline issue many times, beginning in the late 1980's and in this round of work, I first looked at the overarching themes, and came up with my goal for a tetracycline policy, that is, to develop practical and principled production policies.

I think it's important for the NOSB to balance practicality and organic principles, because in my years of work on organic standards, I have noted that decisions based too much on either one of the foundations of organic world rarely lead to an

outcome that works in both field and the marketplace.

At this stage of its evolution, organic agriculture is still described as an alternative to conventional farming. In my mind, a polarized just say no approach is focused too much on principles, and results in some growers having no alternatives but to move toward IPM or conventional production.

Decisions based too much on practical considerations can result in consumers searching for alternatives to buying organic products. Worse case, when the policy about a material or practice is crucially important to the success of growers like tetracycline, is based on highly polarized discussions, both production and sales can be put at risk.

Clearly, alternative agriculture needs alternative solutions to policymaking. A balanced approach that takes into account the needs and concerns of all stakeholders can

provide a way forward, that will foster the stability and continued evolution of organic systems.

I'd like to propose three elements, that when taken together, provide a practical and principled approach for a policy on tetracycline. Limited duration extension, annotation and increasing confidence through oversight.

So first is extension. I support an extension that ends in October 2016 as proposed by the Crops Subcommittee. This time frame allows four more fire blight cycles for testing management systems and materials, both on research plots and on farms.

Further, it ensures that tetracycline will be removed from the National List prior to the date at which it would normally sunset, thus precluding another round of discussion on this contentious topic.

I recognize that this time frame is completely insufficient for long term

solutions, such as developing and planting varieties and root stocks that are resistant to fire blight.

However, I think the intense focus by researchers and growers on new materials and practices will result in innovative practical strategies that can be implemented quickly.

Annotation. OFPA provides a unique role for the NOSB in the review of synthetic materials. This authority has always included the ability of the NOSB to recommend limitations to the approved use of a material through annotations.

Once an annotation is added to the National List, it creates a direct, legally binding linkage between the NOSB's decision and both the regulation and oversight of the organic industry. Some commenters noted that annotations increased the difficulty of implementing the regulation, and I agree with them.

However, I don't think this is necessarily a detriment. In my mind, the increase of regulation, the experience on the ground supports the idea that annotations are a powerful tool for the NOSB to effect change.

Oversight. Those of us who work with the NOP standards every day know about the hierarchy of disease control in 205.206, which requires a primary focus on preventative practices.

Consumers and marketers have not necessarily been aware of this important part of the NOP regulations. For this reason, I recommend including a few words about oversight in the annotation, in order to reassure consumers about the stringent steps that growers and certifiers must take, to ensure that antibiotics are used only as a last resort.

And in my paper, which I passed out, I've proposed an annotation for your consideration. But I don't have time to say

it right now.

CHAIRMAN STONE: Thank you, Lynn. Zea.

MEMBER SONNABEND: Lynn, what annotation do you think would be a good --

(Laughter.)

MS. COODY: Well Zea, I would -- I'll be happy to answer that question. Here's my annotation. Originally, the centrist proposal, the first draft of the centrist proposal had a much more involved and long annotation with the intent of trying to explain to both ends of the spectrum, both the consumer side and the grower side, some of the options that were allowed.

We recognized from the start this was way too long for an annotation, so here it is. This is the revised one. "Tetracycline for fire blight control in apples and pears only until October 21st, 2016. Tetracycline may only be used if the grower has implemented an integrated system of practices and

materials to control fire blight.

"Orchard management systems must demonstrate an annual increase in the extent or number of alternative practices for managing fire blight." So there's three sentences. Each one meets one of the goals that I talked about.

One is the, shows the deadline. One is providing oversight, and one is talking about the implementation of Section 206 of the standards.

So we have received so many comments from consumer groups that we've worked with, that an annotation is important to them because it is the legally binding option. Other options such as you proposed in the Crop Committee are not legally binding, and having oversight explained, they told --

We had feedback from them saying that it would help them a lot, to explain the situation to the consumers, and to show that there is -- to reemphasize that in this

particular case, there is strong oversight, even though we all know that it is already in place. So it's just a reiteration.

CHAIRMAN STONE: Harold.

MEMBER AUSTIN: Lynn, thanks for all the effort that you put forward working on this. The resolution that you came up with, the language for that, you were just talking about some of the consumers and the consumer groups that you had.

I'm assuming that this resolution came forward as part of the discussions and the conversations that you had with others?

MS. COODY: Yes. I did this work on behalf of the National Organic Coalition, and starting about last August, we made multiple efforts with many, many different parties, both from the consumer, the grower side, all kinds of people within the industry, trying to put together small meetings for them to talk together.

This is my interpretation of what

I heard from the consumer groups, you know. You've heard a lot of testimony that they didn't know what, that consumers didn't know about this. So in writing this annotation, I tried to give some emphasis that could allow consumer groups to explain the situation a little bit better to consumers.

So yeah, this is my interpretation of -- it's my effort to try to have a compromise position that recognizes the concerns of both the consumers and the growers, which are on both ends of the spectrum.

CHAIRMAN STONE: Thank you, Lynn. Jane Bultedoab or Jane and your last name starts with a B. If you're in the room, you're up. I didn't see any movement, and there's not signed in. So that means Brian Caldwell. Brian is up, and Michelle Catalano is on deck.

MR. CALDWELL: Thanks. I passed around what I called talking points on this

issue, and I hope you all have copies and you can just kind of look at them as I'm going through. I'm going to bang through them, so hopefully I can finish in the four minutes.

My name is Brian Caldwell from Hemlock Grove Farm in West Danby, New York. I've operated a certified organic apple orchard in Central New York since 1988. It's a part-time operation and my full-time job is doing research on organic vegetable and grain systems at Cornell University.

Antibiotics are naturally occurring microbial products, similar in that way to the toxins produced by BT, etcetera, that are commonly used in organic production.

But the key issue is that they have a vital role in human health care, and though it appears that antibiotics on fruit at harvest are minuscule, I believe there's a risk that broad-scale spraying of antibiotics over thousands of acres with selection pressure for antibiotic resistance on exposed

organisms, especially bacteria, as we heard earlier today.

This could potentially increase the chances of transference of antibiotic resistance to human pathogens, and the results of scientific studies on this so far seem to be mixed.

When I've asked Northeast consumers about antibiotics in apples, they are unaware that they're allowed to be used, and they are invariably opposed to it.

I believe that the continued use of antibiotics in organic production is a real threat to the integrity of the organic label. I want to point out that organic dairy farmers, almost all of whom have transitioned from conventional practices which relied heavily on antibiotics, have given up that practice.

Okay. Fire blight is a devastating disease, and I have seen some bad outbreaks, and it does kill trees. It's

really nasty. The Northeast pear industry has virtually disappeared and moved to the West Coast because of fire blight. The Northeast has more potential for fire blight than dry Western apple regions.

Nonetheless, fire blight has not been a major concern among many organic apple producers in the Northeast. In contrast to an informal West Coast survey, in which large numbers of growers said they would abandon organic production with the loss of antibiotics, and one that I did for Northeast growers, 92 percent of the 12 respondents, it's a small sample, said that it would have little or no effect on their operations.

Most of these growers are small scale, but over half of them are full-time diversified farmers. Many, including myself, have never sprayed antibiotics, and why is this? Well, in general, we have far lower reliance on highly susceptible or fire blight-susceptible root stocks and varieties.

We tend to use a lower fertility regime. We don't push the young trees so hard, and some growers use early season copper sprays. Some use probiotic sprays during the season, and some use Surround, mostly for insect control, during bloom, and all these may help.

I just a little aside here. I think if I wanted to produce fire blight on my farm, and I probably could, I would plant M-9 in high density plantings and fertilize them heavily, and I think that would do the trick. But I don't do that.

Okay. So I think this is a tough choice. Fire blight pressure is even higher in the Southeast and the Midwest regions than it is in the Pacific Northwest or the Northeast. My orchard is a very small part-time operation, and I don't pretend to speak for larger operators. My investment is very small.

Some larger growers have

investments of hundreds of thousands of dollars in their orchards, to millions that are at risk from fire blight, and this is a real fact.

So I support the centrist proposal on this issue. I believe it gives growers whose orchards are at risk time to adopt non-antibiotic purchase to fire blight, and it ensures consumers that there will be no antibiotic use after a specific date. So thanks very much.

CHAIRMAN STONE: Thank you, Brian. Francis.

MEMBER THICKE: Thank you, Brian. I have a question. If the deadline for oxytocin -- oxytocin, I'm a dairy farmer -- oxytetracycline is extended to 2016, do you think that in the Northeast they will actually do the research and will be in a different place than they are now, or will we be again in the same place by 2016, do you think, in the Northeast?

MR. CALDWELL: Well, I don't think there is the heavy research program in the Northeast that Ken Johnson talked about here in the Northwest. But I think, as he said, I think the results will be transferable, at least to some extent, and as I said, I just, at least for a lot of the growers, it's not a huge issue.

CHAIRMAN STONE: Jay.

MEMBER FELDMAN: Pass. I'm going to pass.

MEMBER SONNABEND: Brian, the main difference between the centrist proposal and the proposal we put forward as the majority position is an annotation concerning oversight of certifiers, and a mandate to use more alternative practices than what growers are already trying.

Could you explain why you think that makes a difference, to have that as an annotation versus our resolution, to encourage what we think is being already done?

MR. CALDWELL: Well, I guess I would agree with Lynn, that it just puts it out there for everybody to see in a very clear way. If it's already being done, I don't see, I guess, why anybody would object to it.

CHAIRMAN STONE: Thank you, Brian.

MR. CALDWELL: Thanks very much for your great work.

CHAIRMAN STONE: Michelle Catalano is at the podium, and we have Pam Coleman on deck.

MS. CATALANO: Good afternoon. I represent the Washington State Department of Agriculture's Organic Advisory Board, advisors to our State Organic Food Program. I have served on the board for 13 years as the consumer representative, and currently serve as board chair.

The OAB represents stakeholders from all aspects of the organic industry, including producers, processors, handlers, retailers and consumers. The OAB supports the

Crops Subcommittee proposal to extend the expiration date for oxytetracycline to October 21st, 2016.

Along with the rest of the organic industry, the OAB supports a phase-out of antibiotic usage in tree fruit production, and agrees with the Subcommittee that as an industry, we must commit to and prepare for this phase-out, supporting current and new research for alternatives.

The two years ending October 2014 has not been enough time for research trials to find effective replacements. The OAB disagrees with the arbitrary decision to extend the use of this antibiotic in tree fruit production until October 21st, 2014, rather than to have followed the five year sunset cycle, which would have allowed use of these materials until October 2017.

In the case of fire blight, conditions that promote the disease do not exist every year, and so time is needed for

researchers to test alternatives under natural conditions.

We do, however, applaud the researchers and growers that have been working tirelessly to find alternatives, and strongly believe the NOSB should honor their efforts with this reasonable extension of the expiration date.

Industry commitment to a phaseout is evident in current research. It is well-known that organic research is underfunded, yet its importance cannot be understated. Given the potential for entire orchard blocks to be lost to this disease, it is reasonable to allow for the extension of current fire blight management tools, while research for commercially viable alternatives continue.

Consumers in our region, in Washington State, enjoy an amazing variety of local organic Washington-grown apples and pears. Yet most do not understand the challenges that growers face, nor do they

fully comprehend the complexity of the National Organic Program regulations.

The organic industry will continue to grow only if there is growing consumer demand. The OAB believes consumers need more information about the realities that organic farmers face, not bullet points that simplify that reality.

While recent public discussion may indicate that antibiotics are heavily used, in truth use in tree fruit production consumes less than one percent of antibiotics sold in the U.S., as per recent Rodale Institute information.

WSDA's Organic Food Program and other accredited certifying agencies ensure growers are complying with current organic standards, allowing oxytetracycline when other controls are ineffective.

Growers often have to make the choice of which disease to control, leaving them without options during times of severe

fire blight outbreak. That forces growers to choose between devastating crop losses or using non-approved materials and potentially losing organic certification.

The OAB requests the NOSB allow oxytetracycline to be allowed until October 21st, 2016. Given its use at bloom time only, there is no evidence that oxytetracycline leaves residue on post-harvested fruit in amounts greater than EPA allowances.

The loss of oxytetracycline in tree fruit production now, when research is making positive strides, unnecessarily jeopardizes the tree fruit industry and risks potential reduction of domestic fruit supply.

The continued use of oxytetracycline benefits stakeholders, especially in Washington State, which produces high volumes of organic tree fruit. We wish to see organic acreage continue to increase in our state, and for a diverse variety mix of tree fruit to continue to be available to

consumers here and across the country. Thank you very much.

CHAIRMAN STONE: Thank you. Thank you very much. Oh, I'm sorry. Harold. Ma'am, we have one more question.

MEMBER AUSTIN: No. You're okay, Michelle. Just for the sake of full, absolute, complete transparency, I do serve with Michelle on the Washington State Department of Ag Organic Advisory Board.

CHAIRMAN STONE: All right, thanks Harold. Thanks Pam or Michelle. Pam Coleman is up, and Natalie Reitman-White is on deck.

MS. COLEMAN: Good afternoon. My name is Pamela Coleman. I'm a policy analyst for the Cornucopia Institute. I have a Ph.D. in Plant Pathology, and post-doctoral research experience on apple diseases. I'm happy to be here to discuss a plant disease.

Currently, tetracycline and streptomycin are allowed for fire blight control, only until 2014. Please reject the

petition for extension. These antibiotics are not allowed for any other use in organic agriculture, not for livestock, not for crops.

It's time for a uniform standard. No antibiotics. In the past few days, you might have gotten the impression that research on control of fire blight has just begun in the past few years. Let me correct that impression.

Research on fire blight was published as early as the 1930's, and hundreds of publications have been printed since then. In particular, a great deal of research was done in the 70's, 80's and 90's. That information is available in a farmer-friendly format, as an extension publication that explains how to predict disease outbreaks based on temperature, and how to use cultural controls.

My recent review of the current research has convinced me that fire blight can be managed on apples without the use of

antibiotics. Many apple and pear growers already succeed without antibiotics. According to a recent survey that we conducted at Cornucopia, and you should have a copy of this survey received in the mail, according to that survey, 56 percent of organic apple growers nationwide who responded said they do not use antibiotics.

Only 24 percent of the growers, apple growers, said they used tetracycline. Many growers have not used antibiotics for 10 or 15 years. So what are the alternatives? Growers can use cultural practices, resistant varieties, resistant root stocks, blossom thinning, minimum nitrogen and orchard sanitation.

If those don't work, growers can use materials, copper sulfate, lime sulfur, fish oils, biological controls. That's a pretty good list. Of course, there is the recent research done by Dr. Ken Johnson, using blossom thinning followed by a biological

control.

In case you haven't watched the webinar, he said "It provided an excellent level of control. It was as effective as an antibiotic, even on a susceptible apple variety, Galas, and over three years of testing."

Of course, that effectiveness of that material depends on an integrated approach. Orchardists must be proactive. They must monitor the orchard and take action to prevent disease outbreaks. That's a basic principle of organic disease management.

If orchardists wait until bacterial populations are high, they'll be reactive, and they'll need to spray antibiotics. That's an input substitution mentality, similar to conventional agriculture.

Even before this research was done, growers in Washington were growing apples without antibiotics. I inspected many

of them. They avoided antibiotics, because they were exporting to Europe, where antibiotics are prohibited on organics.

I assure you, they were exporting Galas, Fujis and other popular varieties. I want those apple varieties available to me here in the U.S. without antibiotics. Consumers agree. More than -- consumers agree. Thank you. Sorry.

(Laughter.)

CHAIRMAN STONE: Thank you, Pam. Question. Jay?

MEMBER FELDMAN: So it sounds like you're saying that we may be getting a skewed view of the necessity or essentiality of the materials. What is the method, what was the methodology for your survey?

MS. COLEMAN: Okay. We sent the survey out to about 700 growers. We at Cornucopia have a database, and we believe it includes all the organic apple and pear growers. We received replies from 72 apple

growers and 32 pear growers.

So I reported the apples, because I felt like that was a pretty significant number. I was a little surprised at how many people responded that they don't use antibiotics, because I was concerned that the people who responded would primarily be people who still wanted to use antibiotics.

We asked them whether they used streptomycin, tetracycline or either, and we asked them how a prohibition of antibiotics would affect them, and we had different categories. No effect, use more biologicals, stopped growing organics, stopped farming and so forth. Did you want more information on that? Okay.

CHAIRMAN STONE: Nick.

MEMBER MARAVELL: Thank you, Pam, for your presentation, and let's say for the sake of argument we all agree, which I think most of us do, that there are alternatives and that there are many apple and pear producers

who do not use tetracycline and who are certified organic.

I'd like to just focus on the ones that do for a second, and say some of the practices that we have heard from the previous speakers and that you've alluded to, may not be in use by those who are still relying on tetracycline.

Are you in effect saying that we have enough time for them to make a successful transition away from tetracycline, or do you think that we -- we're admitting this is far less than 100 percent of the producers. Or are we saying that there is indeed a percentage of the producers that are not going to be able to comply with organics?

I mean how are you viewing the eventual outcome of your recommendation?

MS. COLEMAN: Okay. Can I just talk about apple growers for now?

MEMBER MARAVELL: Sure, sure.

MS. COLEMAN: Because as Harold

pointed out, we have some flexibility with the pear growers. What I'm saying is that we as, must require organic growers to use preventative cultural controls, and what I've seen in Washington State as an inspector is that they're not using them.

They should have started using them, and when I say "they," I don't mean all. I mean some, okay. Back in 1995, growers should have been planting orchards with more resistant root stocks. I understand people will say they're not all resistant, but there is a continuum.

It's been well-known for many years, and it's information is available in extension publications, that indicate that when you grow an apple tree on a highly dwarfing root stock, to get a very small tree, it's more susceptible. But when you grow that same apple on a larger, standard root stock, it's less susceptible.

If you look at the acreage that's

been planted in Washington State recently, more and more of them are in highly dwarfing root stocks. They're planted very close together, and those are conditions that exacerbate the probability of disease.

Can people who have not used what I call proactive, preventative controls, now go back and find a material to use? Perhaps not.

CHAIRMAN STONE: All right. Waldo.

MEMBER FOSTER: He just called me Waldo. That's why I'm laughing.

CHAIRMAN STONE: They all heard it.

MEMBER FOSTER: Yeah, yeah. When you sent the survey out, from whom did it come? If I had gotten the survey, who would I have gotten it from?

MS. COLEMAN: We sent it out actually in several different formats. We sent it out as an email from Cornucopia, and

we also sent it out as a Doodle poll, and we also sent it out on paper.

But it would have come from Cornucopia, although the paper form had my name on it, and some people who responded knew me, because I knew some apple growers in Washington.

CHAIRMAN STONE: Thanks ma'am.

MS. COLEMAN: Okay. Thank you all very much.

CHAIRMAN STONE: So Natalie Reitman-White is up, and Diane Dempster on deck.

MS. REITMAN-WHITE: Hello. I'm Natalie Reitman-White from Organically Grown Company. Founded 30 years ago, we are the largest distributor of organic produce in the Northwest, wholly owned by farmers and employees.

Today, I'm also representing the Organic Produce Wholesalers Coalition, a national group comprised of ten wholesale

distributors. Our combined annual sales in 2012 exceeded $550 million. This represents the majority of wholesale sales of organic produce in the U.S. We sell to grocers, restaurants and other customers.

Our members include Albert's Organics, Charlie's Produce, Co-Op Partners Warehouse, Earl's Organic Produce, Eastern Carolina Organics, Global Organic Specialty Source, Goodness Greenness, Heath and Lejeune, Veritable Vegetable and OGC. Many of our businesses were early participants in the organic community.

We'd like to underscore the significance of the NOSB decision on tetracycline to the marketplace of organic produce, and propose a workable solution in the best interest of all parties. Produce is a cornerstone of every grocery. In the last decade, we've seen organic consumption grow tremendously.

Of that, apples and pears are a

staple item. We conducted a survey of our members in 2011. Collectively, the OPWC purchased 40 million of organic apples and pears. Of that, 66 percent of apple purchases and 79 percent of pear purchases were of varieties that are known to be susceptible to fire blight.

In accordance with organic principles, we support a phaseout of the use of antibiotics in organic tree fruit production. That said, we firmly acknowledge that organic growers need field-tested, commercially available methods for controlling fire blight, because the disease can be so devastating.

We are very glad to see promising results coming out of research on non-antibiotic control for fire blight. However, we understand a few more critical years are needed for a successful trade-wide transition to these alternatives.

The OPWC is very concerned that

the 2014 expiration date is being rushed ahead of the pace of science and on the ground commercial feasibility, and will result in many growing dropping their organic certification, in order to protect against the risk of losing entire orchards.

Given the market dependence on fire blight susceptible varieties, this outcome would be devastating to the U.S. organic produce trade, taking years to rebuild the domestic tree fruit market. In the last six months, individual OPWC members supported the work of the National Organic Coalition, to craft a proposal that would take into account the needs and concerns of the entire organic community.

The centrist proposal authored by Lynn Coody puts forward a workable solution that addresses farmers' need for more time to implement alternative practices, while addressing the concerns of consumers about the allowance of organic or antibiotics in organic

production.

In order to protect consumer confidence in the organic brand, we believe there needs to be a clear acknowledgment of the health and environmental impacts of any antibiotics used by the organic community, together with a commitment to an absolute expiration date, and short-term allowance for use only when it has been documented by growers that all other management practices have been exhausted.

Therefore, the OPWC unanimously supports the proposal for a short, limited use extension, a concise annotation dealing with the specific disease management hierarchy that must be followed, an annotation dealing with how oversight from certifiers and the NOP will be carried out.

OPWC members all believe it should be within a 2016 or 2017 time frame. We appreciate the opportunity to comment on the issue.

CHAIRMAN STONE: Thank you. Jay.

MEMBER FELDMAN: Natalie, thank you. I'm going to read this too and ask if you know where this came from.

"The Board expects members of the industry to collaborate and coordinate efforts in preparing for the eventual removal of this material from the National List, specifically optimizing the use of resistant root stocks and cultivars, preventive management methods and use of alternative allowed biological and chemical controls whenever warranted."

Has that happened in the last two years? I don't want to put you on the spot, but do you think those kinds of activities have happened in the last two years? That was the 2011 annotation that we adopted when we --

MS. REITMAN-WHITE: I think efforts have been made. I think that what I understand is that the research is on the cusp of being commercially ready to go, but it's not there yet. We need a little more time,

and that time is a critical couple more years to make that happen. So that's our position.

MEMBER FELDMAN: Yeah, thanks.

CHAIRMAN STONE: Harold.

MS. REITMAN-WHITE: And let me say, with that, I also think we really need to clearly acknowledge as an organic community that we are concerned about the health and environmental effects, and we are committed to a total phaseout. I think it's important for restoring consumer confidence and trust in organics.

MEMBER AUSTIN: With your stakeholder group with our proposal, how do you feel that will impact your stakeholders, and the interactions with your customers and the consumers, if we were to move this forward to 2016, versus let it expire in 2016? Do you think they would be willing to accept that, knowing that the tree fruit industry is trying their best to move away from that? Versus the alternative of its ending in 2014, and the

impact that that might have.

MS. REITMAN-WHITE: Sure. Well, speaking for Organically Grown Company, I think we feel it's critically important to do an annotation, not that those practices aren't already being followed. But we think it's important to put that out there, to reassure consumers and establish trust.

We also think we need to get honest about recognizing that any antibiotic use in the food system is, you know, a health and environmental impact, and that we are committed to doing away with it over time. We think that needs to be publicly stated.

CHAIRMAN STONE: Thank you, Natalie. Diane Dempster is up and Richard Carr. Sorry for the confusion earlier, Richard. Richard Carr is on deck.

MS. DEMPSTER: Hi. I'm here representing Charlie's Produce. I am the manager of Farmer's Own Organic Produce and the organic specialist at Charlie's Produce.

I've been working there for 23 years, and I'm the current president of Tilth Producers of Washington. I served on the WSDA Organic Advisory Board for nine years, and helped write, draft some of the handling standards for the State.

Charlie's Produce is the largest independent wholesale produce company in the Northwest, and one of the first wholesalers to be certified organic by WSDA. We have five warehouses and provide a full line of organic produce to retail and food service customers in Washington, Oregon, Idaho, Montana, Alaska and Canada.

We buy locally when it is available from all over the world -- buy locally when it's available but from all over the world when it is not. We commit to local growers, and they can plant knowing that they have a home for their produce.

Last year, we bought over 72,000 cases of organic apples, and 21,000 cases of

organic pears, which was 8-1/2 percent of our total organic sales. Sales of organic produce have increased 69 percent in the last ten years. Our customers' sales of organics have also increased.

Now, most of our retail and food service customers buy some organic produce. Sales have increased because the supply is stable. If there was not a consistent supply of quality, organic produce, stores would not carry it and growers would not have a good market.

Without a supply of organic pears and apples, farmers would suffer and so would the retail and the whole industry. We support allowing the restricted use of tetracycline to control fire blight in tree fruit production until 2017. It was allowed as a last resort in private certification standards and in the first NOP rules, and it's not the time to ban it now.

Research for products used by

conventional growers is done by chemical companies. Research for organic treatments happens slowly, as money is available. Just as growing a tree takes time, so does research. Researchers are close to finding solutions, and we need three more years to make these solutions viable.

Since the blight is so deadly, growers would not have planted pears and apples if they did not have tetracycline as a backup. Growers who lose an orchard or a tree to fire blight can no longer afford to grow organically. This would devastate a thriving industry.

The recent public concern about the use of tetracycline is based on fear, not facts. People are scared because it's an antibiotic, not because they know the full effect it has on their bodies or the environment.

The Board makes decisions about very complicated issues. The public and

growers rely on you to analyze the facts, have a full understanding of all the issues, and make sound decisions based on good science. I trust that you will do that in this manner, and allow the restricted use of antibiotics in tree fruit production until 2017. Thank you.

CHAIRMAN STONE: Thank you. Question. Jay.

MEMBER FELDMAN: Thank you for your comments. Do you know or have you surveyed the growers that you buy from, and do you know what percentage of them use tetracycline?

MS. DEMPSTER: I have not surveyed them, no. We buy from -- a lot of the growers that we buy from are part of packing sheds who would be pooled, so I don't know many of the individual growers.

MEMBER FELDMAN: But you don't know what percentage of those growers are actually using tetracycline?

MS. DEMPSTER: I do not. I

understand that it's only as needed for a very limited use, from the growers that I've talked to.

CHAIRMAN STONE: Harold.

MEMBER AUSTIN: Diane, thanks for all of your hard work in the organic arena. It's appreciated. The customers that you're selling the produce that you're purchasing, have you had any talks with any of them, regarding the current antibiotic issue and the information that's out and about, and how do you answer their concerns, if you have had those conversations?

MS. DEMPSTER: I have not had any conversations with customers, but I think that they would trust that what has been happening with the use of tetracycline and antibiotics being used only as a last resort effort, would be the same as any restricted use product in the organic, that's used in organic production.

So I don't think that there's any

difference in this use as -- and most consumers would not, they don't know enough about the organic rule to understand all the ins and outs of it.

I personally think that if I went to all the retail customers that we sell to, to their produce buyers, they would be very interested in having a consistent supply of organic apples and pears, more than how much they would worry about minute amounts of antibiotics used on the trees before harvest, before during blossom.

CHAIRMAN STONE: Thank you, Diane.

MS. DEMPSTER: Thank you.

CHAIRMAN STONE: Richard Carr is at the podium and Jeff Falen, Fallon is on deck.

MR. CARR: Hello. My name is Richard Carr, and I am the technical specialist at Oregon Tilth. I very much appreciate this opportunity to stand before you today, and not by Internet, okay. Oregon

Tilth certifies over 2,500 acres of apples and pears, mainly in the Pacific Northwest.

Oxytetracycline is a crucial tool of last resort for organic orchards. If allowed to expire without alternative fire blight controls, substantial numbers of orchards will reduce organic acreage in apple and pear production, or surrender their certification altogether.

Oregon Tilth encourages this Board to objectively measure the potential risks and likely costs that will incur if oxytetracycline is not extended. The reality is crops, organic or otherwise, are grown in a shared world. Regardless of consumer perceptions, organic does not exist outside of our agricultural commons.

Everywhere is downstream, and nowhere is this understanding more pertinent than the risks associated with antibiotic resistance. Tetracycline itself has been used in crop production since the 1950's. It is

used to control fire blight in both apples and in conventional orchards, or both organic and conventional orchards.

If farmers are unable to protect their trees from fire blight, they will likely forego organic certification, and use antibiotics outside of organic practices. Removing this tool from organic farmers will not diminish the cumulative use of antibiotics in tree fruit.

Instead, the inertia we are now seeing in the development of effective non-antibiotic controls for fire blight will lose its driving incentive. Research will continue, but without the urgency and creativity that necessitates innovation.

Antibiotics will be removed from the National List. It is only a question of when. Oregon Tilth urges the National Organic Standards Board to consider a sunset date that is based on realistic expectations, that will allow research to draw significant

conclusions. Commercial availability must also be considered in this time line.

Further, OTCO does not support the inclusion of annotations that reiterate existing standards. We encourage the NOSB to avoid amending 205.206 or the National List with redundant or prescriptive annotations.

We do know this is going to be a difficult vote. It will have consequences, both real and perceived. In fulfilling your mandate, we urge the Board to consider which choice will bring us closer to a non-antibiotic solution to controlling fire blight.

We trust that you will make the very best decision possible for the long-term well being of farmers, consumers and the organic industry as a whole. Thank you.

CHAIRMAN STONE: Thank you. Questions? Harold.

MEMBER AUSTIN: Thank you. In your involvement in the organic arena and the

changes that we've seen take place over the last, oh wow, let's say the last five, six, seven years, what impact have you seen in farming practices, as we've seen the acreages and the number of certified operations grow, and the volume of the acreage of those certified operations expand?

What impact have you seen that have of any on, those that have maybe split application, you know, split production, organic and conventional, and possibly on their conventional neighbors?

MR. CARR: So could you -- so your question, you're asking what is the impact of the growth of the industry?

MEMBER AUSTIN: No, the trends, the practices. You know, mating disruption is an example. We farm organic, we farm conventional. We use mating disruption now on everything that we do.

MR. CARR: Right.

MEMBER AUSTIN: That type of an

impact from moving from the organic to the split production type of programs, or out to conventional farmers. In your day-to-day operations, what have you seen is that impact?

I'm really looking at if we were to allow the extension of the expiration date, to allow the research for the organic replacements and materials to continue to move forward, would not that, if you've seen these, wouldn't that have an impact also on the conventional production?

MR. CARR: Yeah. No, I think very much so. I think that there's a really good opportunity here for organic, for solutions in organics to cross the divide in the other direction, to where we're taking those solutions and being leaders in the entire tree fruit industry.

So that's what I would expect, and I think it's happened, cherries. There was some -- David Granatstein had spoke to that just the other day. So but I think that's a

real possibility.

CHAIRMAN STONE: Thank you, Richard. We're moving down. Bill Denevan. You're up at the podium, and David Granatstein on deck.

MR. DENEVAN: Hello. My name's Bill Denevan, and let me tell you a little bit about myself. I'm a member of the Board of Directors of the California Apple Commission. From 1996 to 2006, I grew organic Bartletts and apples on 120 organic acres in the Santa Cruz-Watsonville area of California.

The companies that I had were Denevan Apple and Happy Valley Farm. I have 35 years of experience working with growers, assessing their crops and giving advice in the U.S. and Chile. I've worked for almost 20 years as a grower rep with CF Fresh and VivaTerra.

My job has brought me in contact with just about every region in the West where fire blight is a problem. As an organic

grower, I know quite a bit about blight. What I did was manage the vigor, follow the temperatures and moisture models, spray copper, cut infections, burn infected wood and pray.

I've fought it year after year. A few times, I had to cut out nearly every fruiting branch, leaving only five or six span liters. It took years to get production back up to that time. Every year, I had to do some amount of blight cutting and burning just to save the trees. My apples are much easier to handle.

During my travels, I've seen nearly 1,000 acres of organic and conventional apples and pears bulldozed due to blight attacks.

In many cases, the affected growers went bankrupt. Eight years ago in Tonaske I saw an orchard of 150 acres of Bartlett, Conference, Comice and Anjou completely wiped out, because the grower

wanted to forego the needed antibiotic treatment so he could sell his fruit to Europe.

Ten years ago in Cuyama Valley, I watched bulldozers take out 400 acres of beautiful five year old pink, Pink Ladies, due to a perfect storm of bad weather and ineffective blight program. A couple of years earlier than that at Pioneer Ranch, I watched 20 acres of 12 year-old Bosc get pushed out.

Five years ago, my 2,000 Bartlett trees were abandoned. Today, they're in piles, being burned as we speak. They did not die directly from blight, but the treatment plans I needed to do effective blight control were just too expensive to keep the orchard going.

Almost all the apple and pear growers that I deal with -- almost all apple and pear growers can do pretty well with heat, bug, fungus, floods and market swings. But dealing with blight infections is a special

problem.

We all know that in a bad blight year, you can easily destroy your life's investment, and you have to find a new way to provide for your family. I've been following the recent research into organic blight control pretty close. It looks promising for the future, but the devil's in the details.

Right now, we're in bloom in California. Growers Advisors, the California Apple Commission, the Pear Advisory Board and manufacturers of control products are conducting trials. We need to see how effective these new materials will perform in our local microclimates before adopting new practices.

What regimen might be effective in Washington and Oregon might not work out so well in California. We have less chill hours, a more uneven bloom period, always more moisture, and oftentimes more heat issues to deal with.

Getting new materials and protocols figured out is going to take more time. Approving material with California Department of Pest Regulation takes much longer than other states. There is no doubt growers in my state will need more than four years to get a product tested, approved and manufactured in sufficient quantity to supply growers' needs.

Most, if not all, of organic growers believe in treading lightly on the planet, and improving the environment they live in. But they are also rational business people who have to feed their families.

It's not the growers' fault that they have not gotten a new tool to fight their blight. Growers don't make the new materials. Manufacturers, researchers and regulators do this work. Growers have been working in good faith with these people.

Please give all of us a realistic chance to succeed. We need four more years,

not two. Anyway, any questions?

CHAIRMAN STONE: Thank you, Bill. Question, John?

MEMBER FOSTER: So Bill, in full disclosure, Bill taught me most of what I know about apple production in the Santa Cruz area a long, long time ago. It's really good to see you. My question is how -- so when you say we need four more years, not two, tell me more about it?

MR. DENEVAN: Well, right now --

MEMBER FOSTER: Like in what ways would four be adequate but two's not?

MR. DENEVAN: Well, right now we have -- I have a couple of growers. We're in bloom right now, and they're using the Blossom Protect, and it seems like a pretty good job. But after bloom, we're concerned about having to use copper.

Now in the Northwest, they have a lot less -- it's a desert, and they have a lot less rain. But we worry about russet, and we

can really destroy the fruit by putting russet on it. Nobody will buy it, and being in a coastal area where I am, we really can have a lot of russet problems, especially on pears.

Now apples, I'm a little -- I think it's a little bit less problematic. But pears, there's no way that I could see that we've developed a protocol that's going to work.

We need more time to see what's -- I think there's about, oh about maybe a 1,000 acres in California that are being checked with Blossom Protect at the most. But there's a lot more than that that have apples and pear growers, and especially pear growers. They need to check it out.

So anyway, that's -- I think we just need more studies and more results.

CHAIRMAN STONE: Thank you, Bill. Thank you for taking the time to be here. David Granatstein is at the podium, and John -- I'm sorry, Carmela. Bill. Okay yeah, go

ahead.

MEMBER BECK: Hello? Bill. Sorry. So I think you kind of touched on this, but I might have missed it. But could you give some more examples about the conditions in California that affect the fire blight, and the need for control?

MR. DENEVAN: Well, one thing that I stated in my talk was that we have, we don't have the adequate winter chill a lot of times. So we'll have a bloom that's scattered. So the bloom period goes on for a longer period of time.

It's harder to get the model right when you're under attack, because when the bloom is out there, that's when the blight is coming into the flowers. So if you have a flowering period longer, you have a lot more chance of getting blight.

And then we also have more moisture, you know. We're not a desert in California. Even our driest areas have more

moisture than the desert areas of the Northwest. So this contributes to more of a bad blight situation.

So we have, I can think of at least five or six definitive climate situations that need different treatment. So you know, we don't have experiments going on in those areas. We need to have all of the areas covered, and we need to have more product available for experimenting with.

We don't have this copper that we hear about, that doesn't russet. I mean we've seen nothing but russet from copper. So we want to try that and see if it works, you know, after we do the Blossom Protect. This is what people are saying we need to use.

So you know, I've seen it in both apples and pears this year already. We're cutting it out and it's quite a problem right now, as we speak.

CHAIRMAN STONE: Thank you, Bill. David Granatstein to the podium, and John Hyer

on deck.

DR. GRANATSTEIN: Okay. You should get my presentation here in a moment. My name is David Granatstein. I'm with Washington State University in Wenatchee, Washington. I'm the co-chair of the Organic Tree Fruit Work Group that was requested by the Board at the April 2011 meeting in Seattle.

My comments represent my views as someone who works extensively with organic orchardists here in the Pacific Northwest, but those views do not necessarily represent all Work Group members. I want to make that clear.

As shown in this time table -- which is the next slide, please -- research into the fire blight disease and biological controls has been occurring for many, many years. The industry and growers have been exploring these alternatives, but there's really been a lack of success until recently.

So it's not a lack of effort; it's been a lack of success. And that's what we are just on the edge of, I believe, particularly with the OREI project and many other things we heard about earlier today.

Next slide, please. I fully understand the concern about the risk of antibiotic resistance in human pathogens from agricultural use of antibiotics. However, all uses and materials do not appear to be the same.

In this slide, Dr. Jeff Ullman, University of Florida, has recently published some research looking at the environmental fate of pharmaceuticals, and he shows in this graph that tetracycline, which is in the lower right corner, becomes absorbed to the soil within about 24 hours, where it is no longer biologically active.

The paper states, and I quote, "Thus, residual antibiotics in soil do not necessarily exert a selective pressure, and

the degree to which the pharmaceutical remains bioactive depends on the antibiotic. Efforts to control antibiotic contamination would be better directed towards compounds that retain biological activity in soils," and tetracycline is not one of them.

Next slide, please. Statements that all organic apples and pears have residues of oxytetracycline and streptomycin are simply not true, since only on average ten percent of U.S. apple acres are treated each year with this material, and few acres are treated with both materials. So that's just not correct.

Data on measurable residue levels of oxytetracycline on fruit are scarce. We've heard about the EPA data. Those results had residues less than the limit of quantification on most of the fruit.

But remember, in that study, no one's mentioned this yet, these materials were applied between 49 and 61 days pre-harvest.

The set pre-harvest interval is 60 days. So they were pushing the limit. They were applied at rates of .5 half label rate to 11 times label rate. So that study is not representative of what's going on out there in the world.

Next slide, please. So to try to help with this, I coordinated a round of residue testing last fall, to see whether trees treated during bloom, which is the most common scenario in this region, whether those fruit would be free of residues at harvest, due to the absence of fruit at treatment, we're treating blossoms, the degradation of oxytetracycline during the five month growing season, we've heard about that, and the lack of mobility of oxytetracycline into the plant where it might move around and come back into the fruit.

Using the biggest current analytical method, the laboratory found no detectable residues on any of the samples --

I think you need to hit -- yeah, there we go. Thank you.

On any of the samples from seven different orchards in Washington State, that were treated from one to five times during bloom. And actually one orchard was treated during mid-summer because there was a major hailstorm that incited fire blight.

So zero residues. That's a real small set of data points, but it's something I think we can start to understand, what is really going on out there with this type of use.

Next, please. In this chart, I have outlined the key elements of fire blight control and their status at different decision points the Board has taken.

For me, it's hard to see that suitable alternatives were available when the 2008 and 2011 decisions were made, and how expiration dates were chosen. Thank you.

CHAIRMAN STONE: Thank you, David.

Questions? Nick. You're still up.

MEMBER MARAVELL: Dr. Granatstein, it's a pleasure to have you at the podium again.

DR. GRANATSTEIN: Thank you.

MEMBER MARAVELL: You were at our Seattle meeting. When we recommended an extension to 2014, did you give us any indication that that was sufficient time for the research to, at that point, get funded, let alone get conducted?

Was there any expectation that you gave us that there would be adequate research to provide alternative materials within that time line?

DR. GRANATSTEIN: No. That is why the petition was refiled immediately, because we felt that the 2014 date was not related to progress in the research and the availability of information to the growers.

We were told by the NOP that the only recourse or question that decision was a

new petition. That's the only reason we are where we are today.

MEMBER MARAVELL: Was it your understanding that we on the Board were looking for positive movement on the part of the industry and the research community, and that we were going to use our best auspices to encourage funding for your efforts, and that was the reason for the 2014 extension?

DR. GRANATSTEIN: Well, my understanding is it was a political compromise date. That's what I understood from that meeting.

MEMBER MARAVELL: Okay.

DR. GRANATSTEIN: But that you were expecting the Tree Fruit Work Group to be formed, to keep you informed of what was happening in the industry. But without a petition, I was told that there would be no action to reexamine the date, and that's why the petition came forward.

MEMBER MARAVELL: Can you tell us,

in your opinion, what would happen in 2015 and 2016 in a little bit of detail, if we were to extend this date, and why that would be important from your perspective?

DR. GRANATSTEIN: Well, I consider the OREI research project on organic fire blight control to be pretty central. It's really the first project of its kind that's specifically looking at non-antibiotic control in organic systems. That's a landmark study.

It won't be completed until 2015. It will take some time for them to analyze, write up the data. They'll typically want to publish journal articles first out of that sort of work, and then extension materials normally flow from that. That's the very typical sequence.

If you publish extension materials first, the journals often will not publish your results. So the key in many ways is getting this into vetted, acceptable extension educational formats for the growers to use,

and it does take additional time, once the research is completed, to do that.

MEMBER MARAVELL: Is the Previsto product part of your research experiments?

DR. GRANATSTEIN: It is not part of mine, because I'm not doing the research. But it is part of the folks on the ground doing it, yes. Yes, they've already been testing it, but it is not registered. That's obviously -- it can't be used by the growers.

CHAIRMAN STONE: Tracy.

MEMBER FAVRE: Hi, thanks for your information. Can you elaborate a little bit about the difference in application between the research that was cited in the EPA report and the research difference between what you just did with the residue testing?

DR. GRANATSTEIN: The testing I did represents fruit that were treated at bloom, except for the one orchard, where I said there was a mid-summer application.

So it was at blossom time, which

is the typical application, and then at harvest we got the fruit samples, put them, plastic bags, chain of custody to the lab, and they were tested later in the fall, after harvest.

The EPA study was done at a number of locations around the country. As I say, they had a range of rates, because they were trying to establish a label rate at that time. So they went from half label to about 11 times label rates. So very, very high application rates, and they were putting those applications on between 49 and 61 days before harvest.

So when the growers are spraying at bloom, it may be something like 150 days before harvest. So quite a big difference in time frame. And at the time it was applied in the EPA study, you had fruit on the tree. So you had a fruit surface on which the residue would land and potentially persist.

At bloom, theoretically, and

that's what I was curious about, there's no fruit. There's a blossom that falls off the tree. There should be -- and if there's no translocation in the plant, there should be no residue left on a fruit that begins to develop at that point.

MEMBER FAVRE: Just as a follow-up point of clarity or clarification. So the EPA study, they applied up to 11 times, which from everything we've heard --

DR. GRANATSTEIN: Eleven times the rate. I don't know if it was 11 applications or just the total amount. It was 11 times what was being proposed as the label rate.

MEMBER FAVRE: But typically much closer to harvest time --

DR. GRANATSTEIN: And closer than the legal limit even. They went past the normal pre-harvest interval, just to kind of push the system and see what would happen.

MEMBER FAVRE: Okay, and so was there any direct correlation between the

application rates and the incidence or the percentage of residue?

DR. GRANATSTEIN: No, there was no dose-dependent effect, which you would have expected with that spread of application rates. But the data were just very scattered and not very many positive detects.

MEMBER FAVRE: So we didn't see the percent residue increase with the percent application?

DR. GRANATSTEIN: That's correct.

MEMBER FAVRE: So there was no direct correlation between them?

DR. GRANATSTEIN: Right.

MEMBER FAVRE: Okay, thank you.

CHAIRMAN STONE: Jay.

MEMBER FELDMAN: Are you familiar with the way EPA sets tolerances? Have you reviewed tolerance review documents?

DR. GRANATSTEIN: No.

MEMBER FELDMAN: Okay. Do you think --

DR. GRANATSTEIN: That's outside of my expertise.

MEMBER FELDMAN: Do you think a registrant of a pesticide or an antibiotic would seek a tolerance level from the EPA, if they could use their product and generate a zero tolerance or zero residue, and then seek to market it?

These are tests that are done, field studies that are done. You keep referring to it as an EPA study. These are field studies that are done by the manufacturer.

DR. GRANATSTEIN: Correct.

MEMBER FELDMAN: They're submitted to EPA. Believe me, those manufacturers are trying to show a zero tolerance or zero residue so they can market their product with an exemption from tolerance.

The reason they can't get a zero tolerance is because there are residues that are showing up in the finished food product,

and if they were to take a zero tolerance and not the tolerance above limits of detection that they have -- even though they are variable; no one's questioning that they're not variable.

If they were not to take that residue tolerance, the one you're criticizing, their products would be violative. They would be in violation of the law, and they would be pulled off the shelves. So instead of doing that, because of the variability in tolerance that exists, it's not a flat line, you always see variability.

Because of that variability, they take the tolerance and ensure that when growers use their products, that they will not be pulled off the shelf. So you can always show with any pesticide, even in conventional crop production, that you go from below levels of detection up to above levels of detection, and you've got to go with the level that is possible.

Maybe infrequent, maybe frequent. We don't know. But it's there, and it's found, and you know, this is not a study. This is a tolerance-setting protocol that is used by EPA.

DR. GRANATSTEIN: Okay. Well, my goal is to say what happens when you do use a normal use pattern? Do we find residues on the fruit, because that appears to be a lot of the questions we've had over the last two days.

MEMBER FELDMAN: But you're not familiar with the tolerance-setting process, so you didn't use the EPA protocol that's used for all pesticide use in the U.S. So I appreciate the work you're doing. I think it might be something you should bring to EPA perhaps at some point.

But for purposes of our relying on scientific data that is useable for purposes of finding the normalized rate of residuals that are found, we can't go off of one study

like this, unfortunately. But I appreciate your work.

DR. GRANATSTEIN: Well, then that's all it is. It's a single probing at this issue, because no one else has delivered anything, other than the EPA report, which contains data from other studies.

MEMBER FELDMAN: Right, and that's all we got. Sorry, thanks.

CHAIRMAN STONE: Jean.

MEMBER RICHARDSON: David, on a slightly different tack, from your experience, you know, the Canadians can't use antibiotics in their organic pear and apple production. What are the materials that they're using right now, do you know? And how effective are they?

DR. GRANATSTEIN: I don't know that. I'm not familiar with the Canadian situation for fire blight.

CHAIRMAN STONE: Harold, I'll let you wrap this up.

MEMBER AUSTIN: David, thanks for your presentation. I think this is probably where we'll agree to disagree a little bit amongst ourselves on the Board. I think the study and the time and energy that you put forth to go out and get those samples and test for those residues really does have benefit, because it does show, under normal testing protocol, that there was zero detect on the seven samples that you turned to the lab, ranging from one application to five applications.

My question to you is the one sample that you talked about that was made to fruit that had been hailed on, typically, could you describe to the Board typically what a hailed on piece of fruit would look like, and wouldn't that have a tendency to show a higher percentage of residue possibly because of the imperfections that are created by the hail?

DR. GRANATSTEIN: Hm. Well,

hailed fruit is, depending on the severity of the storm and where it sits on the trees, is just pockmarked from the hailstones, depending on the age of the fruit when the storm occurs. Sometimes the hail creates wounds that break the skin, and sometimes it doesn't.

MEMBER AUSTIN: Yeah. That's one of -- I guess I should have asked that question before I made that statement. Did the hailed on fruit that you had, were there any perforations in the skin of the fruit itself?

DR. GRANATSTEIN: I don't believe so. No. I don't remember it being as really horrible looking hail fruit that they brought me. So they probably tried to get some of the better fruit from that orchard as a sample, yeah. Okay. Thank you very much.

CHAIRMAN STONE: Thank you for your work and being here today. John Hyer to the podium, and Patty Lovera on deck.

MR. HYER: Thank you for allowing

me this time to comment. I am an organic farmer, being farming organically for 16 years. In addition, I sit on the Washington State Organic Advisory Board.

I am in favor of extending the use of tetracycline to the 2016 date. I have absolutely no interest in orchards, apples, pears. I am a vegetable farmer, vegetable and small grains, and I want to talk to some of the issues that were brought up to shorten the date.

One was this variety. You can switch variety at will. My specialty is potatoes. I've grown six different varieties in ten years. Last year, my major buyer came to me and said if you grow that variety again, we will not purchase from you. So when you say it's easy to switch variety, it's not easy to switch variety, especially for an orchardist. The market wants what the market wants, and we need to find a way to produce that acceptably.

Root stock. I was going to bring a friend with me today, but he had to work. He's a tree salesman for one of the largest nurseries in the Pacific Northwest selling trees. And I asked him about this resistant root stock. He says if you want resistant root stock and you ordered it today, I might get it to you by 2017. So, yeah, they're working on these things, but the time frame is not where we need it to be yet.

There's also some discussion that it's only the large growers who are concerned about this. All the diseases and pests I've ever fought have been indiscriminate. They don't care if you're small, medium or large. They're a problem for everybody. So those who have this problem with fire blight, it's everywhere, and everybody's affected by it.

Other people who have testified have talked about the fact that we don't exist in a bubble with organic production. We produce organically right next to our

conventionally producing neighbors. We have to get along with those people.

I think if you don't control fire blight in your organic orchard, your conventional neighbors will strive to put you out to business, because it's a really serious problem in the orcharding industry, and you can't have a source of innoculant sitting there to spread into the rest of the fruit production that's out there. That's all I have for you. Thank you.

CHAIRMAN STONE: Thanks for being here. Questions? Jay.

MEMBER FELDMAN: Thanks for being here. If you knew that, even though you're not in fruit production, that the use of an input would affect public trust in the overall organic market, that is, people would start questioning, you know, their faith and trust in the organic market, and that would have rollover effect or secondary effects to other markets that are not the fruit, apple and pear

production.

I mean, we obviously don't have a crystal ball on this, but how would that affect your thinking at this point?

MR. HYER: I believe what you're asking is what is the public's perception of organic. That's anybody's guess. It means something different to every single consumer out there.

MEMBER FELDMAN: Thank you.

CHAIRMAN STONE: Thank you. Thank you for being here. Oh, I'm sorry. Sorry, Tracy.

MEMBER FAVRE: Sorry. One last question.

MR. HYER: Sure.

MEMBER FAVRE: Since you're not a fruit producer and you're obviously busy as a farmer, what motivated you to come here today, to take the time to make this testimony?

MR. HYER: Some of the diseases we face in vegetable production behave very

similar to fire blight. The particular one we deal with is called late blight. It's a big issue in potatoes. People talk as though these things are easy to deal with, easy to control. They talk as though, well, you just do this, this, and this and you won't have a problem. That's not the case.

When weather patterns, winds, disease pressures get just right, there really does seem to be almost nothing you can do, regardless of all the steps you have taken to prevent something like that from happening.

CHAIRMAN STONE: Great. Thank you very much. Patty Lovera, and Kenneth Mandley on deck.

MS. LOVERA: Okay. Hi everybody. My name is Patty Lovera, and I work for Food and Water Watch, which is a national consumer advocacy group.

So our supporters are extremely interested in the organic standards because they use them. They use this label for lots

of purposes, in which foods they choose and they're very, very, very motivated to make sure that the standards are -- ensuring that the label is telling them what they're looking for and what they think it does.

So very quickly I'm going to talk about aquaculture, and then I'm going to shift to tetracycline.

So we agree with what Center for Food Safety, George Kimbrell presented this morning, and I'm not going to reiterate that. I did bring a memo that we had given to the NOP a few months ago, to try to inject some more information into what you're using, since the recommendation came out in 2008. So I will drop that off.

It does have some new data since 2008 about escapes from open net pen systems, especially salmon systems, which is every year we can reliably add to that data, because the escapes keep happening. It is a fact of life in those systems, and that's an environmental

issue.

There's also some information in there about using fish meal and fish oil as feed, and just the last thing I'll say about that is as you're looking at these materials, I know that's the job has before it, we think you do have to think about those materials in both systems, since we don't yet have a standard of what organic aquaculture's going to be. We need to look it in an open system and a closed system. There's a much different environmental scenario about how you use materials.

So to shift to tetracycline, in the interest of time, Food and Water Watch supports the minority position, and we oppose any extension on the expiration date for oxytetracycline for apple and pear production. I think the issue of consumer expectation has been covered well here, but it's where we come from as a consumer advocacy group, and I do want to just point out a couple of things.

I know that you heard yesterday about the polling that Consumers Union did, and that's been affirmed in our experience, in our conversations with the folks who talk to us, who come to us to do, learn more and take action and things like that.

What we're finding out is that they don't know that these materials are used, and when they find out, they're not happy. I think the point made earlier about what do consumers know and whose responsibility is it to tell them, I think it's an interesting conversation and, you know, consumer groups are having this conversation.

You've seen that we're talking to our members. We're doing action alerts. The word will be getting out there, and as we talk about organic, it's a lot more complicated now if we're going to talk about antibiotics, and there's not a very, very firm plan to get antibiotics out of organic.

The other thing I do need to say

though is that as I am reminded regularly, in Washington, D.C., especially, this is a marketing program. I'm reminded of that all the time when I talk about organic. So marketing plays a role too.

So I think that we have to talk about what marketing messages consumers are getting about this label and about the use of antibiotics.

So on Friday, we looked very, very quickly on the Internet and found -- very quickly on the Internet and found examples from national food companies, one of whom is represented on this Board. Sorry, Earthbound.

We found examples where folks are not making a distinction between livestock and other foods. They're saying organic does not use antibiotics. That's what consumers are learning. So it's time for organic to live up to that expectation.

So last, quickly, I will just say on the residue issue, it's an important

conversation. As a consumer, I'm obviously motivated by thinking about what I'm taking in. But we spend an enormous amount of time outside organic talking about antibiotic resistance issues, and we've been educated about the reservoir of resistance in the environment being the threat that keeps public health officials awake at night.

So I think we really have to focus on what we heard from Dr. Morris. There's like some comments in the docket from places like Johns Hopkins University that are talking about any use of these materials start to take away their effectiveness.

They build to that reservoir of resistance in the environment, and organic needs to be ahead of that curve, not begging for more time.

CHAIRMAN STONE: Great, thank you. Zea.

MEMBER SONNABEND: Thank you. Would adopting an annotation such as was

proposed by Lynn and the centrist position make you feel better or make you change your message to your constituents in any way?

MS. LOVERA: I think, at this point, what consumers need to hear is something that's going to be hard to prove without a time machine, is that it's going to happen. We've had this experience with other materials and other kind of controversies in organic.

So I think we have to tell them it's absolutely going to happen. There isn't going to be any slippage. This is how. And we're going to have to reserve judgment until we hit that date, whatever the date is, and we see if this material's still being used.

That's the honest answer of where we can come from. I think the strongest signal the Board can send is to not extend the date.

CHAIRMAN STONE: Colehour.

MEMBER BONDERA: Thank you. Thank

you, Patty. I want very briefly for you to address for me, at least -- and I know we're switching topics; we're focused on this tetracycline. But I would like from the Food and Water Watch's perspective what you were referring to.

If you could just given what you said, and you said, you know, you've passed some of that around and what-not, what would you -- I hesitate, because I'm not sure what to say -- advise or suggest or encourage us as the NOSB to do, given the information that you're referring to and have provided, in terms of, so, what's our next step, in your opinion?

MS. LOVERA: On aquaculture?

MEMBER BONDERA: On aquaculture. Yes. Sorry, sorry, I apologize. Yes. I apologize.

MS. LOVERA: Okay. Right. So, I mean, this is a tough procedural spot that the Board is in, and we appreciate that. So you

have a recommendation that none of you were around to make. It has not yet been made a standard, and you're supposed to evaluate materials for systems that you don't know what they look like yet.

So, we get that. I don't envy the position of the Board in having to navigate that. So I think that's probably an agenda question from the Program that we have an opinion on, about whether you all should be looking at materials yet, if we don't know what these systems look like.

We would say no. And then I think if it stays on your agenda and you're still having these conversations, I think you sadly have to do the extra work of thinking about different scenarios of how materials are being used, and you're not -- so that you're thinking about all the possibilities before you approve the material, because there's a huge variation of what aquaculture can be. We heard about that this morning.

So I think it actually adds to your work, if you're doing those materials before we know what the systems are going to look like.

CHAIRMAN STONE: Jay.

MEMBER FELDMAN: Thanks, Patty. Can you explain to the Board what Food and Water Watch's stake is in the growth and success of organic production?

MS. LOVERA: I mean, so, Food and Water Watch talks to consumers most of the time about what we don't like about, whether you want to call it industrial agriculture and conventional agriculture, and people logically want to know then what am I supposed to do tomorrow while these bigger challenges are being tackled.

We would like to be able to continue to say that organic presents an option, and you know this, this and this aren't happening, and this, this and this are happening.

So that's what we say, and we tell people that, and we also try to put out information that lets people know what expectations they can have of organic that are rational.

The more asterisks, the more "excepts" we have to put on there, but they don't use antibiotics "except" in this, or they don't, you know, feed animals feed that isn't 100 percent organic, "except" in aquaculture, the harder it is for us to say that that's an easy, you know, daily thing that you can do to kind of avoid the ills we're talking about in the mainstream system. So we want this to be the strongest program it can be so we can credibly recommend it to people.

CHAIRMAN STONE: Harold, if you'll finish this up.

MEMBER AUSTIN: Hi, Patty. Hey, quick question. You made a comment about all of the things that you're involved with.

Question regarding the consumer survey, the petition with the signatures and stuff. Do you represent -- were those signatures, were those strictly from organic consumers, or were those from all consumers?

MS. LOVERA: Those are from people who are on our email list. It was a very small sample of our email list actually, because it's been kind of a busy month when we had to get those. So we sent that to about, I think we sent it to about 40,000 people, and about 7,000 responded, which is actually very, very high.

These are people who identify with Food and Water Watch. We ask them periodically how they identify themselves. They are very interested in organic. I don't think that they would say they are only organic consumers. They're kind of all over the range of interested --

MEMBER AUSTIN: Okay, so, I mean, and that's what I'm trying to clarify. Are

they truly, were they truly organic stakeholders, or were they from the masses?

MS. LOVERA: I think there's some of both.

MEMBER AUSTIN: Because that does have an impact.

MS. LOVERA: I mean, so we ask people about their demographics and what they do about once a year, and there is a range. I don't know if anybody's 100 percent organic all the time, and we don't ask them that. But they respond to organic issues. They're very invested.

CHAIRMAN STONE: Thank you, Patty. I have Kenneth Mandley to the podium and Neal Manley on deck.

MR. MANDLEY: How did that happen? Good afternoon. My name is Ken Mandley. I operate a small certified organic apple orchard in northwest Wisconsin. But I'm here today on behalf of the Organic Tree Fruit Association, a group of organic tree fruit

growers centered in the upper Midwest. To our knowledge, the only formal organization of organic orchardists east of the Rocky Mountains.

As growers, we've watched the continuing debate concerning use of antibiotics with concern. As is true of the larger organic community, our members have a wide range of opinions, practices and philosophies regarding such use.

However, after much internal debate, we developed a middle course between outright ban and unrestricted use. Today, I want to quickly address some common misperceptions, and then offer our middle ground proposal.

First, contrary to some suggestions I've read, and this is important, organic fruit growers, at least those in our organization, are not trying to cheat, subvert or water down organic standards. Our members are generally small growers with an average

commercial orchard size of less than ten acres, the largest about 200 acres.

We are committed to providing healthy fruit for consumers while being good stewards of land and water. In fact, our commitment to organic agriculture is so strong, we put our money where our mouth is every year, as we face the risk of financial failure, while working to provide a crop of saleable fruit.

The second misperception concerns the practicality of replacing our orchards with fire blight-resistant trees. This is not economically viable in the short or medium term. Commercial availability of the Geneva series is limited. There are some cultivars that are more blight-tolerant than others. There are blight immune cultivars.

The third misperception involves the fear of antibiotic use will lead to resistant bacteria infecting humans, and David addressed that better than I can. In my

written comments from our organization, we reference some other scientific studies I want to call your attention to.

The final misperception is that there are viable alternatives to antibiotics currently available. The truth is new products developed for use in Washington State may or may not work around the rest of the country. In fact, early research conducted at Michigan State University indicates that Blossom Protect does not work at all in Michigan growing conditions.

Further, such products do not address the catastrophic potential of a post-blossom infection brought on by the combination of hail, high humidity and high temps, a very real potential in the upper Midwest.

The truth is many apple and pear growers rely on antibiotics at certain times because there are no other options. The suggestion that this is somehow the fault of

growers is misguided, at best.

Growers turn to antibiotics because they cannot afford to put their orchards at risk of total loss. Having said that, we also understand the philosophical concern of some, but not all, organic consumers.

We propose that the current rule be allowed to expire as scheduled in 2014, and be replaced by a rule that allows antibiotic use only when blight risk is high, as predicted by computer models or actual orchard observation.

The organic system plan must address prevention through measures such as sanitation and pruning, as well as other preventive inputs. In this period, it would hopefully allow time for other alternatives to be developed in increased quantities of blight-resistant root stocks.

Finally, after that period, transition to an even more restrictive rule,

and I understand there might be some legal complications with this. But a more restrictive rule, that allows use of antibiotics in emergency situations, and in that case, the fruit treated with antibiotics would not be sold as organic that year.

Sacrificing one year's crop in order to save the entire block seems to be a reasonable compromise. If you have any questions about the differences between the Midwest and other parts, like Washington, why orchards planted since 1995 are still at risk, and why some growers don't use antibiotics and others do, I'd be glad to answer those.

CHAIRMAN STONE: Very good. Francis.

MEMBER THICKE: Thank you. It's good to hear from somebody from the Midwest. I'm curious. In Wisconsin and the Midwest, is tetracycline used widely, or is it mostly strep?

MR. MANDLEY: It is not used

widely. It is used -- strep would be more, would be more commonly used, and even strep is not used widely. The data that I heard from Cornucopia, that only a relatively small percentage of growers have used antibiotics, would include me. I respond to that, and in six years I have had my organic orchard and I took over an abandoned orchard. In the six years I've managed organically, I have never used antibiotics.

But it is in my plan, simply because certain conditions I would have no other options. But it would be strep that would be probably more commonly used.

MEMBER THICKE: And can you review again what your recommendation is? Did you say four years or five years of allowing it, and then an amnesty program after that?

MR. MANDLEY: We suggested that the current rule expire as scheduled in 2014, and it be replaced by a more restrictive rule, and then, you know, our hope is other things

will happen after that point.

But if they don't, that then would, after another sunset, would be replaced by an even more restrictive rule, that would say organic fruit can't be sold as organic in the year that an antibiotic is used.

Taking away that consumer concern that I'm consuming antibiotics, even though what research we have seen indicates that it's not so.

CHAIRMAN STONE: Calvin? John?

MEMBER FOSTER: Can you bring that recommendation to the next meeting?

MR. MANDLEY: We'll try.

MEMBER FOSTER: Okay, thanks.

MR. MANDLEY: We will certainly bring it in some fashion.

CHAIRMAN STONE: Nick.

MEMBER MARAVELL: Do you have any experience or knowledge of any of your growers in that region using some of the materials that we have been discussing here, lime,

sulfur, copper and the Blossom Protect, outside of the research environment? But have you any of your growers started down that road already?

MR. MANDLEY: Oh, way more than started. Copper in late dormancy is a common protectant. Most of the growers that I've talked to personally about this issue practice orchard sanitation and good pruning.

One of the things that needs to be understood is you never, ever, ever get rid of fire blight. Once it's in your orchard, it will always be in your orchard until you burn the orchard.

So you can protect against outbreak, but you can't do anything in the current environment to assure that you will not have an outbreak. What I should be doing right now, rather than being here in Oregon, is spraying copper. That was on my plan. So the next week.

MEMBER MARAVELL: Are you aware of

anybody that's using the Blossom Protect?

MR. MANDLEY: No. As I said, the initial research at Michigan State that they did indicated that it simply didn't work, and scientists there tried to explain why, probably, and it kind of went over my head. But it has to do with humidity and the product itself.

CHAIRMAN STONE: Jay, you want to finish this up, please?

MEMBER FELDMAN: Well thanks for your creative thinking. We appreciate it. We need it.

One of the reasons that there's sort of a concern about writing an annotation on National List material is that we have this tendency of extending those things. And how would you feel about removing the material and putting it in an emergency use category that would be dependent upon a national or state finding of an emergency, which given what we've heard, wouldn't seem to be too

difficult?

And then following the rest of your proposal, which is to allow its use, not, you know, retain certification without being able to market in the year of use?

MR. MANDLEY: Yeah. I would be against that, solely because I might have a hailstorm, and my neighbor five miles from me might not have the hailstorm. So the issue of the emergency use wouldn't cover what we experience in the Midwest, and that's very, very localized conditions, where I need it and someone else doesn't.

MEMBER FELDMAN: Localized conditions. No, but if it could address localized conditions. I mean --

MR. MANDLEY: If it somehow could address localized conditions --

MEMBER FELDMAN: EPA uses emergencies all the time on a county by county basis. It just has to be declared by the governor, you know, or his representative. So

the question is would you feel comfortable? I guess in this case it could be declared by NOP. But would you be comfortable, assuming there could be --

MR. MANDLEY: Let's see. How long does the NOP take to do this?

(Laughter.)

MEMBER FELDMAN: They could -- well, the way I would see it working is they would have to have a standing allowance, based on certain conditions, that that would qualify as an emergency.

MR. MANDLEY: And I think that's sort of what we were suggesting, because we do understand the difficulties and the reasons why unrestricted use is not wise. We do understand that.

MEMBER FELDMAN: Okay, thank you.

CHAIRMAN STONE: All right. Thank you very much for taking time to be here.

MR. MANDLEY: Thank you.

CHAIRMAN STONE: Neal Manley to

the podium. No Neal. Melody Meyer? Melody's coming this way, and Sal D'Auria on deck.

MS. MEYER: Hello. Thank you for letting me be here to speak about oxytetracycline. Let me begin by emphasizing that I work for UNFI, and UNFI is completely and absolutely committed to ending the use of antibiotics in apple and pear production.

I've worked in the organic industry for 36 years, and mostly with organic fruits and vegetables. So I have great experience with organic apple and pear farmers.

A little bit about UNFI. You saw it on the board. UNFI is the leading independent national distributor of organic foods and organic produce in the U.S. We have national distribution coverage in all 50 states, including Canada. We're the leader in providing organic foods in North America, with 7,000 associates, serving 27,000 customers with 65,000 products.

We're also a member of the Organic Produce Wholesalers Coalition, which Natalie mentioned as well. That coalition is a group of founding members of this industry, and we're very concerned about this issue.

Organic apple and pear sales are a critical sales category for Albert's Organics, which focuses on the distribution of organic produce for UNFI. Organic apples rank number two in sales, only behind berries. Organic Northwest apples represent 22 percent of all fruit sales, and are nine percent of total produce sales for Albert's Organics.

Last year's sales from Northwest apples alone were $16 million, as the slide showed. Our year-over-year growth for Northwest apples was 21 percent, making this category one of our fastest-growing.

Organic apples and pears are not only an important category to us at Albert's and UNFI, but they're also a source of nutrition, great pride and flavor for us, in

that we make these apples and pears available to people all across the U.S. and Canada.

Additionally, organic apples and pears are the source of livelihood for over 100 organic growers that we purchase from in the Northwest. Many of these producers rely entirely on their organic fruit production to support their families. We have known and worked with these producers for over three decades. Put simply, many are like family to us.

Many and most of our growers have told us that if the tools currently needed to fight fire blight are taken away too early, and without viable alternatives, they may have no choice but to convert to conventional production. A typical orchardist has a $20,000 per acre and a five year investment in their orchard.

Pears take 10 to 12 years at minimum to start producing. In seasons of severe fire blight, the very hard decision

will come down to do I lose my entire orchard, or do I convert to conventional production and save my investment?

Losing an entire orchard is not a temporary setback. It's devastating on a personal and family level. Losing an organic producer is devastating to this industry, and affects everything all the way down to the consumer. It has ripple effects.

If the selected extension date does not provide enough time for scientific remedy to be developed and the proper tools to be acquired, to the grower, the decision is a clear one.

Please support our producers and family farmers who are the real backbone of rural communities. They will bear the greatest impact of any premature deadlines.

UNFI and Albert's is absolutely committed to ending the use of antibiotics in pear and apple production. A 2017 expiration date will support current research and

testing, and allow for grower education and success.

The expiration dates need to be based on research-based time lines, not political compromise. The original deadline that we have now was put forward without public comment.

Expiration dates that are the result of -- and thank you very much. I have more experience with some consumers, if you want to ask me those questions as well. Thank you.

CHAIRMAN STONE: Thank you, Melody. Harold.

MEMBER AUSTIN: Could you go ahead and explain to us your experience with your consumers?

MS. MEYER: Absolutely. Since we've had a lot of the consumer associations and people coming out with quite frankly some misinformation, that your gut is full with every bite of apple, we've had a lot of

consumers, retailers and their consumers calling us.

We put together some really educational talking points about the minuscule amounts that are used, it's used during blossom primarily, and also the effects of if this is done prematurely, it will drive many organic orchardists into conventional production, in which case we have more antibiotics used, potentially more chemicals, because they're in conventional production.

There won't be as many apples and pears, so that will drive the price up, and the average organic consumer won't be able to feed organic apples and pears to her children, his or her children.

So the ramifications are huge, and just to have that information to those consumers and give them a balanced approach rather than misinformation is very, very important, and I think that we can manage that, serve the grower community and the

consumer community as well.

CHAIRMAN STONE: Great. Thank you very much.

MS. MEYER: Thank you. Thanks for all the work that you're doing.

CHAIRMAN STONE: Sal D'Auria is to the podium, and David Mostin on deck.

MR. D'AURIA: Well, thank you very much, and thanks, Mac. My name is Sal D'Auria. Thanks for pronouncing it correctly. My wife and I have an organic orchard up in the upper Hood River Valley.

I met a number of you earlier this week, and I think in the fun part of your week when you're actually outside seeing trees and not stuck in a room here.

Thank you for doing the job you're doing. You guys have a very, very difficult decision to make. You've got a difficult job. I definitely do not envy you, because the only thing I'm sure about your decision is that whatever the decision is, is that some people

will not be happy with it. That's the only thing that's for sure.

But I think that you should take some comfort in the thought that if you apply science and logic and a healthy dose of pragmatism, you'll be doing a great job for everybody, and that's a terrific thing.

I've really enjoyed the last day or two here. I've learned a lot. I've been inspired, but I've also been somewhat disappointed. Some of the presentations I've seen mixed, a lot of different language.

The language like "possible" and "probable" are two very different words in the science world, and some people I saw mix those things in ways that I think could be misleading.

I think that the mixture of facts and opinions is something one needs to watch, and I'm going to try my best to stick to a bunch of facts and tell you when I tell you my opinions on those various things.

Jay, you did a great job the other day of helping me frame this massive amount of information that we're putting together here, and I should tell you that my background's in science, and I spent the last 25 years in the world of developing products in the R&D environment and dealing with very complex problems.

So if I could have the slide. I can't find my slide. If you can't find the slide, I'll just say that -- just to keep track of things, I said, okay, how do we frame this to kind of like do a report card of where we are. Hopefully, we'll get this and I can get a few minutes back here.

The thing that Jay really impressed me with the other day was the concept that what you're dealing with is a balancing act between need and hazard. I think those were some of the words that I heard a number of times from you, Jay, and they were very important for me to hear and

help frame this thing.

So if you look at -- did you find it? Okay, thank you. So if we look at this balancing act that you all are dealing with and look at these sort of two columns, the need column on the left and the hazard column on the right and see how it all adds together. I can tell you again I'm trying to do my best to give you the facts of the real world of my own orchard.

On the needs side, we've heard this and you've heard it many times, popular varieties are at risk. I know that we, our highest values pears are Comice and Forelles, and Star Crimson next. Those are very at-risk varieties.

We also heard that the combination, the vectors coming together of gross cycle, climate and weather will cause this very severe problem, and some people will have it based on their geography and some people will not. But if you provide cultural

practices, sanitation practices and you do those every single day, every part of the cycle, that helps the process.

But, but, if you don't do that and if you don't have the tools of oxytetracycline, you will lose your trees. Now, let me ask you, you know, how many products, how many materials are on the list that have to do with losing a crop, period? I know lots of products, you know, these products will make your fruit bigger. These will make them more colorful. These will stop them from dropping off the tree.

This product is about stopping death in the orchard. How many others are on the list? I don't know too many. I know I don't use any other products that have that effect on my crops.

So on a scale of sort of nice to have, because it makes better color, to critical because I'll lose my orchard, I think you can guess that I would say, if it's about

death, if it's about critical, I don't know what your scale is, but I would say it pins the scale for any logic I know.

On the hazard side, I think you need to break it down. I think this is really, really important, because it's so important, you know. Hazard both to the consumer and also to the environment. We have to think about that. We are organic farmers. We believe in this.

Jay asked me the other day, why do you do this? Well, we do this because we want good food for our kids, our families, for now and in the long future.

The reality is that, in our orchard, this is never sprayed on mature fruit. It's sprayed at bloom, and when those vectors are and the Cougar model tell us it's a bad thing, and my certified consultant tells me and signs a paper that this is the time I need to use it.

Last year, we had blossom about

May 1st on our Comice, and we picked them October 1st. That was five months later. The earliest pear was four months later from the bloom. So four to five months before the picking.

I want to make it clear -- can I get a couple of minutes more, because of my -- or did you reset it? I just want to say that, you know, from a -- are we okay? I have a minute. So again, this product is not synthetic. It is naturally occurring. I heard some people say, oh, it's synthetic. It's not. You guys, I think, know that.

I took Jay's advice last night and I looked and looked and I found 273 hits on your website, looking for some primary research on residue.

I'm sorry I didn't read every single one of them, but I couldn't find one. I heard some great things today. I think there's some great science out there that should not be disregarded.

And again, relative to scale, from a consumer perspective, you know, from what I've heard and what I know to be factual, I'd think that on the relative scale this is on the low scale relative to consumer, immediate consumer hazard.

On the environmental side, there's no question. I think that we all want to see -- the doctor today did a great job of explaining to us about the long term impact of those things. We want to see those things go away. We want to see other products that we can use to help get us around this.

But, but, organic is -- I'm saying less than five percent. It really was less than -- a lower number than that, you know. It's a very, very small number, and on the relative scale, it doesn't move the scale that much.

I believe that those are facts on this chart. The next slide, just real quickly, just to say, if I were to summarize,

I'd say that on the needs side, in this balance, the need is critical. These are dead trees. I don't know how you don't pin it to critical.

On the hazardous side, I'd say, pragmatically speaking, all things considered, this is my opinion, that the hazard for both the consumer perspective and the long-term environmental perspective is relatively low. Thank you.

CHAIRMAN STONE: Thank you very much.

MR. D'AURIA: Any questions?

CHAIRMAN STONE: Great. Thank you very much. Thank you for helping to educate us on the tour as well.

MR. D'AURIA: You're welcome.

CHAIRMAN STONE: David Mostin to the podium, and Addie Pobst on deck.

MR. MOSTIN: Good afternoon. I'm David Mostin. I'm a third generation pear grower in Lake County, California, in the

coastal mountains north of San Francisco. My oldest block of trees was planted in year 1900. We call it the old orchard. I've been an owner operator for 33 years. I've been certified organic since 2002.

I also operate other orchards that are both conventional and organic. I am concerned with the loss of an effective material, such as oxytetracycline, without the opportunity to replace it in a reasonable amount of time.

Following is my experience with replacing materials and new materials. In 1996, the University of California Cooperative Extension began field trials of pheromone confusion products. I had several of my orchards involved. The problem was the increased resistance of codling moth to organophosphate. After many years of field trials, we were able to drop out the organophosphates. Yet we still had it available if the pressure got out of hand.

Eventually, the developed pheromone program replaced the organophosphates as a standard for conventional production.

After several years of proven stand-alone effect of this pheromone program, I saw the opportunity of transitioning to organic production. Even though pheromones is now the industry standard in our area for both conventional and organic, the research continues. In the 2011 California Pear Research Report, three of the four projects were about pheromones.

During that same time period, my orchards were involved in the A506 BlightBan trials. This material is a live bacteria that is applied to out-compete other bacteria, one of which is blight. Two weeks ago, we began testing, or actually last week, a new material, Blossom Protect. Never used it before.

We've heard about the Michigan trouble with it. This is a yeast-based

material that out-competes blight. It does not kill it. It's also double the cost of antibiotics. In the 2011 California Pear Research Report in the Plant Pathology section, three out of three projects were on fire blight. In the 2012 California Pear Research Report, three of four projects were on fire blight.

Next year, we hear that there will be a new Blossom Protect material that combines copper with yeast. The combination has been shown to be more effective than either material by itself.

This year, I will apply four different materials to control fire blight, not including the tests with new products. Every year is different. This year, we received 80 percent of our annual rainfall in less than six weeks, and then went two months with nothing.

Now we are in the middle of bloom, and we have no frost threat, but we have

storms every four to seven days. The 16 years of experience with pheromone BlightBan research showed us it is easy to get good results on a good year, one with light pressure.

When things turn ugly and there is ideal conditions for blight infection, then you find out how effective your product is. During the years of research, the rates and timings of these new products were developed. Even when the new product becomes the standard, we strive for better.

For many years, during the pheromone transition, we had materials available, yet we did not use them unless the pest population became unmanageable. The same holds true for fire blight materials.

A year or two of exceptional weather conditions can make all the difference in the world for a new standard of grower inputs to this operation. Thank you.

CHAIRMAN STONE: Thank you.

Questions for David? Nick.

MEMBER MARAVELL: Yes. I want to get an idea of how familiar you might be with Blossom Protect, and what some of the potential pitfalls might be of that, since you've had a lot of experience introducing new products into your orchard.

What's your, just, you know, off the top assessment, what could be some of the problems with that?

MR. MOSTIN: When we started the A506 project, there was a lot of monkeying around with timing and rates, and it took a couple of years in different kind of springtime weather conditions, to figure out what works, you know. You know, you can put it on in an easy year and, you know, everything's fine.

But you get an odd year and you find out what, you know. So yeah, I would expect and Blossom Protect, six days ago, I never used it before. So I've got like zero

experience. In fact, I'm supposed to put it on again tomorrow. I've got to get out of here.

But you know, the A506 material, they went to like one shot early in finger stage, you know, worked great. Multiple shots, and it changed, based on the weather conditions.

So I expect the yeast material is very similar. You've got to play with it, you know, and if we have a secondary material that is similar to A506 that out-competes it, okay, from what I understand, that new tissue, there's nothing on it. The bacteria will colonize it, and unless you take up the sites and blight is always there. Blight is always there.

In 1982, we had a killer hailstorm come through the first week of June. At that time, we were using copper, copper dust. That's like old school. What a mess. I don't want to do that again. So you know, and I've

been doing for three years the delayed dormant copper application. Never done that before in my life.

And all these research programs, they're for the total California pear industry, not just the small amount that's organic. And yet like the pheromone and the A506, they weren't developed for organic. They just developed them and we're using them good.

CHAIRMAN STONE: Tracy.

MEMBER FAVRE: First of all, I'd like to thank you for coming. We should all be humbled by folks like yourself, who take time out of your busy schedule to make the time and effort to come to speak to us, and it is appreciated. So thank you.

My question for you is should you not have the option for oxytet in your organic pear program, what do you think your alternatives would be?

MR. MOSTIN: I think it's -- I

think that using multiple products that are allowed, it's a matter of timing and rates and research, a track record of what works and what doesn't. Not having a material like that, it's going to hurt. It's going to hurt.

When we phased out the glutathione, we had really good success, and it's been 16 years, and we had a research project on it this last year. They're trying to get the application amounts to half of what the standard is this year. So we're trying to reduce the materials put out there, and yet maintain the effectiveness.

And you know, two years from now, maybe there's something else that comes on the market that will help us. But the fact remains that if you do get a hailstorm post-bloom, then you're in trouble. In that 1982 event, I had trees that had 20 cases of blight in it. We probably cut ten percent of our crop onto the ground because of the blight infection.

And you can't wait. If it hails now, I walk out my back door, jump on a spray rig and start spraying. You can't call anybody or get permission. You've got to go. We spray when the trees are wet. We don't even wait for it to quit raining.

Usually, it's just like a five minute hailstorm, and I may get hit. My neighbor a quarter mile away doesn't. That's what happened. It was like a half mile wide swath right through the pear growers in the Valley, and you can't wait for a disaster declaration, like in the -- like the crop disaster stuff that, you know, have to have 30 percent loss over the total county.

It doesn't happen. We've got six, seven different microclimates. The guys in Scott's Valley, they get hailed on almost every year. I'm out in Big Valley. I see it coming, and hope it goes left or right. So yeah, no. It's just, if we don't got it, then you just sharpen up your chainsaw. We had to

take trees out because we could not control it.

MEMBER FAVRE: But leaving the organic program would not be a consideration for you?

MR. MOSTIN: Oh geez. Well probably if I would leave the program if I got wiped out. Let me put it that way, okay?

CHAIRMAN STONE: Francis, if you'll finish this out.

MEMBER THICKE: Real quickly. I just wanted to thank you for what you're doing, you know. You're the innovator that we really need to get out there, the pioneer to do it. Thanks.

MR. MOSTIN: Okay, thank you.

CHAIRMAN STONE: Thank you, David.

MR. MOSTIN: If I don't get home, I put my wife on the sprayer.

(Laughter.)

CHAIRMAN STONE: Yeah. You'd better get home. Addie Pobst to the podium

and Nate Lewis on deck.

MS. POBST: Hi. My name is Addie Pobst, and I'm with VivaTerra Organic. We are a Washington-based sales agent with 20 years of experience marketing organic fruits and vegetables. Organic apples and pears are the core of our business.

In 2012, we worked for U.S. growers with over 3,000 combined acres of organic apples and pears, and their harvests brought them over 9.8 million in returns. We represent independent organic growers, ranging in size from four to four hundred acres.

On their behalf, I urge you to support an extension for tetracycline. A premature transition to non-antibiotic alternatives that are not consistently effective will undermine apple and pear production in the U.S.

The sunset time frame must be extended, so that alternatives can be developed, tested, proven and made

commercially available to growers. The importance of antibiotic controls is difficult to overstate. Fire blight does not cause trees to die back; it causes them to die, and quickly.

It does not respect orchard boundaries, size or ideological purity. It spreads incredibly fast. It does not infect just a few trees; it spreads across acres and acres of orchards, and it kills them. The only cure for fire blight is a bulldozer and a bonfire.

Antibiotics do not cure fire blight, but they can protect orchards from contracting this devastating bacterial infection. In years when predictive models indicate spring conditions are ripe for an outbreak that would overwhelm the protection granted by other techniques, antibiotic controls are critical.

This is not a debate about a substance used to grow prettier or larger

fruit, or for some other convenience. It's about the actual life of the trees, and by extension, the livelihood of growers, workers, their families and communities.

The risk of losing entire orchards representing years of work and thousands of dollars is simply too high. Growers already face all the inherent uncertainties of agriculture. A year's crop can be lost due to late frost, hailstorms, windstorms, heat waves, labor disruptions and market upheavals. Any farmer can tell you a dozen such stories.

But after these disasters, growers still look ahead with hope to the next year's harvest. Fire blight doesn't leave a stricken orchardist with even that hope.

As long-time members of the organic community, our company and our growers emphatically agree on the goal of phasing out antibiotics. Great strides have been made towards the development of effective non-antibiotic controls for fire blight.

However, simply wanting an alternative to exist by a certain date does not make it so. Research takes time. Prematurely eliminating antibiotics will drive organic growers back to conventional methods. Maybe not in the first year, because fire blight doesn't strike everywhere every year.

But when that fateful spring comes and conditions put their orchard at high risk, growers will surely choose to use antibiotics and lose their organic status, rather than watch their orchards die. Once a grower has taken that step and lost his or her organic status, economic realities will mean going full-blown conventional, in order to compete in the conventional market.

Eliminating antibiotics from the allowed synthetics list in 2014 will not reduce the amount of antibiotics in U.S. fruit production. Instead, it will increase the risks faced by organic growers beyond what they can stand. It will reduce the

availability of U.S.-grown organic apples and pears for consumers.

Most damaging of all, it will hobble efforts to develop non-antibiotic alternatives that can eventually be used by all producers, conventional and organic. Thank you for your time. Please support the extension to give researchers the time they need to develop the solutions we all want. If you have any questions about consumers or how the organic tree fruit market works, I'd be happy to answer them.

CHAIRMAN STONE: Thank you. Harold.

MEMBER AUSTIN: Thanks, Addie. What conversations have you had with your customer base and consumer base in this regard?

MS. POBST: We receive emails from end consumers, as well as from our direct customers who are retailers and wholesalers regarding this issue. More so in the last

four or five months, there's been a definite up-tick in interest.

Prior to that, we've had an FAQ available on our website for years, in case anybody was interested. We certainly weren't hiding the fact that tetracycline was used, or antibiotics were used, in organic tree fruit production.

The questions that we've gotten are generally just very straightforward, you know, something along the lines of, you know, my mom told me that she heard a radio program that said that antibiotics were used in organic tree fruit. Is that true?

And we answer back with an email that says, yes, that's exactly true, but here are the reasons why and, you know, this is how it's allowed, this is how it's regulated, you know. We're very open with that information, because we would really like everybody involved in the organic community to actually understand that this is not some nefarious

scheme or conspiracy. This is just a reality of agriculture.

Typically, I don't hear back from them again after that, so I can't really say, you know, how it goes from there. But I feel like at least we've done our part to be open and honest with anybody who's interested.

CHAIRMAN STONE: Great. Thank you very much.

MEMBER FELDMAN: Thanks, Mac. Thank you. How would you feel about the possibility of labeling apples with some language that indicates they've been treated?

MS. POBST: You know, honestly, I can't see that even working a little bit. Not because we couldn't put labels on boxes. We can put labels on boxes. We do that all the time. That's a normal occurrence for us.

But I would say, if you look at how the country of origin labeling has been instigated or actually effectively implemented in the country, I go regularly into retail

stores where I see fruit that has a PLU sticker on it that very clearly says "Chile," say, as the country of origin, and directly in front of that there's a little handwritten sign, or maybe it's a little chalkboard or one of those little, you know, POP signs that sticks up, and it says "California."

If we can't even get country of origin labeling on a one-word label correct at the retail level, I mean, a sentence that says, "This fruit was grown in an orchard that was treated last spring with tetracycline in order to control fire blight." To actually get that at the retail level on display, you know, in a way that's going to make sense to anybody in any kind of accurate way, just strikes me as not likely.

CHAIRMAN STONE: Thank you, Addie. Nate Lewis to the podium and Anne Schwartz on deck.

MR. LEWIS: Distinguished members of the Board, my name's Nathaniel Lewis, and

I work as one of three certification coordinators at Washington State Department of Ag. My role covers the coordination of our input material registration program, the organic certification of processors and handlers, and our periodic residue sampling program.

I'm owner and operator of a certified organic livestock operation, located about 90 minutes north of Portland, Lincoln Creek Ranch, where we're now starting to implement biodynamic practices. I'm also a father and organic consumer who doesn't feel betrayed by the limited use of oxytetracycline in organic apple and pear production.

While today I'm representing the views of WSDA in the following public comment, nothing I'm about to say conflicts with my own personal opinions as an organic producer and consumer.

The minority position within the Crop Subcommittee recommendation on

oxytetracycline uses previous public comment from my colleague at WSDA, Katherine Withey, to support conclusions that are uninformed and inaccurate.

Since our organization is specifically called out in the recommendation, we felt it appropriate to comment directly on these statements. First, there are no producers in full compliance with the USDA organic regulations that rely on oxytetracycline. Compliant producers rely on their preventative management plan and use the oxytetracycline only when their plan is failing.

Second, the minority concludes that since, in 2010, 96 producers grew apples and pears for EU export, meaning without oxytetracycline, they must be doing something fundamentally different than producers who had applied antibiotics.

This is an uninformed and therefore illogical conclusion. Many

producers who grow apples and pears in compliance with the EU restrictions, without oxytetracycline, also grow varieties of organic apples and pears that receive oxytetracycline treatments.

These split operations do not implement different preventative practices on their various production sites. Rather, these producers fall victim to the unpredictable and hyper-locale-specific nature of this disease.

Third, the minority advocates for the use of other 601 listed materials, lime sulfur, dormant oil, copper, et cetera, as part of a prevention program for fire blight. To advocate for the use of one synthetic disease control material over another is inconsistent with the current requirements of the Pest, Weed and Disease Prevention Practice Standard, and we find encouraging these practices to be problematic.

I would like to provide general comment on the use of expiration dates and

National List annotations. We feel the use of any annotations that are redundant to the current practice standards in OFPA, like expiration dates, required pest prevention hierarchy, detracts from the certification process.

These type of annotations demand to certifiers utilize their communication resources to convey the myriad of changes and restrictions on specific materials. This inherently detracts from our efforts to communicate the requirements of practice standards. The appearance of focusing on materials runs counter to the process-based approach of organics we all champion.

The Board should use the power to annotate carefully, and it's absolutely critical to any annotation, whether redundant to the current standard or not, have adequate defensible justification.

Lastly, this phase-out of oxytetracycline has highlighted the importance

of fostering our land grant university cooperative extension and farmer collaborative process.

The Subcommittee resolution urging certifiers to encourage an increase in specific preventative practices is a challenge we're excited to meet. We strive to make strategy our strength and not disaster.

CHAIRMAN STONE: Great. Thanks, Nate. Questions? Very good. Thank you very much. Very informative.

Anne Schwartz to the podium, and Jeff Falen on deck.

MS. SCHWARTZ: To members of the NOSB, my name is Anne Schwartz. I'm a mixed vegetable and berry producer. I've been farming organically since 1979, and I've been certified since 1980. I have devoted my life to the development of organic farming systems.

I represent Tilth Producers of Washington, a state-wide association of organic and sustainable growers, researchers

and agricultural businesses. Our growers represent a wide diversity of crops, regions and scale across the state. We are asking the Board to approve the Crops Subcommittee proposal providing an extension of the use of tetracycline in tree fruit until October 2016.

This time table supports the growers, and ultimately consumers, who both want safe, healthy food, as well as supporting family farmers and rural communities, which we believe is the backbone for a sustainable farming system.

Many consumers have been misled by the lies perpetuated by consumer groups that presumably have their best interest at heart. The use of antibiotics in organic agriculture is far too complicated to explain in 30 seconds. Distilling it to erroneous statements does much harm to our industry.

"It's hard to believe, but every time you bite into an organic apple or pear, you get a mouthful and a gutful of

antibiotics." This doesn't help any of us.

Rather than guiding consumers to an understanding of how and why antibiotics are used, that they are based on naturally-occurring compounds, that the industry is working tirelessly to find alternatives to these exceptions, these groups have instead presented antibiotics as evil, ignoring the truth that may be found in the carefully developed rules of the Organic Foods Production Act.

The original language of OFPA specifically allowed limited and restricted use of antibiotics in both livestock and cropping systems. This allowance was not a loophole. It is based on a national dialogue, which is based on science, review and process, all of which are transparent and in the public record.

We believe it is a disservice to consumers to have complicated issues reduced to sound bites. The reason that less than one

percent of Americans are farmers has something to do with the risks and the amount of work it takes to operate a successful, sustainable farm.

As growers grapple with the constant realities of farming, even informed citizens don't really understand what it takes to produce food and stay in business. We believe that the American people don't want to do farm work for five or ten dollars an hour, and the alternatives are relying on imported food.

Consumer and environmental organizations should be educated and taking action about the most important causes of antibiotic resistence, which are non-therapeutic use of antibiotics in livestock feed and injectables, and in the regular, routine use of anti-microbial soaps used by consumers today.

At the core of Tilth's mission in Washington is the promotion of ecologically

sound and economically viable farming practices, that improve the health of our communities and natural environment. We educate growers and support efforts to allow for the continued expansion of organic and sustainable agriculture.

These issues are complicated. The work that all of you do, NOSB and NOP staff, is important and thankless. With only one percent of Americans choosing to struggle daily with nature and the uncertain markets to provide healthy, fresh food, our culture has lost the insight into what it takes to create a sustainable food system within sustainable rural communities.

I would argue that until you see your life work die in front of your eyes, you really don't understand what it takes to invest your life into growing food. I've committed my life to making our food system better. I left my farm 300 miles to the north to speak on behalf of farmers and the

communities they live in.

We share the same commitment to organic agriculture, but I also want to speak to the commitment that the people in our orchards, who are working to do better by the rest of us. I hope we continue to provide our commitment to ensure that organic farmers have the necessary tools to succeed. Thank you.

CHAIRMAN STONE: Thank you very much. We appreciate you driving those 300 miles. That's one reason we moved the meeting around the country, to have access to voices like yours.

Questions? All right. Thank you very, very much for making the effort to be here. Jeff Falen to the podium, and Michael Crupain on deck.

MR. FALEN: Good day. My last name rhymes with that of Sarah Palin. I have found a use for a politician. So it's Falen, thank you.

My wife and I own and operate

Persephone Farm, where we raise 15 acres of organic vegetables and eggs two hours south of here. When I moved onto the farm in 1985, I entered a depleted landscape. By adhering to organic principles of crop rotation, cover cropping and biodiversity enhancements, we have seen dramatic improvements in the health of the farm ecosystem.

These practices have resulted in higher quality produce, improved soil tills, reduced fertilizer usage, a stable pH, greater cold tolerance in our crops, and elimination of problems with lepidoptera and aphids.

At the same time that we are witnessing these improvements, I became aware that some other organic growers were relying more heavily on inputs, and giving minimal regard to organic practices. We are currently participating in a case study analysis of several West Coast organic farms that use a systems approach.

This study, sponsored by Oregon

State University, hopes to document the positive changes that organic practices can bring to the farm as a way to encourage other growers to focus more on practices and less on materials.

It is my belief that the NOP should assist in this effort by pressuring certifiers to encourage growers to view their farms as a living, breathing organism, rather than a substrate to which various materials are applied. The focus on materials offers band-aids to problems that often can and should be solved through good practices.

Inputs are sometimes needed, but more band-aids encourage growers to gloss over deeper problems. I admit that I don't know enough to make a science-based argument concerning the materials before you. I hope you carry more knowledge than I do to your decisions. But I ask you to weigh heavily some basic principles of necessity, transparency and human health.

I recently spoke with an organic pear and apple grower who does not use antibiotics for fire blight control, relying instead of resistant varieties. He also gave me information which I'm sure you're aware of, of research results showing effective biological controls as an alternative to antibiotics.

This is one data point, of course. But I think it's important to remember that many people, including myself, are alive today because of these drugs, and I have personal experience with antibiotics losing their effectiveness.

If there truly is an effective alternative, why take the risk of human pathogens developing resistance to agricultural antibiotics? I ask you to end their use in organic agriculture as soon as possible.

And not that polyoxin D should be left out -- I haven't heard many people talk

about it -- so I hope you will consider that broad spectrum fungicides harm beneficial fungi as well as harmful fungi. More importantly, is it appropriate to use a material for which some of the ingredients and processing are a secret?

The people who purchase and eat our produce value transparency. So I feel it my duty to advocate for them. I ask that this petition be denied until more information about the material is made available.

I appreciate the role the NOSB plays in maintaining the integrity of organic farming. I don't envy you for the judgments you have to make.

I hope you will ask of these materials, is this an unnecessary band-aid solution, or does it contribute to the NOSB definition of organic agriculture as, and I quote, "an ecological production management system that promotes and enhances biodiversity, biological cycles and soil

biological activity." It is based on minimal use of off-farm inputs, and on management practices that restore, maintain and enhance ecological harmony?

Thanks for listening. Whoa. Right on time.

CHAIRMAN STONE: Pretty good. Terry, I don't know about that one. Thank you, Jeff. Questions? Very good. Thank you for being here.

MR. FALEN: Okay.

CHAIRMAN STONE: Michael Crupain, please correct to me of the mispronouncing of your name, and Jessica Shade is on deck.

DR. CRUPAIN: Good afternoon. My name is Dr. Michael Crupain. You got it right. I'm from Consumers Union and Consumer Report. So I work with Dr. Urvashi Rangan, and I direct the daily operations of our food safety and sustainability center.

I'm a physician licensed in the State of New York. I'm board-certified in

preventive medicine. I have a Master's in Public Health. I teach graduate and undergraduate students at Johns Hopkins University. And I've come here today to talk about what is considered to be one of the world's most pressing public health problems, antibiotic resistance.

This problem is a major focus of our work at Consumer Reports, as well as other groups and government agencies, numerous medical societies, and is a topic that I lecture on at Johns Hopkins.

I want to stress that the basic science around antibiotic resistance is not controversial. Further research is always helpful, but we know enough right now and don't need any more research to understand the dangers of using antibiotics in agriculture.

So let's start with the basics. Antibiotics are drugs that either kill or inhibit the growth of bacteria. Prior to the 1940's, we had very few useful tools to treat

people who had antibiotic-resistant infections. Back then, hospital wards were filled with people who suffered and died from infections that have now become relatively simple to treat.

Antibiotic resistant bacteria make treating those simple infections much more complicated. These organisms are able to survive and flourish in the presence of these antibiotics that would normally kill them, or stop their growth, and infections with antibiotic-resistant bacteria can prolong human illness, increase suffering and increase the risk of death.

To compound the problem, each day we use antibiotics more and more resistance develops, while at the same time each year we introduce fewer and fewer new antibiotics. Antibiotic resistance occurs when bacteria acquire genes to give them the ability to resist the power of these drugs. This can happen spontaneously when genes mutate, but

more commonly can occur when bacteria share these genes with each other, and as Dr. Morris said, they're very promiscuous.

Antibiotic-resistant bacteria is a normal part of the evolution of bacteria. However, the process is accelerated by the use of antibiotics, and greatly accelerated by the inappropriate use of low doses in antibiotics.

Antibiotic use promotes the development of resistant bacteria in all venues. This includes hospitals, clinics, the community, animal agriculture and orchards. The environment including orchards is filled with bacteria, and they are able to share this resistance readily with each other.

So we must consider resistance that develops anywhere in any of these settings a major public health threat, and of course the prevalence of antibiotic-resistant genes in our environment, the more of those there are, the more likely there are to be resistant bacteria that can make people sick.

Tetracyclines are a highly important class of drugs for human medicine, and we must do everything in our power to limit their use so as to prolong their efficacy in treating human illness.

The science of antibiotic resistance, again, is not new. In 1945, Alexander Fleming received a Nobel Prize for his discovery of the antibiotic penicillin. In his Nobel address on penicillin, he said, and I'll read it to you:

"The time" -- it's better with a Scottish accent -- "The time may come when penicillin can be bought by anyone in shops. Then there is a danger that the ignorant man may easily under-dose himself and by exposing his microbes to non-lethal quantities of the drug, make them resistant."

Here is a hypothetical illustration. Mr. X has a sore throat. He buys some penicillin and gives himself not enough to kill the streptococci, but enough to

educate them to resist penicillin. He then infects his wife, Mrs. X. She gets pneumonia and is treated with penicillin.

As the streptococci are now resistant to penicillin, the treatment fails. Mrs. X dies. Who is primarily responsible for Mrs. X's death? Mr. X, who negligently used penicillin, and changed the nature of the microbe.

We all have a responsibility for the development of antibiotic-resistant bacteria. One way consumers should be able to lessen this is by buying organic.

Organic food is believed by consumers to be produced without the use of antibiotics, and we need to make sure that the label is consistent and lives up to this expectation. That's why we support the expiration in 2014.

CHAIRMAN STONE: Thank you. Harold.

MEMBER AUSTIN: First off, I've

got a very bad allergy to penicillin, as does my son. It's been probably passed down through our family, not something that we've come into contact with out walking about and stuff. But that's not my question.

You kind of made a broad-brush approach, and a referral to the tetracycline in orchards, to the resistance and the amount of bacteria, stuff that is, you know, that's out there, physically out there, that we're going to -- we could build up some resistences and tolerances to.

What's that based on? Is it from personal experience?

DR. CRUPAIN: It's based on basic science. We know that there's bacteria everywhere. We know from the literature that there's bacteria in orchards. There's lots of studies looking at tetracycline resistance in orchards, or some studies. But there's bacteria everywhere. So we know they're there, and if they're there, they'll become

resistant.

MEMBER AUSTIN: Okay. But, you know -- okay. Let's just leave it at that.

DR. CRUPAIN: We don't ask questions like -- we don't measure the speed of light in the Hilton in Portland compared to the Hilton in Washington, D.C., because of basic science.

CHAIRMAN STONE: All right. Thank you very much. Jessica Shade to the podium. Angela Vasquez didn't sign in. Before uou start Jessica -- Elizabeth Whelan? Didn't sign in either. Rick Walsh. Rick did. I think Rick is here. Rick on deck, please. Okay. Thank you, Jessica. Go ahead.

MS. SHADE: Hi. My name's Jessica Shade, and I'm the Director of Science Programs for the Organic Center. My Ph.D. is from UC-Berkeley in integrative biology. So my comments are from a scientist's perspective, and I agree with the testimony of others here that the use of antibiotics needs

to be phased out of organic agriculture.

I had the good fortune of being able to visit the field testing sites with Ken Johnson, and it looks like if we can get farmers to adopt the non-antibiotic integrative management systems, the new products, when used in combination, could be as effective, if not more effective, than oxytetracycline at managing fire blight.

I come at this from a field biologist's perspective. My dissertation focused on field biology, and as such, I'd like to stress the importance of allowing time for testing in the field and farmer education in the phase-out process.

For field testing results to be deemed replicable and trustworthy, the studies need to be carried out over several years. Unfortunately, biological field studies are at the mercy of the environment. So any year with fluke weather patterns or biotic anomalies could give unreplicable results.

The work that's been done at Oregon State University is excellent, but farmers aren't going to trust a single year of data. They need more when their livelihoods are at stake, especially since the 2013 season will be the first real scale-up and test under commercial conditions of Blossom Protect, and Previsto hasn't even been registered yet.

Additionally, the dissemination of scientific results does not happen instantaneously. The non-antibiotic methods for preventing fire blight require the integration of multiple products to be applied at specific floral stages throughout the growing season, and education and training are going to be crucial for the success of these practices.

This is not unique situation. These issues are important for the success of all scientific studies. Too often the step between science and educating the public is ignored, and then you have a situation where

the research results aren't getting to the audience that they're targeting.

Without taking the time to test the management strategies in the field and educate farmers about the integrated techniques they need to implement to successfully prevent fire blight without the use of antibiotics, these methods will not be adopted and we're in danger of losing organic apple and pear farmers to conventional farming.

Our goal is to decrease the use of antibiotics. But if we don't take the time to fully test the new product and educate growers on how to use them, our good intentions may backfire. So thank you so much for listening to me. I know it's been a long day.

CHAIRMAN STONE: Thank you, Jessica.

Questions? Thank you very much. You're welcome. Rick Walsh to the podium and Marty Mesh on deck.

MR. WALSH: Hello. My name's Rick Walsh. I'm a farmer down in Klamath County, about five and a half hours south of here in Southern Oregon, and I'm here today because I want the NOSB to uphold principles of organic production in agriculture.

I'm particularly concerned about the allowance of tetracycline for the control of fire blight. If antibiotics are consistent with organic principles, why are they allowed only in apples and pears? Antibiotics are not allowed for my vegetables I grow, not for chickens, cows, pigs or any livestock.

I believe that antibiotics should be eliminated from all agricultural, organic agricultural now. My customers support my farm because they do not want food grown with antibiotics or other synthetic material. They question me quite often on this.

Consumers who learned about antibiotics are used in organic apples may decide to stop buying organic apples. They

may also decide to stop buying organics altogether, because they lose their trust in organic certification. That hurts all of us organic farmers.

I was a conventional farmer before I started this. I was growing about 1,000 acres of potatoes, hay and grain, and the alar scare come along with the apples. All of a sudden, the apple industry was hurt pretty bad financially, and that tells me there that consumers do care what they have, are getting in their food.

Some orchards claim that antibiotics are essential for apple and pear production, but this is not the case. Orchardists in Europe do not use antibiotics on their crops. With so many orchardists can succeed without antibiotics, it is time to require all organic producers to abandon antibiotics.

There are cultural controls, natural materials and biological controls

available, like the kind that I use in my operation, and this is what organic farmers should be using. Unfortunately, using antibiotics may be simpler, easier and cheaper than prevention.

I became an organic farmer partly because I was concerned about the effects of pesticides on human health. I'm also concerned about the effects of antibiotics used on human health. In areas with intense apple production, antibiotics can be sprayed into the air over thousands of acres of orchard.

This exposes the farm workers to the antibiotic residue on the trees, and exposes consumers to antibiotics residue in or on the fruit. I do not want to see farmer workers or consumers exposed to antibiotics. I ask you to please reject this petition and take actions to take antibiotics out of this organics.

I know that it sounds like I'm in

a minority here, as being outside of one saying take it out and not extend it. As being a farmer and an organic farmer, I would say that Mr. Mandley out in the Midwest had a pretty good solution, you know.

Take it out of production, take it out of the organic production for a year if they use the product, and that will give the consumer confidence that they're not getting antibiotics in their food supply. Thank you for allowing me this time.

CHAIRMAN STONE: Thank you, Rick, for taking, making the effort to drive the 5-1/2 hours to be here, and the Board was listening closely.

MR. WALSH: Thank you.

CHAIRMAN STONE: Are there questions? Jay.

MEMBER FELDMAN: Ditto. Thank you so much for coming. I'm interested in your perspective on the agricultural community, because we're hearing these different points

of view, and sometimes I think if you dropped into this room from maybe another planet or even another county, you might think that folks don't get along too good.

So I'm wondering what your perspective is in terms of the environmental community overall. Why do we have these differences of opinion on an issue like this, which some people see so clearly on one side, and some people see so clearly? You seem to have a pretty clear vision of how you view the situation.

MR. WALSH: In my situation, I take it like the buying organic seed to plant in your farm. When we first started it, buying, you had the option of buying conventional, non-treated and had this, and it was always cheaper. So I kind of did that.

Pretty soon, the certifier says, hey, you're not buying much organic, and he says -- and kind of said you need to start buying more organic seed. So I started buying

a little more, but it was always in the back of my mind. Boy, it's a lot cheaper to buy this, and then it comes down that you're going to have to buy organics, and we started buying the organic seed.

At that time, I started realizing if I were not going to buy the organic seed, that meant that he, the producer out there, is not going to produce it, because there was not a demand.

If I bought it and all my other farmers bought it, well, then the price of that seed would come more in line with conventional seed, and then it's there. I'm seeing that now, is that there's more conventional.

I think a lot of the tetracycline that they're using, it's an easy way out to me. I don't quite understand it. I don't grow fruit, a lot of fruit. But to me, I know that I've went to a lot of schools and done a lot of workshops on it, and teas, they're

talking about using your teas and your preventative programs to control your diseases.

I use a lot of that in my production of food now. It's just like if I use a PyGanic, it's the last resort. If I mention I used PyGanic at the farmers market, well, what's that? Well, that's a pesticide and, man, they just back up. So there's a lot needs to be education to the consumer what it is, and that's what we have to do.

CHAIRMAN STONE: John.

MEMBER FOSTER: What is it that you grow down there?

MR. WALSH: Well, we have about 15 acres of certified organics, and we're in the high desert. But we are kind of in a certain situation. We have a lot of geothermal, and so we have an acre of certified organic, geothermal heated greenhouses.

So we support a CSA year-round. We grow tomatoes and strawberries and herbs

and microgreens and broccoli and cauliflower all year long, and support about a 50-member CSA down there. Plus we sell to the co-ops down in Southern Oregon.

MEMBER FOSTER: I used to do a bunch of work down there. What town or what city?

MR. WALSH: Klamath Falls, Oregon.

MEMBER FOSTER: Klamath, okay. K Falls.

MR. WALSH: Yeah. 4,200 feet. It snowed two days ago.

MEMBER FOSTER: And so did I hear right, no apples or pears right now?

MR. WALSH: No. I've just done some research, and I'm thinking about trying to put them into the grow tunnels inside, and put the heat in the ground about 36 inches down, and seeing what would happen there, and what it wouldn't do.

MEMBER FOSTER: Oh, cool. Nice. Just one more. How did You hear about the

meeting to come, because --

MR. WALSH: I'm a member of the Cornucopia Institute, is where I heard about it.

MEMBER FOSTER: Thank you so much.

MR. WALSH: I enjoy you folks coming down here, at least coming out to the West Coast and giving us an opportunity to speak. It's kind of exciting.

MEMBER FOSTER: All right, thank you.

CHAIRMAN STONE: Very good. Did a good job as well. Appreciate you making the effort to be here. Last, and certainly not least, Mr. Marty Mesh.

MR. MESH: My name is Marty Mesh. I'm the Executive Director of a non-profit, Florida Organic Growers, and the legal name is Florida Certified Organic Growers and Consumers, and I always took very serious my responsibility to balance the needs of being an organic farmer versus obviously my own self

and my own family eating organic products, and what consumer expectations were.

We operate a certification program called Quality Certification Services, accredited in the original accreditation round, and I started farming organically in 1973, after spraying apples in 1972 and the lightbulb going off.

A lot of other folks have done really good articulated comments, well written-out, and so you won't hear that from me. But know that I'm the last speaker, so the exit strategy is nearby.

You know, I want to support Anne's comments. I heard Anne speak, and a lot of consumer comments as well, and I know that you guys are in a hard position to be in. I didn't want to not support George's aquaculture presentation. It occurred to me that for over -- since the last millennium, I've been up here talking about organic aquaculture. To see George's time line, then

you go, wow, it's been that long since the last millennium, was kind of hard to see and hard to know that it's languished for so long.

But getting to the apples, the middle suggestion that you all heard was 2016, that middle ground, and then what I was attracted to was the farmer who brought up, really referenced 205.672, the government-mandated spray program section, that says, you know, if you use a material under a government, if you sprayed under a government-mandated spray program, it can't be sold as organic, but you don't lose the certification of it.

I believe that the Board could look at that option after 2016, you know, while products are waiting for registration, and look at it and say if the material is used, then you can't sell it as organic, period, and relieve the consumer expectation that the material is not used, and have the farmer take a bit of risk.

Then as materials are registered, actually get registration, extension publications are published, growers get the messages from the researchers in 2017-2018, take it, prohibit it totally.

So that was -- I was drawn to his suggestion and thought it was worthy of your deliberation and consideration. And with that, we'll get you all out of here early, unless you all have got questions. I saw Jay's light bulbs going off when I was saying something, so I'm sure he's got a question.

MEMBER FELDMAN: I'll talk to you later.

(Laughter.)

CHAIRMAN STONE: Great. All right. Thanks, Marty. I appreciate you being here.

MR. MESH: All right.

CHAIRMAN STONE: So, Board members, did really good. We ran about 45 minutes long, maybe closer to -- yeah, 45. But we did great. I think I appreciate the

questions. The audience did a great job of presenting and responding to questions. So a couple of just scheduling.

First of all, if there's someone from the Portland area that can direct me to a cigar store. My oldest daughter had a healthy baby boy just about a couple of hours ago.

(Applause.)

CHAIRMAN STONE: I want to remind everyone that just outside these doors, there's the organic apple and pear tasting, hosted by OTA, OMRI, Oregon Tilth and several others, and a reception in the adjoining room just down the hall.

Any Board members have anything we need to bring before we adjourn for the evening or recess for the evening? With that, we will be here promptly at eight o'clock in the morning.

(Whereupon, the above-entitled matter went off the record at 6:25 p.m.)

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C E R T I F I C A T E

This is to certify that the foregoing transcript

In the matter of: National Organic Standards Board

Before: USDA

Date: 04-10-13

Place: Portland, Oregon

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

Neal R Gross

Court Reporter

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURE MARKETING SERVICE (AMS)
NATIONAL ORGANIC PROGRAM (NOP)

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MEETING OF THE NATIONAL ORGANIC
STANDARDS BOARD (NOSB)

+ + + + +

THURSDAY

APRIL 11, 2013

+ + + + +

The National Organic Standards Board convened at 8:00 a.m. at the Hilton Portland & Executive Tower, 921 Southwest 6th Avenue, Portland, Oregon, Mac Stone, Chairperson, presiding.

MEMBERS PRESENT

MAC STONE, Chairperson
HAROLD AUSTIN
CARMELA BECK
COLEHOUR BONDERA
JOSEPH DICKSON
TRACY FAVRE
JAY FELDMAN
JOHN FOSTER
WENDY FULWIDER
NICHOLAS MARAVELL
JEAN RICHARDSON
ZEA SONNABEND
JENNIFER TAYLOR
FRANCIS THICKE
CALVIN WALKER

STAFF PRESENT

MILES McEVOY, Deputy Administrator, National Organic Program

MICHELLE ARSENAULT, Advisory Board Specialist

MELISSA BAILEY, Director, Standards Division, National Organic Program

LISA BRINES, Standards Division, National Organic Program

T-A-B-L-E O-F C-O-N-T-E-N-T-S

T-A-B-L-E O-F C-O-N-T-E-N-T-S (Continued)

P-R-O-C-E-E-D-I-N-G-S

8:02 a.m.

CHAIRMAN STONE: I'm going to call the meeting back into session. Again, everyone's quite familiar, we have a lot to consider today, several topics that we've not brought up yet.

First, I'd like to start out, each of us that are appointed by Secretary Vilsack would like to give Francis a little something that he can prove to his friends that he actually is on this.

So, Francis, if you'll come up here?

(Whereupon, a presentation was made to Member Thicke.)

MEMBER THICKE: Thank you very much.

CHAIRMAN STONE: Thank you, Francis. I guess now you realize the gravity of your agreement to serve.

So at this time I ask Jean to read

from "The Unsettling of America," Wendell Berry, this morning.

MEMBER RICHARDSON: "The concept of country, homeland, dwelling place becomes simplified as the environment; that is, what surrounds us. Once we see our place, our part in the world as surrounding us, we have already made a profound division between it and ourselves. We've given up the understanding, dropping it out of our language and so out of our thought, that we and our country create one another, depend on one another, are literally part of one another, that our land passes in and out of our bodies just as our bodies pass in and out of the land. That is, we and our land are part of one another so all who are living as neighbors here, human and plant and animal, are part of one another and so cannot possibly flourish alone, that therefore our culture must be our response to our place. Our culture and our place are images of each other and inseparable

from each other and so neither can be better than the other."

CHAIRMAN STONE: Thank you, Jean. So anybody else, any tidbits or anything from the Program to start?

Okay. Very good. Okay. We'll jump right in. We're going to do Handling Subcommittee first thing this morning before a break. Then we'll have CACS before lunch. Then after lunch will be the voting session for all the topics that we have pushed off until today.

So with no further ado, I'll turn the program over to Mr. Foster.

MEMBER FOSTER: Thank you. We have four substances and one document to be voting on today. We have sulfuric acid, barley beta fiber, sugar beet fiber, DBDMH and the auxiliary or other ingredients document.

My hope is that we can, after we hear public comment, vote on the four materials, and my guess is that we'll hold off

voting on the other ingredients document until after lunch probably. But otherwise, I think we're ready to go on sulfuric acid.

And Dr. Brines, if you'd be so kind as to introduce it?

DR. BRINES: Thank you, John. The first petition on the agenda is sulfuric acid. The substance was petitioned on July 29th, 2010 by a company called Marinova. The petition requests the addition of sulfuric acid to Section 205.605 of the National List for use in organic handling. The substance does not appear elsewhere on the National List for handling.

In support of its review the Handling Subcommittee requested the development of a third party technical evaluation report. That report was completed in 2012 and both the report and the petition were posted on the NOP Web site in advance of the opening of the public comment period for this meeting. Thank you.

MEMBER FOSTER: Thank you very much for that. As before, I'm going to ask the folks who headed up the discussions on each of the items to introduce them and carry the discussion forward if necessary.

So, Joe Dickson, I think you're up.

MEMBER DICKSON: Thank you, Mr. Foster. The Handling Committee reviewed the petition for sulfuric acid and the technical evaluation report. We found that sulfuric acid, which is used as a pH adjuster in the extraction of seaweed extracts, did not meet the review criteria for a number of reasons.

First of all, the petition itself had large swaths of confidential business information redacted, which made it very difficult to really understand the process by which the extraction of the seaweed takes place. It was impossible to determine whether the resulting extract was a synthetic material and it really just left a lot of details out.

The essentiality of the substance was not demonstrated in the petition and the technical report documented negative environmental impact of the production of the substance very clearly.

We received several public comments regarding this material. Marinova, the petitioner, did provide some additional information that did address some parts of what had been redacted from the petition, but did not fundamentally change the standing of the substance with regard to the review criteria.

Richard Theur noted that if we are going to ever have organic citric acid, this material will need to be added to the List, which may well be the case, but isn't germane to this particular use.

Beyond Pesticides, PCC, NOC, Wild Farm Alliance all commented against this material and we did not hear from any potential downstream users of the ingredient

in any product.

Any questions?

MEMBER FOSTER: Yes, if we could kind of have clarifying questions now, that would be great. And then I anticipate having discussion after we hear public comment on the subjects. But clarifying questions at the moment?

All right. Thank you, Joe.

Moving onto barley beta fiber next on the docket. And Dr. Brines, would you be so kind?

DR. BRINES: Thank you, John. The petition for barley beta fiber was submitted by Cargill on September 17th, 2009. There was one update to the petition on June 1st, 2011, and that update was in response to additional questions from the Handling Committee. The petition requests the addition of barley beta fiber to Section 205.606 of the National List for use in organic handling and barley beta fiber does not appear elsewhere on the

National List.

In support of its review the Handling Subcommittee requested the development of a third party technical evaluation report, and that report was completed in 2012. Both the report and the petition were available to the public on the NOP Web site in advance of the opening of the public comment period for this meeting. Thanks.

MR. FOSTER: Thank you. So this material was petitioned to be put on 205.606 as an allowed non-organic ingredient. I won't go through the whole summary, but it's intent was as a nutritional supplement to add to dietary fiber. The reported unique qualities of this were a preferable balance between soluble and insoluble fiber, and the variety of barley from which this is derived is -- in the petition was identified as a unique variety not available in an organic form.

A review of what we could find in

the commercial stream confirmed that. In general, we identified that the evaluation criteria -- impact on humans and environment, we felt that that criteria was met. On essentiality and availability, in part because essentiality and availability are linked in a single criteria, the answer is actually yes and no. And then compatibility consistency, we felt on the whole it did meet that criteria. And again it seemed to meet the commercial supply criteria.

We confirmed through the classification motion unanimously that it was agricultural as petitioned, and on the listing motion the Handling Subcommittee voted seven yes and one abstention to list it on the National List.

Any clarifying questions at the moment on that?

Okay. Hearing none, I'd like to move onto sugar beet fiber.

Dr. Brines, would you be so kind?

DR. BRINES: Thank you, John. The petition for sugar beet fiber was submitted by Nordic Sugar on September 30th, 2009. The petition was revised February 7th, 2011 in response to additional questions from the Handling Subcommittee. The petition requests the addition of sugar beet fiber to Section 205.606 of the National List as an agricultural product, and sugar beet fiber does not appear elsewhere on the National List.

In support of its review, the Handling Subcommittee requested the development of a third party technical evaluation report, and that report was completed in 2012. Both the report and the petition were available on the NOP Web site in advance of the opening of the public comment period for this meeting. Thank you.

MEMBER FOSTER: Thank you. Like the barley beta fiber, the intent was to add this as a dietary supplement to increase the

fiber content of materials. It's a byproduct of the sugar manufacturing process. The primary concerns that we discussed were the manufacturing of sugar and its impact on the environment. The majority of the discussion focused around the likelihood of genetically engineered sugar beets getting into the supply chain in some way. We had a fair amount of discussion on that again summarized in the proposal.

In general we felt the criteria for evaluation criteria were met and we confirmed through vote to classify this as agricultural and the listing motion again on 205.606 were seven yes and one abstention.

Are there any clarifying questions at the moment?

All right. Moving onto the last of the substances up for vote this meeting, DBDMH. I'll try once -- actually no, Dr. Brines, would you be so kind to just pronounce this correctly as you introduce the material?

DR. BRINES: Sure. For the record, the petitioned substance is 1,3-Dibromo-5,5-Dimethylhydantoin, henceforth known as DBDMH.

The petition was received on February 9th, 2012 and was submitted by Alvamaro Corporation and the petition requests the addition of the substance to Section 205.605 of the National List as an anti-microbial. It is not currently listed elsewhere on the National List.

In support of its review the Handling Subcommittee did request the development of a third party technical evaluation report. That report was completed in 2012 and both the petition and the technical report were posted on the NOP Web site in advance of the opening of the public comment period for this meeting. Thank you.

MEMBER FOSTER: Thank you. The material DBDMH is widely used as a disinfectant in the rest of the world, in

drinking water, recreational water treatment, bleaching agent in paper and pulp manufacturing. It was petitioned here as an antimicrobial treatment for beef carcasses and beef parts. As Dr. Brine said, not recognized by other programs.

The Committee on the whole felt that none of the evaluation criteria were met. We classified this as synthetic seven yes and one was absent. And on the listing motion to add this to 205.605(b) the vote was seven no and one absent.

Are there any clarifying questions at the moment?

All right. Thank you. That's the last of the substances up for a vote. We have one more item on our agenda, and that is the auxiliary or other ingredients document. And I would ask Zea who headed up the discussion, the robust discussion on this to take it from here.

MEMBER SONNABEND: Thank you,

John. Well, Michelle is going to pull up or slides on other ingredients, the PowerPoint first and then the revised document.

Anyway, I will start with just a bit of discussion. I guess we were asked by the NOP originally about a year ago to take up this issue. We decided at our pre-meeting that we had on Monday afternoon no one likes the term other ingredients, and so we decided we're going to try out ancillary substances. And so all of these slides say ancillary substances, but just in case you forget what that means, they say other ingredients, too.

(Laughter.)

MEMBER SONNABEND: And we did not actually revise the original document to say that.

But anyway, we received 88 specific comments and then a whole bunch that I didn't count that were generally no synthetics in organics. Among the 88 specific comments there were 5 certifiers and the ACA

that represents certifiers, 9 companies; I mean production companies in that, OTA, the Trade Association and W,D,& A as the consultants, 4 NGOs and 67 individuals.

Unlike some other presentations, because each of these groups had pro and con and suggestions for wording changes -- and so I'm just going to give some general comments from them without singling out who said what, and then we're going to show a few revisions that we made to the recommendation, the proposed recommendations based on the people's comments.

Okay. As I mentioned, we developed the proposal in response to the NOP request. Certifiers in general were in support of this Program. The sense was that it balances consumer expectations with the paperwork burden and will allow more consistent decisions among the ACAs. A few of them had suggestions that we have addressed in our revisions to the proposal.

Okay. Several NGOs and individuals want an option D where everything is reviewed, and they claim this is required in OFPA. Our attitude is that we're responding to the NOP request and comments regarding what is legal in OFPA is really not our domain and that needs to be taken up by the NOP lawyers and perhaps your lawyers.

Our proposal clearly states that we are prepared to review ancillary substances. We're planning to do this to the best of our ability according to the criteria in OFPA. We are not proposing to put them individually on the National List. We're trying to balance the need for vigorous review of all the materials with the budgetary limitations of the NOP and being able to achieve technical reviews, write rules and implement sound and sensible procedures for the NOSB, as well as themselves and ACAs.

The checklist we used is in process of being revised to reflect this

proposal. An example of one of the questions on it, which comes from category 2, question 11, are there other ingredients associated with the substance that have been reviewed as part of the substance? Describe along with proposed limitations.

Other questions on the checklist will parallel the same OFPA criteria that we used for the main ingredients. Although some commenters want us to publish checklist questions for comment, we're not planning to do this directly, but we still start using it, this new checklist, for items on the next agenda so you will be able to comment in that context.

We acknowledge the concerns raised by two commenters about considering international norms in planning how to implement this review and we realize the details of the procedure will need some refinement and clarification as we start to use it. As they say, it seldom turns out the

way it does in the song.

This includes exactly what form the allowance information for ancillary substances will take, whether it will be an annotated or whether it will be a combination of annotation guidance or incorporated into a permitted substance list for handling in the future.

So we're going to now project our revised version of the document that will deal with some of the additional comments.

Okay. Now one factor I want everyone to be aware of is that the NOP is having some challenges incorporating a lot of annotations into the sunset process. They have brought up the possibility to us of starting the supplementary reviews on other ingredients especially for the big categorical things before the normal sunset because we do anticipate that this process of reviewing the other ingredients will add another six months or so to every review while we go out to the

community to find out what these other ingredients are and have them come in so we can review them all. And so we may consider taking up the supplementary reviews before the normal sunset so they can be spread out over time.

I feel it also necessary to point out to the Board and the public that this is our best proposal from the Handling Committee. If this doesn't pass, we're going to go back to the way things have been done in the past with the NOSB doing haphazard reviews, the ACAs making inconsistent interpretations of those reviews, and the NOP eventually deciding how this will be done in the future.

So our first change is on the baseline criteria, which is on page 5 of the proposal. We were unclear in point 4. Now a lot of people misinterpreted and thought that the baseline criteria in some way were review criteria, but the baseline criteria is just the starting point, and that's basically

everything. The starting point is everything as long as its allowed in food and not prohibited. So point 4 we've made the clarification change. It's required by the FDA to be on the ingredient label of the product to which the substance is being added.

Okay. Onto the policy. We have tried to strengthen the language by taking out a few terms like "if possible" in the last sentence of the third paragraph, and "try to," because we're not going to do just if possible. We're going to do it. We're going to incorporate restrictions. And we are going to distinguish between non-synthetic ones now that we have the classification of materials out. We had written this before that came out. And so this clarifies that we're going to do it according to the new classification of materials.

Now the procedure. A lot of commenters commented that this wasn't really clear whether this was NOSB review criteria or

was what ACAs and MROs, etcetera, had to follow. So we added a paragraph to clarify that point, that this procedure refers only to NOSB review, but not ACA procedures. It is anticipated that following adoption of this proposal the NOP will issue guidance for ACAs, MROs and handlers about their procedures in this matter.

We took heed of your comments and it was an unintentional leave-out that not just -- we would engender the public or enable the public and the industry to submit their other ingredients and not just ask ACAs for what other ingredients were, or petitioners. We do want this to be a level playing field so that not one brand name is favored over another, and so we plan to try and review the broad range of other ingredients. To that end we changed points 1 and 2 in the NOSB review portion to accommodate public comment and the industry on this.

Also, we took out some somewhat

vague language on point 8 and we replaced the clause "provided they are specifically acknowledged by the NOSB during review," because that doesn't have a very clear meaning, and we replaced it with "specific restrictions or prohibitions will be communicated in an annotation or an NOP guidance."

Okay. Moving down to the confidential business information section, we had written this before the last version of the CBI policy from the Materials Subcommittee. And so our intention was to refer to that, which was going to originally be a proposal but got turned into a discussion document rather late in the game. So we're changing this language and we perhaps weren't as clear as we could have been that our intention is that ingredients can never be kept confidential. All ingredients have to be disclosed and have to be reviewed. So the wording that we have now is "all other

ingredients;" although we may change that to "ancillary substances," "must be disclosed for purposes of NOSB review." All other issues around CBI will be covered by the NOSB recommendation on this subject once it is finalized.

Lastly, the portion that we called "Other Considerations," was not -- it was put there for things that we have to be aware of for the future, but not that we would vote as part of this policy or procedure, and therefore we just moved that whole section down to an appendix. And we will take that up, the whole -- about a separate section for cleaners and sanitizers and the like -- that will be taken up at some future date by this Committee is by no means endorsed or voted on as part of this recommendation.

So I think that summarizes our changes.

MEMBER FOSTER: Thank you, Zea. There was a lot of hard work for a long period

of time. Thank you very much for carrying that load.

Are there any clarifying questions at the moment? Again I expect a broader discussion after we hear public comment. Nick, go ahead.

MEMBER MARAVELL: Yes, Zea, thank you for running us through that. I have been hearing some concern that we may not be reviewing all these other ingredients or ancillary substances to the criteria that are specified in the Organic Foods Production Act. And I'm just going to say our policy says the NOSB intends to review other ingredients. We might want to just clarify for the purposes of the public that intends to review to OFPA standards other ingredients. That would be consistent with what we are saying here, is that correct?

MEMBER SONNABEND: I did say that and I plan to do my very best to take a look at all the OFPA criteria as we look at these

things, but it's up to each of us to do as much as we can in that regard.

MEMBER MARAVELL: And then I had another point of clarification where we refer to going out to the public to solicit additional information that maybe we're not aware of with regard to ancillary substances, or materials; I can't remember what they are, in the sunset process. And this may seem like a minor point, but if we get a petition, we will, you know, obviously put the petition out so the public has access to it, but we have not explicitly stated here that we would welcome -- and that's what I'm questioning for clarification -- we would welcome input from the public once a petition is received as to any substances that are not mentioned in the petition that they may be aware of that we should consider.

And the reason I'm raising this is we are not going to have a lot of flexibility with requesting technical reviews and if we

find another substance out there that's not in the petition substance but is a major issue, we'd like to have that in time for the technical review process. So I was wondering if that's something that might be accommodated within our procedures here.

MEMBER SONNABEND: We did say that in procedure point 1, NOSB 1, and 2, that we would talk to the industry and the public. What we didn't say is the exact mechanism for doing that, because that is still being worked out. What I anticipate though is when we get a petition in, the first meeting notice after the petition could call for other ingredients. That's something we're going to take up at the following meeting in six months. This is why I say it will probably add six months to most petitions. And then we have that time, and hopefully we'll have an open docket so people have a little time to submit these. But then it will be reviewed at the following meeting. We'll probably leave some things behind in the

first round, and we're going to have to have a plan B to deal with that, but this is starting somewhere and we're starting somewhere.

MEMBER MARAVELL: And then with regard to the NOSB may or may not stipulate in a review that any agricultural other ingredients must be organically produced, how does that work with our commercial availability general policy? Is that clear from this document?

MEMBER SONNABEND: That doesn't need to be clear from this proposal. That will be worked out in the course of looking at the ingredients compared to the commercial availability clause.

MEMBER FOSTER: All right. Thank you, Nick and Zea.

I think I saw Jay. Yes.

MEMBER FELDMAN: Thank you. Thank you. So, John, we will have more in-depth discussion on this later at some point?

MEMBER FOSTER: That's my intent, yes.

MEMBER FELDMAN: Okay. I just want to ask a general question for internal consistency purposes. When we're talking about CBI, we're talking about getting access to all ingredients so that we can review them and we can ensure disclosure. So do you feel like the document does the same thing for the public that enables the public to have access to what is reviewed and to have full disclosure of what is reviewed?

MEMBER SONNABEND: Yes, because they will be named on the checklist. Otherwise, ACAs are not going to be able to enforce to this and they will be in the TRs.

MEMBER FELDMAN: Okay. But both of those things you just mentioned are internal processes to the NOSB. So through the posting mechanism is how you see it being disclosed to the public? Okay. Thank you.

MEMBER FOSTER: Okay. Any

clarifying questions at the moment? Yes, Miles, please.

MR. McEVOY: Yes, I just wanted to clarify our thinking around the annotations in sunset, kind of add a little bit to that. There have been a number of annotation changes that have been recommended during the sunset process and we have found that that has been incredibly difficult to meet the deadlines, the time frames of sunset, when we're making annotation changes because it complicates the rulemaking process.

So what we're requesting is to move forward with these reviews and making recommendations about the annotation changes, but to have any rulemaking that we conduct to make annotation changes be separate some sunset so that we don't run into these very difficult deadline problems, and that the annotation changes could be made through a separate rulemaking process.

So we still want these ancillary

substances or other ingredients to be reviewed, and it could be potentially done during sunset, but the rulemaking we'd like to do separate if there's any annotation changes.

MEMBER FOSTER: Thank you, Miles. Other clarifying questions? Nick?

MEMBER MARAVELL: Miles, would that represent any change from what our existing policy and practice is? Aren't we already doing that in effect?

MR. McEVOY: Well, the sunset from the last round you made two recommendations, one for relisting as is and one for relisting with an annotation change if there was an annotation change. So you're asking if the future sunset review process will be different?

MEMBER MARAVELL: Yes. Or will it be a continuation of what we're doing?

MR. McEVOY: Your process will be the same, yes.

MEMBER MARAVELL: Okay.

MEMBER FOSTER: Was that the end of that clarification or -- I see people looking around as if they want more clarification.

MEMBER MARAVELL: I hope so. Does anyone else need more clarification? What I heard was that Miles said we're just going to continue to do what we've been doing.

MEMBER FOSTER: Okay.

MEMBER MARAVELL: No change.

MEMBER FOSTER: Excellent. All right. Then that I believe concludes the end of the introduction of the materials.

CHAIRMAN STONE: Thanks, John. And I guess the idea is that we'll have more debate, more conversations, excuse me, on each of these after we hear public comment so that we can include that as part of our deliberations.

So with that, I've got several signed up here to speak during the Handling session. Luis Monge. And Luis, please

correct me on that pronunciation of the last name. Theresa Frakes is on deck. So, Luis, come on up.

And just to remind, if you weren't here yesterday or you're just here today, there's a little stop light system. The green light is for three minutes. The yellow light for one. And when it goes red and the beep, we ask that you stop. And right now Terry Shistar is in the lead to win the prize for being the best on time public presenter.

MR. MONGE: Just for the record I'm colorblind.

(Laughter.)

MR. MONGE: That's true.

CHAIRMAN STONE: So when it goes --

MR. MONGE: So I'm going to assume that somebody's going to say stop. Okay?

CHAIRMAN STONE: When the one on your right gets brighter, then you can step away from the microphone.

MR. MONGE: Okay. Good morning. I bet most of you might be asking what is he doing here if there's nothing on the agenda related to bananas or pineapple? Well, that is exactly the reason I'm here today --

(Laughter.)

MR. MONGE: -- to remember that there is a new petition on -- to list gibberellic acid on 205.605 for post-harvesting organic bananas.

Two meetings ago the petition to include the gibberellic acid on 605 fail because we, the petitioners, could not prove that gibberellic acid was essential to organic bananas production.

Well, we submitted the new petition making a special emphasis on how essential gibberellic acid is to the sustainability of organic banana production. Months later we receive a letter from the Handling Committee asking for more information and we submitted the requested information.

I'm here today to ask the Handling Committee and the NOSB to include gibberellic acid on the agenda for the fall NOSB meeting in Kentucky. I just want to repeat one more time that gibberellic acid, a natural substance already allowed for crop use under 601, is a key tool that needs to be used by the organic banana growers to reduce the rejection of the fruit at the packing station and at the market. Please, Handling Committee and NOSB Members, include the gibberellic acid on the fall NOSB meeting agenda.

The other reason of my presence here today is to submit a brief report and update on what the organic banana industry in Latin America is doing in order to develop alternatives to rotenone for red rust control.

Remember last time in Rhode Island you set the date of January 1st, 2016 to include rotenone in 205.602 as prohibited natural? Well, we organize as the industry. We have had two meetings already. The first

meeting was held in Ecuador to set up the coordination group, and the second meeting was in fact a red rust summit held in Piura, Peru. We had the participation of NGOs, a university, local and national authorities from Ecuador and Peru, as well as growers, researchers and private corporations.

It was a three-day summit where all the parties shared their research results on banana red rust. We now have a group of representative from all the stakeholders working together towards a common goal; that is, to find real alternatives to red rust thrips control in organic bananas. We will keep submitting update reports on the upcoming NOSB meeting.

So thank you and see you in Kentucky.

CHAIRMAN STONE: Very good. Thank you, Luis. Questions for Luis?

All right. Thank you for being here. Oh, I'm sorry. Harold?

MEMBER AUSTIN: Luis, thanks for coming and giving us an update. Were you around yesterday at all? I saw you earlier, but I wasn't sure. Were you around for the discussions with tetracycline at all during the afternoon?

MR. MONGE: Not really, no.

MEMBER AUSTIN: Okay. And the reason I'm asking, very similar to the tree fruit growers, same type of a resolution, same type of, you know, annotation was made in Seattle in 2011 giving them the 2014 expiration date with the challenge to go out and do the research. Very typical, very similar to what the challenge has been given to the banana growers regarding rotenone, to go out, come back to us before that 2016 expiration date, showing us that you guys are making progress. It's nice to see that you're here and telling us that you're making progress. Thank you.

MR. MONGE: Great. It is always a

pleasure to see familiar faces.

MEMBER FELDMAN: Hey, Mac?

CHAIRMAN STONE: Yes?

MEMBER FELDMAN: Luis, I just want to let you know; it's good to see you again, that on these complicated issues we like to go on field trips, but we haven't got an invitation from you yet.

(Laughter.)

MR. MONGE: You're always welcome.

CHAIRMAN STONE: Maybe when the sequester is over we'll get down there.

(Laughter.)

CHAIRMAN STONE: All right. Thank you, Luis.

MR. MONGE: You're welcome.

CHAIRMAN STONE: I have Theresa Frakes. I didn't see any movement. Theresa? Very good. Sherry Sirkin is on deck.

MS. FRAKES: Hello, my name is Theresa Frakes. I'm a member of the Cornucopia Institute and I'm here today as a

citizen lobbyist.

Cornucopia agrees with the Handling Committee's recommendation to reject the petition for sulfuric acid. Sulfuric acid is classified as a group 1 carcinogen and is toxic to humans. It should not be added to the National List. We disagree with an industry consultant who commented that sulfuric acid should be added to the National List to allow the manufacturer of organic citric acid. That is a classic example of changing the regulations to change the definition of organics and we believe that is unacceptable. Sulfuric acid is a toxic synthetic substance. It is not compatible with organic principles.

Cornucopia also agrees with the Handling Subcommittee's recommendation to reject DBDMH. DBDMH is an antimicrobial chemical used in conventional slaughterhouses to control pathogenic bacteria such as E. coli. DBDMH fails every criterion for

inclusion on section 205.605. The EPA even considers DBDMH to be a pesticide.

The petition withheld important information from the NOSB, the technical reviewer and the public. The withheld confidential business information included an entire section titled "Effects on Human Health."

Alternatives exist including those discussed at length in the TR; peracetic acid, hot water washing, chlorine and hydrogen peroxide. The lack of publicly available safety testing data combined with strong indications that human health and environmental concerns exist renders this material a poster child of why U.S. consumers are switching to the organic label which mandates greater scrutiny of chemical inputs in food production.

Some of the answers on the decision tree should be corrected. We do not agree that the answer to the question are

there adverse effects on environment from manufacture use and disposal is no. It appears that DBDMH and its breakdown product hypobromous acid are both toxic to aquatic life. The only information regarding the environmental impacts of DBDMH comes from the petitioner. If anything, the environmental impacts are unknown and we do not believe the Handling Subcommittee has enough information to confidently state that no negative environmental effects exist.

The Handling Subcommittee also answered no to the question is there any harmful effect on human health. Multiple animal studies on DBDMH and its breakdown product hypobromous acid have shown effects on the reproductive and endocrine function. Again, the fact that the Handling Subcommittee does not know the answer to this question does not justify the assumption that the material is safe for human health.

Serious concerns exist about this

synthetic antimicrobial which is regulated as a pesticide by the EPA. Animal studies suggest its breakdown product may be an endocrine disrupter. Operating under the precautionary principle the NOSB should reject the petition to add DBDMH to the National List.

Thank you for considering our comments.

CHAIRMAN STONE: Thank you very much. Are there any questions for Ms. Frakes?

Thank you very much for being here.

Sherry Sirkin to the podium. Sherry? Okay. Thank you. And Charlotte Uris is on deck.

MS. SIRKIN: Morning. My name is Sherry Sirkin. I'm a member of the Cornucopia Institute and I'm here today as a citizen lobbyist, although I'm also a small farmer just 20 minutes east of here.

We urge you to reject the petition

for sugar beet fiber. Read some of the 1,300 public comments submitted to you through regulations.gov and it will confirm what public interest groups like Cornucopia repeat over and over to you. Organic integrity is important. Organic consumers feel very strongly that organic foods should contain organic ingredients. I know that seems like a no-brainer, yet the Handling Subcommittee voted unanimously to allow conventional sugar beet fiber in organic foods.

The petitioner, Nordic Sugar, confirmed in a written comment that the conventional sugar beet seed they use is treated with a pesticide that belongs to the neonicotinoid class, or neonics pesticides, are deadly to honeybees. In a front page story from the New York Times just a few weeks ago, March 29th, began as follows: "A mysterious malady that has been killing honeybees en masse for several years appears to have expanded drastically in the last year,

commercial beekeepers say, wiping out 40 or even 50 percent of the hives needed to pollinate many of the nation's fruits and vegetables."

The New York Times story goes on: "A conclusive explanation so far has escaped scientists studying the ailment, Colony Collapse Disorder, since it first surfaced around 2005, but beekeepers and some researchers say there is a growing evidence that a powerful new class of pesticides known as neonicotinoids incorporated into the plants themselves could be an important factor." And it seems to me every new day a study shows the connection between neonicotinoids and Colony Collapse Disorder.

And now they Handling Subcommittee recommends we add conventional sugar beet fiber to organic foods even with the full knowledge that conventional sugar beet is treated with a neonic pesticide. They're ignoring their legal responsibilities to

protect the environment under OFPA. For that reason alone the petition asking to allow conventional sugar beet fiber in organic foods should be rejected, and we hope unanimously.

There are dozens more reasons to reject the petition, and I'd like to speak about just two others. The petitioner may be in Europe where sugar beets are not currently genetically engineered because they don't allow it there, but if it is added to the National List, it will open the door for conventional sugar beet fiber sourced from anywhere in the world, including the U.S. And in the U.S., according to the USDA's own data, 95 percent of conventional sugar beets were genetically engineered in the 2009-2010 crop year.

Finally, this material is not essential to organic production. There is currently plenty of fiber in certified organic food and this is really just a gimmicky nutraceutical that is being petitioned in

order for multinational corporations to be able to make certain health and marketing claims on their label. Consumers who want more fiber in their diet can eat whole organic foods that are rich in fiber. Consumer survey data from various sources; the PCC Natural Market surveyed 1,500 organic shoppers, found that organic consumers expect the added nutrients in organic foods to be organic.

And finally, I'd like to add that I'm a grower of mostly vegetables here and I'm actually not certified organic because I direct sell every single vegetable that leaves our farm. I know the people who eat it. But when I go shopping as a consumer, I prefer to buy organic because I don't want to be a guinea pig and be part of the genetic engineering test. And I oppose genetic engineering strongly. And the one thing that I feel confident is that if I eat organic food, I'm not exposing myself to genetic engineering.

So thank you for considering our comments.

CHAIRMAN STONE: Thank you very much. Any questions from the Board?

All right. Thank you for taking time to be here. We appreciate it.

Charlotte Uris is to the podium and Goldie Caughlan on deck.

MS. URIS: Hello, my name is Charlotte Uris. A chemical exposure changed my life. I now have multiple synthetic chemical sensitivities and any additional chemical exposures could be harmful to me. People like me with sensitivities to the numerous synthetic chemicals that didn't exist for thousands of years of human history and life on earth are like the canary in the mine warning of danger. We have the same bodies as you do, as your children do, as your grandchildren do. Keeping organic food truly organic is necessary, marketable and moral.

I'm a member of the Cornucopia

Institute here today as a citizen lobbyist.

We urge you to reject the petition to add barley beta fiber to the National List. Barley beta fiber appears to be petitioned to serve as a marketing tool for organic processors to increase fiber content and justify an FDA-approved health claim on the food or beverage packaging. A Michael Pollan food rule is never buy a product that makes a health claim. Eat real food, he says. Organic consumers want real and organic food. Adding conventional barley beta fiber manufactured by Cargill to organic foods would be a marketing disaster for the organic label in general.

Organic consumers expect organic foods to contain only organic ingredients. There is some tolerance for synthetics that are truly essential, carefully reviewed for safety and for which no alternatives exist like sodium bicarbonate, baking soda, to make organic cookies. There's nothing essential or

even healthy about conventional barley beta fiber in organic foods.

PCC Natural Market's 2011 survey confirms that organic consumers do not want added nutrients in their organic foods unless they are derived from an organic source. Nearly two-thirds of respondents said they would not knowingly purchase organic foods with a conventional added nutrient. And one-quarter said they would be less inclined to purchase an organic product with a conventional added nutrient.

If you have any doubt whether organic consumers feel strongly that the organic products they buy should be trustworthy, truly organic, containing only organic ingredients, please read some of the 1,300 citizen comments submitted to you through regulations.gov.

Organic consumers buy organic foods to avoid GMOs, avoid pesticides and protect the environment from the toxins used

in conventional agriculture. Barley beta fiber is made from conventional barley. Toxic and environmentally damaging fumigants are likely used in storage. Methyl bromide, an ozone-depleting fumigant which is so environmentally disastrous it's being phased out, is still used to fumigate barley. Another fumigant, sulfuryl fluoride is a greenhouse gas 4,000 times more efficient at trapping heat than carbon dioxide. Ethanol is used in the processing of barley beta fiber and is likely derived from genetic engineering corn.

Cornucopia found that Cargill has identified a specific enzyme used in barley beta fiber production for which the patent states that the bacteria have been genetically engineered. Cargill is the sole manufacturer of barley beta fiber in the U.S. Cargill routinely uses genetic engineering. In fact, the corporation contributed a quarter million dollars to defeat proposition 37 in

California.

Barley beta fiber is entirely incompatible with organic principles. Organic consumers will lose confidence in the integrity of the organic label if this is allowed in organic foods endangering the organic industry. Please reject the petition.

Thank you for considering Cornucopia and my comments.

CHAIRMAN STONE: Thank you very much. Any questions from the Board? John?

MEMBER FOSTER: Excuse me, I have a question over here.

MS. URIS: Okay.

MEMBER FOSTER: How is this conventional ingredient different in any of the aspects than any of the other conventional ingredients on 205.606 currently?

MS. URIS: I don't understand all the technicalities, but basically a genetically modified enzyme is used to process the beta fiber, which is a conventional beta

fiber from conventional barley which should not even be in the organic product.

MEMBER FOSTER: So if that's the case; I don't know that that's the case, but if that's case, would it not be prohibited under other portions of the regulation?

MS. URIS: I didn't understand the question or quite hear it.

MEMBER FOSTER: If it's a genetic-engineered material, then it would be prohibited for other reasons.

MS. URIS: Well, I would think so, yes.

MEMBER FOSTER: I would hope so. I don't know that that's the case, but I think that there's other prohibitions that would keep that ingredient from being --

MS. URIS: This is based on the research of Cornucopia where they are saying that it's a patented genetic enzyme. I'll go back to exactly the way they describe it: It's a specific enzyme used in barley beta

fiber for which the patent states that the bacteria have been genetically engineered.

MEMBER FOSTER: So if that's the case, I'm thinking that that would be prohibited for other reasons, right?

MS. URIS: And are these reasons that you wouldn't be dealing with in this Committee? Is that what you're saying?

MEMBER FOSTER: Well, there's provisions in the regulation that prohibit the inclusion of genetic-engineered material.

MS. URIS: I just see all of these things as being relevant to the organic standards and that's why all of these things are being brought up in this particular testimony and hearing.

MEMBER FOSTER: Yes. Right. Is that the only distinction see as far as, you know, this being different than other materials on 606, or is that one of the unique qualities?

MS. URIS: Every one of the things

I've said are things that are of concern to me as an organic consumer. As I explained in the beginning, I'm very sensitive and I have actually had organic products that have had a significant negative impact on me, one, because of processing or even because of the storage. For example, organic apples. Some of them are stored. They might be organic apples, but if they're stored in the wrong kind of boxes and packaging to keep them from getting moldy or spoiling, they actually have a negative impact on me.

MEMBER FOSTER: I'm sorry to hear that.

MS. URIS: So all of what I'm saying is I really am like a canary in the mine.

MEMBER FOSTER: Yes.

MS. URIS: And when other people might just think, oh, this is a funny-tasting apple, you know, think about -- I had a brief moderate toxic load that totally changed my

life. With all of these synthetic chemicals that basically have come into our world since around the time of World War II, which are really new things, for most people it's more of a slow loading of the system. Some of the things can be cleared and some can't.

MEMBER FOSTER: Yes.

MS. URIS: I'm the canary in the mine. That's what I'm saying.

MEMBER FOSTER: Thank you. Just one more question. Are you aware of the 100 percent organic claim? Do you see that in the marketplace?

MS. URIS: I am. I think it's very complex to figure out what that really means, because there are things that say organic that you'd think by reading the label is organic.

MEMBER FOSTER: Thanks.

MS. URIS: -- you know? And I'm not just talking for myself. I'm concerned for other people besides myself.

MEMBER FOSTER: Thank you very --

MS. URIS: That's why I'm doing this testimony, too.

MEMBER FOSTER: Thank you. I appreciate it.

CHAIRMAN STONE: Thank you very much. Goldie Caughlan to the podium and Charlotte Vallaeys on deck.

MS. CAUGHLAN: Thank you. Yes, my name is Goldie Caughlan and I formerly served on this Board as well in 2001 until '06. I'm from Seattle, worked for nearly 30 years with PCC Natural Markets.

Regarding other ingredients, ancillary or otherwise, the Organic Foods Production Act, the USDA Organic Regs and previous USDA statements have all made it indisputably clear that all ingredients in an organic product must either be organically produced or appear on the National List. There is no distinction existing between ingredients and other ingredients. We urge

the NOSB to use the organic law and the regulations for setting policy regarding other ingredients.

OFPA states, unequivocally we believe, that every synthetic and non-organic ingredient must be listed for its specified purpose. For example, if rennet cannot be made without sodium benzoate, a currently unapproved synthetic, then sodium benzoate should be petitioned for the specific purpose of use in rennet.

The current practice of allowing ingredient suppliers to use any synthetic preservative, stabilizer or other ingredient and to justify this based on the fact that these suppliers are not certified organic handlers, is itself a violation of OFPA and should end. The success and continued growth of the organic industry absolutely depends in large part on consumer trust in the organic label. You've heard it frequently, not just from Cornucopia. And in turn, the success

would depend upon the NOSB, the USDA and the industry's combined adherence to the organic law and the regulations.

Without question, if organic consumers know that the organic products that they buy could contain unapproved ingredients such as polysorbate 80 or sodium benzoate and others and are processed with materials such as hexane and propylene glycol, then they would undoubtedly feel deceived, and rightfully so, and we will all be the ones who bear the results of that.

You've heard about the data from PCC. I don't need to say that again, but we must remind you again apparently that over 1,500 of our shoppers found that organic products containing an added nutrient with unapproved ancillary ingredients would not be purchased by an overwhelming majority of organic shoppers.

Since these other ingredients are not required, however, to be listed in the

ingredient lists of a processed food, most consumers likely don't realize -- in fact, I know that they don't from talking with them, which is what I spent a lot of time doing with consumers over that period of three decades. They know. They believe they can believe, and then there is the moment of surprise. They don't know that if they buy a product with algal oil, for example, that they're buying a product with glucose syrup solids possibly derived from genetically engineered corn, synthetic stabilizers and additional unapproved synthetic other ingredients. But those other ingredients do have to be listed.

CHAIRMAN STONE: All right. Thank you very much. Zea?

MEMBER SONNABEND: Thank you, Goldie. When you were on the NOSB did you bring up any of this testimony in reviewing petitions or to the Department about these other ingredients?

MS. CAUGHLAN: As you probably

will remember, Zea, during the final phase of the time that we spent on the Board just during the last part of 2005, as a matter of fact there was a great deal of discussion and concern about these issues and it was a very troubling time in many respects on the Board. And I don't need to go over that, but there were certain situations that made it much more so. I would say that we talked about these things exhaustively long and it was very confusing. And I think that we bear part of the problem, because I think perhaps some of the confusion started with that Board, our Board's decision.

I've spoken with some of the other members of the people that were on the Board at that time and we all, you know -- so the fact of the matter is we don't need nor want, and we certainly should not continue with the mistakes that well-meaning people dealing with the same kinds of very difficult issues that all of you are dealing with, doing your

darnedest to come up with decent answers. But it doesn't excuse us from the fact that right now we're faced with the fact that we will only add to the problem if we don't attempt; and I believe you are attempting, to make a situation where this will not go forward. But it's not a pleasant situation, as I'm sure you would agree. Thank you for your work on this.

CHAIRMAN STONE: Jay?

MEMBER FELDMAN: Thank you, Goldie, and thank you for all you have contributed to the organic movement --

MS. CAUGHLAN: Thank you.

MEMBER FELDMAN: -- both on the NOSB and at PCC. You know, we've been going through a lot of these issues where the Board is trying to grapple with consumer expectations and trying to review inputs, the inert ingredient issue, which I view as a similar parallel sort of situation, which the Board has committed itself to review those ingredients which have here to date been

inadequately reviewed, I would say. And so now we have and have had for a long time a similar situation with other ingredients.

So obviously there's a workload issue.

MS. CAUGHLAN: There is.

MEMBER FELDMAN: And there's a question of resources. And, you know, you heard the director of the Program earlier talking about the difficulties of annotation and, you know, which --

MS. CAUGHLAN: Right.

MEMBER FELDMAN: -- has been added as a function of our sunset review, or that authority, which I think is an important one.

What advice can you give to this Board as we grapple with this proposal and at the same time grapple with the OFPA standards and requirements, as you indicated? What advice can you give us in terms of creating a system that meets those standards, does not overwhelm the Board and the Program, ensures

integrity from a consumer perspective as organic continues to grow?

MS. CAUGHLAN: Thank you for asking. I will answer from my own perspective. A perspective that has been shared, I believe, by others that I have spoken with is that I think the Board is always, and increasingly so, under incredible pressure to respond and to do so at the behest of industry which comes to us constantly asking for more tools, understandably. And it's, if I can put it that way, almost a sense of imperative. We have to do this. We have to hear this. And we heard it yesterday in regard to several very serious issues, the constant pressure that you must perform, that you must give that which has been asked.

The reality is it is incumbent upon each of us when we sit in those sometimes very uncomfortable chairs for hours at a time that the fact is much of the individual public voice is not necessarily coming through with

the drum beat that is heard from industry itself.

And so the work of people like Cornucopia, which is not frequently viewed with acceptance or concern when it's -- by members of this Board I'm sure -- are looked at, I'm sure, as nitpickers, but they're attempting to bring to your attention to the fact that consumers' voice is very, very, very important. After all, if the consumers lose their confidence in the product, what do you have? What does industry then have? What do any of us have? None of us got into this originally with the intent to continuously have acrimony. I think the fact of the matter is the consumers are basically the end choosers, and I think that that has to be revisited frequently in our thoughts.

And I heard some rather disparaging kinds of comments yesterday. I don't think it was intentional, but in exasperation I heard some Board Members and

others feeling that consumers don't really know what they're talking about or don't really care, don't really understand. If they don't understand, then somebody with all the ability to market to those consumers better take a look at it. Are we telling people just enough or just what we think people want to hear, or are we leveling with people?

That's all. I'm sorry. I think that it's extremely important to realize that you have a very awesome task in front of you. You're not there just to serve industry, however. It is a partnership between the producer and the consumer and that consumer has to have an opportunity to truly influence or this is not going to work very long.

CHAIRMAN STONE: Thank you. It's great to hear from the heart. We listen closely when we hear that tone.

MS. CAUGHLAN: Thank you so much.

CHAIRMAN STONE: Thank you. Thank you very much.

CHAIRMAN STONE: Thank you. Charlotte Vallaeys to the podium and Allyson Kelly on deck.

MS. VALLAEYS: Hi, my name is Charlotte Vallaeys. I'm policy director at the Cornucopia Institute. I have two master's degrees, one in nutrition from Tufts and one from Harvard in ethics.

I'd like to urge many of us, you, to stop viewing and talking about organic consumers as if they're a nuisance, as if they're misinformed, irrational and therefore irrelevant. We've heard a lot of that over the last couple of days and hours.

It sounds a lot like conventional agribusiness. They don't think very highly of their customers either. But organics grew because consumers are interested, because they do care, because they are informed, and most importantly because they want clean, safe and responsibly-produced food, the same reason that people collectively spent $30 billion

last year on organic food to avoid the pesticides and the GMOs that the FDA and the EPA tells us are perfectly safe.

It's the same reason they're asking you now to remove antibiotics from organic production, to ensure sugar beet fiber and barley beta fiber; conventionally produced ingredients, don't make their way into organic foods and that all ingredients, including ingredients of ingredients, no matter how they got into the finished product and regardless of whether they're listed in the ingredients list -- that they be either organic or on the National List.

Organics is a vehicle for positive change. People who buy organic do so to support a food production system that does the right thing. This is very much about ethics. Nobody expects the organic apple industry to solve the global problem of resistance to critically important antibiotics, but consumers expect organics to be part of the

solution. They expect organic producers to do the right thing. And they certainly don't expect organics to be part of the problem, which in the case of antibiotics it is. Consumers feel betrayed when they are informed that the organic foods they were buying, that the organic seal that they trusted is not what they thought it was.

And organic consumers expect all ingredients to be either organic or on the National List. This is backed by solid consumer survey data. And no, OFPA does not state that consumer expectations are one of the criteria, but in this case the consumer expectation does not come out of nowhere. It comes from OFPA, which does not distinguish between ingredients and other ingredients and requires all ingredients to be either organic or on the National List.

So here's Cornucopia's recommendation, and it's a simple one: Follow the law. The organic industry needs to be

honest. Consumers are told that unreviewed synthetics do not end up in organic food, but they do as ingredients of ingredients that are because of faulty FDA labeling laws not listed in the ingredients list. They look to you to follow the law in this case.

The NOSB needs to do everything in its power to preserve consumer trust in the organic label. The organic industry needs consumer trust a lot more than a segment of apple producers need antibiotics. And yes, consumer trust is more important to all of us than the unreviewed and unapproved potentially harmful ingredients that end up in organic foods as ingredients of ingredients. Thank you.

CHAIRMAN STONE: Thank you, Charlotte. Any questions from the Board? Jay?

MEMBER FELDMAN: Thank you, Charlotte. I'm interested in the discussion that John had earlier with; I'm sorry, I

forget her name, the other witness on the fiber issue. There's a patent, and I guess the question that we would need to know is whether that is unique to this particular petition and the materials that are associated with the petition and how you would view the Board's responsibility in terms of evaluating the genetically engineered component of that as distinct from other inputs that might fall under the petition that would not be affected by a genetically engineered substrate or ingredient to the process.

MS. VALLAEYS: Well, I think in the case of barley beta fiber what our volunteer Cornucopia member said organic consumers said is it's about everything about this barley beta fiber, the fact that it is not essential. You can get fiber from whole foods. And I think that it does come as a shock to consumers when they find out that non-essential, in this case, marketing tools that are not organic, that are treated with

fumigants, with pesticides, in this case with GMO enzymes are added. And I mean we would, you know, certainly hope that the certifiers would look at the GMO enzymes, and if there are GMO enzymes, would not allow them. But in this case Cargill appears to be the only producer of barley beta fiber. And so it's one of the many components that contributes to our concern about this particular petition.

MEMBER FELDMAN: Have we faced this before? Have we faced this sort of question before where a material that's being petitioned appears to have an individual component that's essential to the production of that material or that substance known to be genetically engineered and we sort of say, well, we don't know? We're going to put on the List and let somebody figure out? I mean do you believe that to be the responsibility of the Board or the petitioner to ensure that we know whether there are other practices or other inputs that could fit under this new

listing that are not genetically engineered? I mean do we have that burden as a Board to know that?

MS. VALLAEYS: Well, you know, it comes back to the other ingredients discussion, which is what is the responsibility of the Board? And it fits very nicely, because that's in part why for the other ingredients issue we're saying it actually should not be the responsibility of the Board. It is the responsibility of the Board to put very specific single materials on the National List and then all the other ingredients and all the -- you know, since -- well, and process aids, but in this case since it's an excluded method, that the certifiers will look very closely at that. And if it does not fit the criteria and the law, that those would not be allowed into organic foods.

And the reason we bring this up here is because what we've discovered over the past couple of years -- in looking very

closely at some of the petition materials, we discovered this was not happening. So that is why we're bringing it up. It happened with DHA algal oil. We saw the petition before the Board and all of the other ingredients that were in an organic baby food, which was confirmed, were not in the petition, were not reviewed and the certifiers were letting it in. So that is why we're bringing up these issues now. And it is relatively recent, because it's something we discovered only a couple of years ago.

MEMBER FELDMAN: So just to be clear, in the absence of a policy like that, this Board has historically taken action to restrict some of the other ingredients. I mean we did that on DHA. We happened to focus in on one extractant, you know, hexane. But we could have limited the other ingredients. I mean we have done that in a limited fashion. I guess the question I have, given that there's a patent involved here and the

petition is reliant on that patented process; we know what that patented process is, do we have a duty to address that in an annotation or to address it when we're thinking about the overall material? Not to say that there aren't other issues that Board Members may want to consider in voting this up or down. I'm just focused on the GMO issue right now.

CHAIRMAN STONE: All right. Nick?

MEMBER MARAVELL: Yes, Charlotte, I'm referring now to our other ingredients policy that's been proposed here to the Board. I know we don't have two or three hours to sit and discuss it in detail, you and I right here in this venue, but I mean if you could say I've got two major concerns and this is what I would do to fix it, what might those be? You know, just briefly what is it that you feel would set the Board --

MS. VALLAEYS: Sure.

MEMBER MARAVELL: -- going in the best possible direction?

MS. VALLAEYS: Well, when the memo from the USDA was received in 2011, November 2011, it was to develop a policy. And so we don't think that putting more work on the Board to review all the other ingredients is necessarily the solution. It could be as easy as a policy that you as the Board are saying to the organic community, to certifiers, to industry, saying every ingredient, including ingredients of ingredients, including those that the consumer doesn't see, but that are on the spec sheets that certifiers see; that is, the certifier who makes sure that all those other ingredients are either organic or on the National List.

And that seems to be a very simple solution that would be very lawful, you know, following the law that would be simple for you as well. So you would be reviewing individual single substances. And then if manufacturers need other ingredients, that those be reviewed by the certifier. And obviously if we had it

our way, yes, the FDA labeling laws would change and the consumer would also be able to see those. But since that's not the case, we believe it is the job of the certifiers to make sure that everything that ends up in an organic food is organic or on the National List.

So the second thing; because you asked for two, is if a manufacturer of another ingredient says I absolutely need material X to make this ingredient, then they could petition that for the specific use in the ingredient that they need it for. And then again, it would be a very transparent process. Consumers would know, the public would know what's going into which foods, and then it would be reviewed according to OFPA's criteria again. So if they say I need material X, but it turns out that's harmful to human health, then it is up to the NOSB to review it and ensure the public that indeed what they are buying as organic, that everything in it has

been carefully reviewed and meets the legal criteria for being in organic food.

MEMBER MARAVELL: Let me just clarify. So you're saying in certain instances an additional petition -- that would represent something different than what is currently going on, that an additional petition would be required? Is that what you're saying? I'm not quite following. You're saying that an additional petition for something that we're calling an other ingredient may be called for?

MS. VALLAEYS: Right. So if there is a preservative that a manufacturer says they need for rennet or any of the other ingredients already on the National List, that they petition that, that they say I need this to make my rennet which is on the National List. And then they petition that. And then that material could be on the National List. And OFPA states that the National List should list materials for their specific use or

application. So then it could say for the specific use of rennet, but nothing else. And then it's up to you to decide.

MEMBER MARAVELL: And is it possible that the Board could have already decided broad classes of materials that are either prohibited or permitted with regard to rennet, and so that petition might not be necessary? Do you see that as a possibility?

MS. VALLAEYS: Are you saying that you review all the ingredients and put it in an annotation, for example?

MEMBER MARAVELL: Well, we might review classes of ingredients that we would say would meet OFPA standards unless there was some reason not to. Yes, I mean in other words do you perceive that that could occur, that the Board could review rennet and comment on major categories?

MS. VALLAEYS: So like synthetic preservatives you can --

MEMBER MARAVELL: Yes, we could

say for example no synthetic preservatives. I'm just making that up. Do you see that as a possibility?

MS. VALLAEYS: Well, there's a concern there when you start putting in the annotations, first of all, the concerns we've heard from the USDA, but our concern would be if there are prohibitions in an annotation, the danger there is that a petitioner tells the Board the ingredients, the other ingredients they're using. You review those and those get prohibited, which would open the door to a competitor which maybe uses something else. Since that has not been reviewed and they're not prohibited, those would then -- and it would not be a level playing field. It would put the petitioner at a competitive disadvantage and I'm sure that's the last anybody here wants to do.

MEMBER MARAVELL: No, that's another issue which is prohibited versus permitted. But, yes. Okay. I was just

exploring this with you. Thank you.

CHAIRMAN STONE: All right. Harold, if you'll wrap this up?

MEMBER AUSTIN: Hi, Charlotte.

MS. VALLAEYS: Hi.

MEMBER AUSTIN: In your comments you mentioned a little bit tetracycline; go figure, and the consumers. The consumers are definitely an intricate part of the organic community, and I think we all respect that. And I think we all know that those that are growers/producers, they can produce their little hearts out. And if there's not a consumer out there to eat the products of their labor, the fruits of their labor, it's all for naught.

But we're talking about an issue that is very passionate, very emotional on all sides of the equation where we have a group of stakeholders that are using a material that is actually on the National List. They've developed their livelihoods. They've

developed their farms, their practices as part of their process, not necessarily a basic fundamental, but as a tool that they can use to get from one point to another.

How do we move forward as an organic community to find a point of commonality to where we can support the various components of the organic industry and the stakeholders and I mean -- and that's from growers to retailers to the consumers ultimately themselves, to where we can not make the accusations and not make he said, she said, they said, we said, but a point of commonality to where we can agree to agree for the benefit of all and for most importantly for the organics to move forward? On an issue like this how do we move forward?

This is one of those ones where in 2011 there was a resolution, there was an expiration date, there was a challenge put forth to a group of stakeholders to go out and redefine their processes, to come back, show

that they're making progress to move away from that material. And I think there are strives to get there and I think all of the tree fruit growers anywhere that you talk to are going to be striving and are striving to get to that point so that the consumers can have full confidence that an antibiotic like tetracycline is not being used.

But in the interim how do we work together as a group of organic stakeholders on all spectrums to achieve that? What are your thoughts there?

MS. VALLAEYS: Well, I think for the antibiotics issue there's a lot of emotion definitely, but what bothers me sometimes is when the consumer groups are the ones that are accused of being emotional, of not being scientific, when we are basing our concerns on Dr. Morris, on the physicians, on the World Health Organization saying we need this particular antibiotic, and every time it is used in an agricultural setting we are risking

losing that. That's what we're basing our emotions on.

And then we have to -- the consumer groups, the Cornucopia -- have to listen to the producers who get up here and are also very emotional, are saying I'm going to watch all my trees die. How is that not emotional? So we're saying we are not irrational. Cornucopia is not -- we are science-based as much as -- well, we base everything that we say on sound science. And there can be different -- within science there are different viewpoints and different conclusions and there's absolutely no doubt about that.

But what we're going to base it on is the -- and this has happened before, on the independent scientists or on the scientists who have concerns to consumers. And so as a farmer group, because most of our members -- we have 8,000 members. Most of them are farmers. We do represent our members. And

when we did the survey and discovered that in fact there were lots of apple growers who were saying I don't use antibiotics. And we'll have a volunteer read some of those comments later today who are saying I am organic and I don't want organic to be part of this problem. I want organic consumers to be able to trust organics. And that is important.

And I think that that's more important than anything else. You cannot gamble with your customers, with your consumers because they are the ones spending $30 billion because they trust it. If you lose that, you lose everything. And I think that's serious and that's not something to be taken lightly. And that was my concern in my testimony, is that I feel it is kind of ridiculed. Consumers are important and we can't lose sight of that.

CHAIRMAN STONE: Thank you, Charlotte. Allyson Kelly to the podium and Troy Aykan on deck.

MS. KELLY: Hello, my name is Allyson Kelly. I'm the organic program manager for the Hain Celestial Group.

We wish to offer our support for the Handling Committee's proposal on other ingredients. We also support the excellent comments made on this topic by Gwendolyn Wyard of the Organic Trade Association.

As organic program manager, it is my responsibility to make sure that we maintain all of the documentation required for over 1,000 organic products and the thousands of ingredients that we use. We have a whole team of people who spend virtually all of their time obtaining documents from ingredient suppliers and new documents have to be obtained every 12 to 18 months, even if nothing has changed.

To add to that, at inspection time the inspectors want to see hard copies of all of this documentation, which I spend hours and days and weeks compiling and sending out to

more than two dozen of our certified facilities a year. We've killed more trees than Mount Saint Helens when it exploded and the ingredient suppliers are sick of filling out all of these documents. We welcome the recommendations by Mr. McEvoy encouraging sound and sensible practices that will hopefully lighten these paperwork requirements.

We use many ingredients that are on Section 605 and 606 of the National List. The companies that make these ingredients do about 99 percent of their business with conventional food companies. Because our order quantities are relatively small, one of our greatest challenges is sourcing ingredients that meet this National List criteria, such as non-GMO, no radiation, no sewage sludge and additional requirements described in the annotations.

The Handling Committee proposal describes the possible stipulation that

agricultural other ingredients be organically produced. We strongly urge the Board to not require that these incidental additives be organic. They are using extremely small quantities, therefore their use will not increase or organic production.

More importantly, many suppliers will not add inventories of organic ingredients that are used in such small quantities and they will create entirely separate products for the comparatively tiny organic trade. While we understand and support the desire to promote the use of organic ingredients, the majority of ingredients suppliers will not do it and this will make it even more difficult to source the ingredients that we need.

We would also like to make a comment on the Committee proposal that describes special questions to assess the role, essentiality and viability of alternatives to the other ingredients in a

substance. Before the Board makes any decisions regarding the role or essentiality of other ingredients or viable alternatives, we strongly request that during the review process, the Board should get input from all stakeholders, especially ingredient manufacturers. On the ingredient suppliers have the in-depth knowledge of their own manufacturing processes and the needs of their customers to do this assessment.

The comments I'm making do not require structural changes to the Committee proposal. They pertain to how the Board implements the policy. We strongly support the Committee proposal. The proposal is sound, thorough and practical and it provides for input from all stakeholders. Thank you.

CHAIRMAN STONE: Thank you, Allyson. Questions for Allyson? Thank you very much.

MS. KELLY: Thank you.

CHAIRMAN STONE: Troy Aykan to the

podium and Zareb Herman on deck.

MR. AYKAN: Okay. Good morning. My name is Troy Aykan. I'm a food scientist and a lawyer. I am legal counsel for the intellectual group for the regulatory and on my spare time I teach food laws and regulations at Cal Poly Pomona and Chapman University since 2002. I will also be teaching the same class at Chapman University School of Law later this year.

I will be addressing the Board on the topic of other ingredients. OFPA requires that other ingredients be evaluated as a part of the consideration of substances for inclusion on the National List. The law expressly states that the NOSB shall work with manufacturers of substances considered for inclusion on the proposed National List to obtain a complete list of ingredients and submit to NOP, along with the proposed National List listing or any proposed amendments to such list, the results of the

Board's evaluation and the evaluation of the Technical Advisory Panel of all substances considered for inclusion on the National List.

There is no mention of the word ingredient or single ingredient in the law governing National List or the NOSB. The OFPA does not require other ingredients to be separately listed on the National List. There is no requirement or restriction against use of other ingredients other than following the law which prescribes technical review, evaluations, public comments, voting and power to amend. Therefore, there's no requirement that other ingredients be petitioned separately in the law or regulations.

The other ingredients occur at insignificant levels in finished products and may be considered as incidental additives. Historically, other ingredients have been reviewed as a part of the technical reports and by the NOSB, and they are subject to public comments and NOSB vote.

We strongly support the current Handling Committee proposal. It's quite rigorous and it fully complies with the requirements of the OFPA and the regulations. Other ingredients will be reviewed as part of new petitions and they will be reviewed during the sunset review of all substances currently on the National List. This process is transparent and allows for input from all stakeholders. Therefore, petitions are totally unnecessary as well as totally impractical. It would be impossible to process petitions for every possible other ingredient. We urge the Board to approve the Handling Committee proposal. Thank you. Any questions, please?

CHAIRMAN STONE: Thank you. Questions? Thank you very much.

MR. AYKAN: Thank you.

CHAIRMAN STONE: Zareb to the podium and Trace Tipton on deck.

MR. HERMAN: Good morning. My

name is Zareb Herman. I am a nutritionist and food scientist with the Hain Celestial Group. I am here to support the Handling Committee proposal on other ingredients.

In the early 1970s my family grew organic apricots in Southern California. Back then, we didn't call crops organic, but we wanted to grow fruit the natural way without chemical pesticides. I've been involved in natural and organic foods for most of my life, managing a natural food store, doing research on citrus trees and for the last 21 years I've been doing R&D and regulatory for an organic food manufacturer.

Last month I was speaking with two former NOSB members at the Natural Products Expo in Anaheim, California. We were lamenting that until a few years ago NOSB meetings which much less polarized and more reasonable. People had differences of opinion, but we could generally compromise and work things out so the organic industry could

keep growing. It may be unrealistic in this age of politics, but I hope that we can return to this former approach, because after all we should all share the goal of increasing the use of organic foods and growing the industry.

This brings me to the Committee proposal on other ingredients. The proposal provides for a thorough review of other ingredients during the petition process and during each sunset review. If anyone objects to any ingredient, they can submit written and oral comments to their heart's desire.

This brings me to the suggestion by some that every single ancillary substance must go through the petition process. Do we really want to go through the petition process for every incidental additive? This process would take so long, we will all be dead or wish we were dead before it could happen.

And as stated by others, we do not have the resources to do it and it is unnecessary because the current proposal more

than allows for public comment and debate.

Let's look at the consequences of requiring petitions. Over 50 percent of organic sales are for processed organic foods. Almost all of these products require substances from the National List for their production and many of these substances require other ingredients. The petition process would get so bogged down that these other ingredients would never get approved and without them there will be no flavors, colors, enzymes, microorganisms, yeast, vitamins, minerals and many other substances. Without these substances, companies will not be able to manufacture most processed organic foods. The entire organic industry will be devastated and thousands of organic farms will likely revert to conventional agriculture resulting in increased use of chemical pesticides, herbicides and fertilizers.

For these reasons I strongly urge you to support the Committee proposal. Thank

you.

CHAIRMAN STONE: Thank you. Questions? All right. Thank you very much. Trace Tipton to the podium and, it will sound different when she says it because I say it slow, Lindsay Fernandez-Salvadore on deck.

MR. TIPTON: Good morning. My name is Trace Tipton. I do regulatory affairs for Suterra just over the hill here in Bend, Oregon. My comments are actually related to the review of other ingredients for crop inputs, not necessarily with the handling section of it, but I appreciate you giving me a couple minutes to present this. I have submitted written comments to the NOSB Board and NOP throughout the years and I've never had the chance to speak to you at this type of venue, but I thank you for coming to Oregon.

I'll be brief today. My comments are just about the replacement of the 7 CFR 205.601 exemptions for inerts that are currently based on the old U.S. EPA List 4,

and in the case of passive pheromone products, List 3 ingredients. The mechanics of the NOP exemptions are surely in need of an update as the U.S. EPA lists have not been updated for several years now.

To start I'd like to thank past and present NOSB and NOP decision makers for their level-headed treatment of pheromone-based products. From the earlier days with the use of pheromones just in insect/pest traps and monitoring lures and the integration of these with temperature records, degree-days, pest control models to today the use of pheromones in actual pest control products we have seen that the benefit has been tremendous. Anybody familiar with the pome fruit industry can attest to the benefits of disrupting the normal mating cycle of that proverbial worm in the apple, the codling moth.

These pest products have been available to organic growers for many years

based on the old EPA lists. In some cases the substances in question are things that are sitting all over the room here. Cellulose paper for your coffee cup, polyethylene materials for dispensers. Folks are drinking their morning coffee in cups and lids that are made out of these same materials. These materials do not contaminate organic crops, they do not leave harmful residues and they are completely compatible with organic farming practices. They're necessary for the economical application of pheromones in the field.

And during your upcoming deliberations about them, I'd only ask that you please keep in mind that many of them are ubiquitous in the world around us, have already undergone extensive EPA review in order to be placed on EPA's List 4 initially. And in the case of the List 3s for passive pheromone hand-applied products only, they simply do not come into significant contact

with organic materials when used according to their labeling.

The benefits of continued use of these other ingredients clearly outweigh any hazard or risk and the continued exemptions for them will allow organic growers to continue to benefit from the use of pheromone active ingredients in the field. Thank you.

CHAIRMAN STONE: Thank you for taking time to be here and submitting written comments and tracking our work so we can get your input. We appreciate that.

Question?

Very good. Thank you very much for taking time to be here.

So, Lindsay, if you'll state your name so they hear the non-Kentucky version, and we'll go from there.

MS. FERNANDEZ-SALVADORE: And accent, too. Good morning. My name is Lindsay Fernandez-Salvadore with OMRI.

(Laughter.)

MS. FERNANDEZ-SALVADORE: And I am the program director at OMRI. I really think today that my comments will be quick and painless in comparison to what you were hearing yesterday. I'm commenting on the proposal on ancillary substances, or formerly known as other ingredients. We are pleased with the changes made to the recommendation that Zea presented. For the most part they clarify the confusions that we had about the intent of the document.

We understand now that if the proposal is adopted by the full NOSB today that we should wait for further guidance from the NOP on how OMRI as a material review organization should proceed when reviewing processing ingredients that may contain ancillary substances. In the meantime, we will continue with our current procedure that we have established and published for the review of such ancillary substances.

Overall we find the recommendation

to be clear and the revised procedures will lead the NOSB through this complex subject in a structured, transparent manner. We will be happy to provide comments on ancillary substances as each 205.605 and 606 material comes onto the docket. And we will also look forward to bidding for the supplementary technical reviews. Yay.

And so thank you for your hard work on this proposal. See, painless?

CHAIRMAN STONE: Good. Great. Thanks. Question?

Great. Thank you very much. Thanks for all your --

MR. FELDMAN: I have a question. Sorry.

CHAIRMAN STONE: Oh, I'm sorry, Jay.

MEMBER FELDMAN: Thank you. Thank you, Lindsay. I'm trying to reconcile the role of the MROs with the role of the NOSB on this. I mean it was suggested earlier by

Charlotte that the certifiers play maybe more of role. I mean you're waiting for guidance from NOP, but how does that square with the Board's responsibility to ensure that the materials that are in certified organic products are in compliance with OFPA and are reviewed by the Board and put on the National List, or at least held to the National List criteria?

MS. FERNANDEZ-SALVADORE: It doesn't. I would say that there's two separate processes. So whatever you decide on today is one procedure, and I'm sure that will guide the NOP on their further guidance.

MEMBER FELDMAN: And what about Charlotte's point that if we create a negative annotation as opposed to an annotation that specifies allowed ingredients, if we were to go that route, that we're creating competitive disadvantage for the original petitioner so that new petitioners can come in with replacement ingredients that are not

prohibited by the annotation and fill that part of the market?

MS. FERNANDEZ-SALVADORE: I really can't comment on Charlotte's comments. I just can't answer that question. I'm sorry.

MEMBER FELDMAN: Well, what if I were to propose that we have a negative annotation? Could manufacturers come in and use that approved listing with other ingredients? Would you as an MRO allow other ingredients that were not specifically prohibited?

MS. FERNANDEZ-SALVADORE: If that was the guidance from the NOP, yes. But again, the NOP hasn't provided that guidance and I understand that this is not what we as an MRO are supposed to do with this proposal, that the NOP will provide that guidance.

MEMBER FELDMAN: Thank you.

MS. FERNANDEZ-SALVADORE: Thanks.

CHAIRMAN STONE: Thanks, Lindsay. Thanks for all your support for the organic

industry.

That concludes the public comment for the Handling Committee. We're just about 10 minutes behind. Not bad. We have a lot to do before lunch so that we have plenty of time for robust discussion after lunch, so be in your seats, Board Members and audience, please promptly at five after 10:00.

(Whereupon, the above-entitled matter went off the record at 9:55 a.m. and resumed at 10:09 a.m.)

CHAIRMAN STONE: Board's going to go back in session. So I think the Handling Committee is prepared to work through a discussion and vote on four materials, I believe, John?

MEMBER FOSTER: Yes.

CHAIRMAN STONE: And we plan to put ancillary substances to the after lunch session. So the motion or recommendation is on the table if anyone will -- John will get it up and I think Joe may be leading the first

one. And Michelle can put sulfuric acid up on the screen, please. So I'll turn to over to John.

MEMBER FOSTER: All right. Well, I guess it's my turn to figure out how to delay just a moment until Joe gets back.

All right. So we have the proposal up on the screen. We made no changes to it in the interim, but I do want to make sure we follow through on opportunities to have discussion beyond clarification on the material.

So you all heard the summary of proposed action on sulfuric acid.

MEMBER DICKSON: Was a motion made?

MEMBER FOSTER: A motion has not yet been made. I was hoping you might be able to do that.

MEMBER DICKSON: I would like to move to accept the Committee -- or, I'm sorry, we're classifying first. I move to classify

sulfuric acid as a synthetic substance.

MEMBER FOSTER: Is there a second?

MEMBER AUSTIN: I'll second that.

MEMBER FOSTER: Thank you, Harold. Before I ask for further discussion, I want to ask on materials what we want to do with declaration of interests. Anyone have a declaration of interest they'd like to make at the present time? Zea?

MEMBER SONNABEND: I do work for a certifier who may or may not in the future allow products with any materials that we vote onto the National List.

MEMBER FOSTER: Mac?

CHAIRMAN STONE: And just to be clear this is for each of these four materials, not just sulfuric acid. We'll get that on the table.

MEMBER SONNABEND: Not to mention other ingredients maybe in some of the certified products.

MEMBER FOSTER: Thank you for

mentioning that. Are there any other declarations that need to be made here?

I'll go ahead and say our company's farming operation doesn't use it, but I imagine at least one the suppliers we work with, it's likely someone would intend on using it.

Okay. That's it for declarations. So now do we have further discussion on the classification motion for sulfuric acid?

All right. Hearing none, then I think we can proceed to a vote.

CHAIRMAN STONE: Okay. The voting will begin with Carmella.

MEMBER BECK: Yes.

MEMBER SONNABEND: No.

MEMBER FELDMAN: This is the synthetic.

MEMBER SONNABEND: Oh, the synthetic? Sorry. Yes, synthetic.

MEMBER FELDMAN: Yes.

MEMBER RICHARDSON: Yes.

MEMBER DICKSON: Yes.
MEMBER FOSTER: Yes.
MEMBER WALKER: Yes.
MEMBER FULWIDER: Yes.
MEMBER AUSTIN: Yes.
MEMBER TAYLOR: Yes.
MEMBER MARAVELL: Yes.
MEMBER THICKE: Yes.
MEMBER BONDERA: Yes.
MEMBER FAVRE: Yes.
CHAIRMAN STONE: Chair votes yes.
MEMBER FOSTER: Thank you. Do we have a motion for listing of sulfuric acid?
MEMBER DICKSON: I move to accept the Committee's recommendation to add sulfuric acid to 205.605(b).
MEMBER FOSTER: Do we have a second?
MEMBER RICHARDSON: Second.
MEMBER FOSTER: Thank you, Jean. Further discussion?
CHAIRMAN STONE: Just to clarify,

Francis, remind you that the motions are always made in the positive.

MEMBER FOSTER: All right. Back to further discussion.

All right. Hearing none, then we proceed to vote.

CHAIRMAN STONE: Okay. The voting will begin with Zea.

MEMBER SONNABEND: No.

MEMBER FELDMAN: No.

MEMBER RICHARDSON: No.

MEMBER DICKSON: No.

MEMBER FOSTER: No.

MEMBER WALKER: No.

MEMBER FULWIDER: No.

MEMBER AUSTIN: No.

MEMBER TAYLOR: No.

MEMBER MARAVELL: No.

MEMBER THICKE: No.

MEMBER BONDERA: No.

MEMBER FAVRE: No.

MEMBER BECK: No.

CHAIRMAN STONE: No.

MEMBER FOSTER: How did we come out?

CHAIRMAN STONE: Vote was unanimous.

MEMBER WALKER: Yes.

MEMBER FOSTER: All right. Next item up is barley beta fiber. Michelle, could we have the proposal up?

All right. I will make a motion to classify barley beta fiber as petitioned as agricultural. Is there a second?

MEMBER RICHARDSON: Second.

MEMBER FOSTER: Thank you, Jean. Further discussion on barley beta fiber? Zea?

MEMBER SONNABEND: Okay. I'll start the discussion. I originally abstained on this coming out of Committee because I wanted to hear from the public comments that came in from manufacturers who felt that this was actually needed in organic products because I don't feel like I personally can

judge whether something is needed or not in an organic product. And so I have trouble with most of the 606 items.

The fact that we heard no companies submit testimony that they needed this in their organic product has made we decide to vote no on this material. Aside from other questions that I do have about its appropriateness and availability of other alternatives, it seems clear that there are other alternatives since nobody really requested it.

MEMBER FOSTER: Thank you, Zea. More discussion?

All right. Then I think we can proceed to vote then on the listing motion. I'm sorry, yes, on classification.

CHAIRMAN STONE: Voting will begin with Jay.

MEMBER FELDMAN: Yes.

MEMBER RICHARDSON: Yes.

MEMBER DICKSON: Yes.

MEMBER FOSTER: Yes.
MEMBER WALKER: Yes.
MEMBER FULWIDER: Yes.
MEMBER AUSTIN: Yes.
MEMBER TAYLOR: Yes.
MEMBER MARAVELL: Yes.
MEMBER THICKE: Yes.
MEMBER BONDERA: Yes.
MEMBER FAVRE: Yes.
MEMBER BECK: Yes.
MEMBER SONNABEND: Yes.
CHAIRMAN STONE: Chair votes yes. Vote was 15-0, unanimous.
MEMBER FOSTER: Moving on to a listing motion, I would move to list barley beta fiber as petitioned at 205.606. Is there --
MEMBER RICHARDSON: I second that.
MEMBER FOSTER: Oh, thank you, Jean. Further discussion on the listing motion?
Okay. Surprisingly, I guess to

me, no discussion. We'll proceed to vote then.

CHAIRMAN STONE: The voting to -- I'll just try to get a little more thorough in my delivery here.

MEMBER FOSTER: This is to list barley beta fiber as petitioned at 205.606.

CHAIRMAN STONE: Good. Voting will begin with Jean.

MEMBER RICHARDSON: No.

MEMBER DICKSON: No.

MEMBER FOSTER: Yes.

MEMBER WALKER: No.

MEMBER FULWIDER: No.

MEMBER AUSTIN: Yes.

MEMBER TAYLOR: No.

MEMBER MARAVELL: No.

MEMBER THICKE: No.

MEMBER BONDERA: No.

MEMBER FAVRE: No.

MEMBER BECK: Yes.

MEMBER SONNABEND: No.

MEMBER FELDMAN: No.

CHAIRMAN STONE: No. Three yes, twelve no. Motion fails.

MEMBER FOSTER: All right. Moving onto sugar beet fiber. Thank you, Michelle. First we'll do classification motion. I would move to classify sugar beet fiber as petitioned as agricultural.

MEMBER BONDERA: I'll second that.

CHAIRMAN STONE: Thank you, Colehour. Any discussion on the classification motion?

Seeing none, we can proceed to vote.

CHAIRMAN STONE: The voting will begin with Joe.

MEMBER DICKSON: Yes.

MEMBER FOSTER: Yes.

MEMBER WALKER: Yes.

MEMBER FULWIDER: Yes.

MEMBER AUSTIN: Yes.

MEMBER TAYLOR: Yes.

MEMBER MARAVELL: Yes.

MEMBER THICKE: Yes.

MEMBER BONDERA: Yes.

MEMBER FAVRE: Yes.

MEMBER BECK: Yes.

MEMBER SONNABEND: Yes.

MEMBER FELDMAN: Yes.

MEMBER RICHARDSON: Yes.

CHAIRMAN STONE: Yes. Fifteen yes, no nos.

MEMBER FOSTER: All right. We'll move onto the listing motion for sugar beet fiber. I would move to list sugar beet fiber as petitioned on 205.606. Is there a second?

MEMBER FAVRE: Second.

MEMBER FOSTER: Thank you. Further discussion on the listing motion? Zea?

MEMBER SONNABEND: The exact same comment I said for the barley beta fiber applies to this. I was curious to see if anyone really wanted this in their organic

products and so I abstained, but the comments came in that made it clear that there does not seem to be a demand for it. And there are some troubling issues that arise from approval of this, and so I have decided to vote no.

MEMBER FOSTER: More discussion on this item?

I would just ask could you get in what are the troubling issues, you know, that you just mentioned?

MEMBER SONNABEND: Yes. The fact that in order to assure that there's no GMOs it pretty much confines us to product only from Sweden, and I think that puts a real hardship on certifiers. You know, there's just no way that any domestic sugar beet fiber would not be potentially GMO, and so it's sort of favoring this one manufacturer. And there seem to be plenty of alternatives, or we would have heard from people about why this was the only type of fiber that they would possibly need.

So those are the two main factors, although considering, you know, if they find a way to grow sugar beets organically, then maybe it would be appropriate I guess, but otherwise no.

MEMBER FOSTER: Okay. Thank you. More discussion? Oh, Colehour?

MEMBER BONDERA: Thank you. You know, I don't serve on the Handling Committee, but in my review and reflection on the essentiality and the compatibility, I can't comfortably -- besides this whole relatively large GMO question in my mind, sorry, I have a difficult time supporting it even before or independent of the testimony.

MEMBER FOSTER: Thanks. All right. I just want to reiterate I do have faith in the certification system to make sure that if genetic engineering is involved it's going to be excluded. So I just want to get that out there. It sounds like there's some either confusion or doubt about that. I just

want to say I don't doubt that, so I have confidence in that system.

Also, perhaps this isn't the best example of it, but part of the discussion we had was around the use of agricultural byproducts, and I want to say that in this -- like I said, this may not be the best example of it, but in general I want to recognize that I think most of us, if not all of us in the Subcommittee, were wanting to at least recognize the value of trying to find uses for agricultural food and ag byproducts, and this is one. It may not be the best example, but in general we supported that and look for ways, you know, to find opportunities to use that.

So that was kind of the last item in the discussions that we had in the Subcommittee that I wanted to get out in this record.

All right. Any last tidbits?

Then we'll proceed to vote.

CHAIRMAN STONE: The voting begins with John.

MEMBER FOSTER: No.

MEMBER WALKER: No.

MEMBER FULWIDER: No.

MEMBER AUSTIN: No.

MEMBER TAYLOR: No.

MEMBER MARAVELL: No.

MEMBER THICKE: No.

MEMBER BONDERA: No.

MEMBER FAVRE: No.

MEMBER BECK: No.

MEMBER SONNABEND: No.

MEMBER FELDMAN: No.

MEMBER RICHARDSON: No.

MEMBER DICKSON: No.

CHAIRMAN STONE: And no. So all nos and zero yeses.

MEMBER FOSTER: All right. Last of the materials in front of us today on the Handling Committee is DBDMH. I'll go ahead with a classification motion. Move to

classify 1,3-Dibromo-5,5-Dimethylhydantoin as petitioned as synthetic.

MEMBER AUSTIN: Second that.

MEMBER FOSTER: Thank you, Harold. Any discussion on the classification motion?

Seeing none, then we can proceed to vote.

CHAIRMAN STONE: Voting begin with Calvin.

MEMBER WALKER: Yes.

MEMBER FULWIDER: Yes.

MEMBER AUSTIN: Yes.

MEMBER TAYLOR: Yes.

MEMBER MARAVELL: Yes.

MEMBER THICKE: Yes.

MEMBER BONDERA: Yes.

MEMBER FAVRE: Yes.

MEMBER BECK: Yes.

MEMBER SONNABEND: Yes.

MEMBER FELDMAN: Yes.

MEMBER RICHARDSON: Yes.

MEMBER DICKSON: Yes.

MEMBER FOSTER: Yes.

CHAIRMAN STONE: Yes. Unanimous yes.

MEMBER FOSTER: We'll move on to listing motion. I move to list 1,3-Dibromo-5,5-Dimethylhydantoin as petitioned on Section 205.605(b) of the National List. Is there a second?

MEMBER RICHARDSON: Second.

MEMBER FOSTER: Thank you, Jean. Further discussion on this?

All right. Then we can proceed to vote.

CHAIRMAN STONE: Voting begins with Wendy.

MEMBER FULWIDER: No.

MEMBER AUSTIN: No.

MEMBER TAYLOR: No.

MEMBER MARAVELL: No.

MEMBER THICKE: No.

MEMBER BONDERA: No.

MEMBER FAVRE: No.

MEMBER BECK: No.

MEMBER SONNABEND: No.

MEMBER FELDMAN: No.

MEMBER RICHARDSON: No.

MEMBER DICKSON: No.

MEMBER FOSTER: No.

MEMBER WALKER: No.

CHAIRMAN STONE: And no.

Unanimous, 15 nos. Motion fails.

MEMBER FOSTER: Moving onto last item on our Subcommittee agenda for this morning then is the ancillary substances-other ingredients proposal. Do we have a motion? Ah, my mistake. I think we were thinking about pushing off the voting to that in the afternoon.

MEMBER SONNABEND: Okay. I hadn't necessarily heard that. Why?

MEMBER FOSTER: My expectation based on the comments was that we would want further discussion. There's room on the agenda to first deliberate that. If we don't

need it, that's okay.

MEMBER SONNABEND: Don't you think we should discuss it now and then if things come up that we have to revise then push the vote back to this afternoon? Because if we don't discuss it now, we're going to be really, you know, starting over.

MEMBER FOSTER: Let's discuss it.

CHAIRMAN STONE: And right now we're about 30 minutes ahead of where we thought we might be, so I think we can spend a little time discussing.

MEMBER SONNABEND: And so to that end, John, I don't know if you want to put a motion on the floor before we start discussing it or not, but it's up to you.

MEMBER FOSTER: I think if we can do it, let's just do it in discussion. It could get muddier faster if we have a motion on the floor.

CHAIRMAN STONE: The Chair respects that.

MEMBER FOSTER: Excellent. So if you want to start the discussion, that would be great.

Would any of the other Board Members like to discuss the proposal in front of us? Nick?

MEMBER MARAVELL: Yes, I want to say that I think this is a very important issue and they've made a considerable amount of progress in addressing I'm going to just say other ingredients because I get too confused with what I'm reading and what we're saying, but I would like to suggest some clarifications and perhaps some shortening to our policy that I don't think is at all substantive and would make it easier for future boards to understand.

So in that light, and I'm going to ask Zea if she considers these quote/unquote "friendly." I would definitely like to add the words "reviewed to OFPA standards" just so that we don't have to answer that question

anymore. In the very beginning where it says "It will be our policy to review all other ingredients," I would -- I don't even know if I'm looking at the most recent version of it in my book, but the very first -- now I got to find it. Yes, right under the heading it says "Policy." The NOSB --

MEMBER SONNABEND: Okay. Could I just ask -- Michelle has it up and could you --

MEMBER MARAVELL: Sure.

MEMBER SONNABEND: -- point and --

MEMBER MARAVELL: On page 199 in my book at the very bottom there's the heading, subheading called "Policy." The very first sentence at the top of the screen, it says, "The NOSB intends to review," and I would add the words "to OFPA standards," "OFPA criteria." I would take anything that the Committee or the Board wants to put in there. "Other ingredients found, et cetera, et cetera." But I'm tired of answering the

question and I think that future Boards can see our intent very clearly there.

I'm going to make another --

MEMBER SONNABEND: Can --

MEMBER MARAVELL: Yes?

MEMBER SONNABEND: Can I just make sure Michelle has that change, because Michelle is going to have to keep the firm version of the document.

MEMBER MARAVELL: Okay. And then perhaps I should just ask, does anyone have a particular word they want to see there? OFPA standards? OFPA criteria? Do you want to cite the statute? I want it to be crystal clear. Does anyone have any thoughts on that?

CHAIRMAN STONE: Jay?

MEMBER FELDMAN: I would say "in accordance with OFPA criteria."

MEMBER MARAVELL: Okay. I'm fine with that. I just want to make it clear.

MEMBER SONNABEND: Okay. Michelle, adding "in accordance with OFPA

criteria" to the first sentence under "Policy" at the end, does that work for you?

MEMBER MARAVELL: Then a second concern that I have is -- just to shorten this a little bit would be to take the section that lists the categories we know are going to have a lot of other ingredients in it. And we're not really giving policy on that. We're just saying, hey, guys, we got to look at these. I would be willing to put that in an appendix just so we can sort of shorten our policy.

MEMBER SONNABEND: I'm not sure I'm following you, Nick. Can you tell us what page and where you want to add or take out language?

MEMBER MARAVELL: Okay. I'm sorry. Yes, I'm sorry. Okay. Page 201 in your book. "The following listings in 205.605 are classes of substances that are known to require the use of other ingredients." That's sort of a factual statement. "These are recommended for careful review during the

sunset period." We're going to do that. We're highlighting this for ourselves, future boards and to the Program, but I don't feel that we need to have that in our policy section. It could be in our appendix or move out of the policy. And I'm doing that in the interest -- I'm trying to have us focus on the most essential portions of the policy when we vote. I don't feel that this is a policy statement so much as it is just flagging things that we're going to be doing anyway.

So, but I'd love to hear from the rest of the Board on that.

CHAIRMAN STONE: Harold?

MEMBER AUSTIN: I'm going to take the other side of the equation on that one, Nick, and throw something at me if you totally disagree, but I think looking at the complexity of what we do and the processes that we all try to get engaged with, that I think something like this is stuck in there for the boards and the members that follow

behind us. Actually, I think it's a good component to have there just because it's there. I mean, as they read through this document, it's black and white. It's very visible to where they're not going to have to look some place else in the regs or the rules to find these. It puts it right there in plain sight. Just my thought.

MEMBER MARAVELL: Right. I don't feel strongly about this. I'm just saying it's not what I would consider to be high policy and if want to, you know -- and that it would still remain in this document. I'm not suggesting that it leave the document. That's all. It's a minor point. I'm trying to boil this down to if I have to explain this policy to stakeholders that I don't have to go through that list as part of the explanation. That's all. But, you know, so a minor point, but I'd love to hear yet additional comment if there is any.

CHAIRMAN STONE: To me it's under

the procedure, not policy. So there is a separate subheading there. Jean?

MEMBER RICHARDSON: Yes, I think I would leave it just where it is. It really illustrates what's being discussed in the policy and it is in the procedural section. And there's always a tendency for items that go into the appendices to be lost in the discussion, so I'd leave it where it is.

CHAIRMAN STONE: Zea?

MEMBER SONNABEND: Well, I just would like to ask Miles or the Department; I saw you mumbling over there between each other --

(Laughter.)

MEMBER SONNABEND: -- if you have a reaction to this.

MR. McEVOY: Yes, we were just discussing whether or not it was appropriate to be amending the proposal without a motion on the floor. So the proposal that was submitted by the Subcommittee for

consideration -- well, first there was the published proposal and then you amended that when you presented the proposal. Was that this morning? Boy, it all blends together after awhile.

(Laughter.)

MR. McEVOY: And so, we just want to be clear what you're doing here. And it sounds like you're discussing some changes. And if you're going to make those change to what you proposed this morning, then you have to clarify that when you finally get to the motion.

MEMBER SONNABEND: Well, the motion would be for the amended proposal, but I am no parliamentarian, so whoever wants to decide that, it's fine.

CHAIRMAN STONE: Yes, the fear here is we get into amending amendments and that type of thing, so I would like to modify the document and then approve as modified. But if we need to have a motion and second and

then we agree on one amendment, I think that would be the cleanest for the record.

MEMBER SONNABEND: Well, Nick's first amendment to add OFPA criteria, there was agreement. But this one I'm hearing some disagreement, so that would have to be a formal amendment then.

MEMBER MARAVELL: I don't consider any of these amendments. I'm just considering this discussion points for us to consider right now and sort of a forewarning that this could lead to an amendment of the document. And I agree totally with what Miles said, we are not amending this right now. We're showing the public what our deliberation process is. Is that okay?

MR. McEVOY: That's fine.

MEMBER MARAVELL: I would just like though to clarify then, are we seeing the policy section different in terms of its impact from the procedure section in terms of our recommendation? That's just a

clarification question. In other words, do they both carry the same weight? Because if they don't, then I've got other suggestions, because I think they both need to carry the same weight.

MEMBER FELDMAN: Yes, I agree they need to carry the same weight. I mean you're talking about transparency, right?

MEMBER MARAVELL: Absolutely.

MEMBER FELDMAN: So that when someone reads this policy, it's not in the background discussion. It is the policy.

MEMBER MARAVELL: Zea, how do you see it?

MEMBER SONNABEND: I don't understand. It's a recommendation. It carries the same impact, both parts of it. I guess I don't understand.

MEMBER MARAVELL: Okay. Well, it's just semantics then. I thought I heard something saying, well, it's not in the policy section, it's in the procedure section, and I

don't know if that made any difference that we're only adopting the policy and we're not adopting a procedures. But if it's all equal --

MEMBER SONNABEND: That wasn't me.

MEMBER MARAVELL: Yes, yes. If it's all equal, then, yes, that's fine. That's fine.

CHAIRMAN STONE: Is there other discussion, other clarifications that Board Members might have? Jay?

MEMBER FELDMAN: I'm trying to figure out the definition of other ingredients. Not being a part of the Committee makes it a little difficult, and as you know from our pre-meeting, I've been through this document several times. But you know, there's some reference to incidental ingredients as defined by FDA in the document. There's reference to processing aids. There are referenced ingredients within ingredients. There are references to single ingredients and

multiple ingredients. And at this point my head is a little spinning around. But is there a clear definition section that identifies exactly what we're talking about? Is everybody clear on that?

Because we have the section of base criteria and we have a section of other criteria, but do we need to start with base criteria that's defined under another statute, or do we need to start with all other ancillary ingredients that are used in the production of materials that are being petitioned? Why isn't it that simple? And when we talk about ancillary ingredients, why isn't it as simple as processing aids and other ingredients that are used for purposes of formulation for whatever reason?

I get a little worried when we start referencing FDA and GRAS and incidental ingredients because as you all know, as we've talked about in the past, the standards that govern those statutes or other statutes we

typically reference are -- not that we can't use them and incorporate them, but unless it's really clear that we independent of those statutes are defining the universe of ingredients, I feel may we may leave some out and then we have further problems down the road.

So am I missing something here? I have a few other questions.

CHAIRMAN STONE: John?

MEMBER FOSTER: I know in the past NOSB has been I believe directed by NOP to consider ingredient. I think it's pulled from the FDA definition of ingredient; any substance used in the preparation of an agricultural product that is still present in the final commercial product as consumed. And I kind of recall and I've been informed that's an accurate recollection is that there was some direction to do that. And that's consistent with the heading of 605.606 I think.

MEMBER FELDMAN: Could I ask you a question at this point?

MEMBER FOSTER: Sure.

MEMBER FELDMAN: I don't want to interrupt, but just is there anything in OFPA that talks about functional or technical effect as is referenced in FDA, FFDCA? And along the same lines is there anything in OFPA that talks about insignificant as is referenced in FFDCA? I mean the reason OFPA exists is because those other statutes were different.

I mean I don't want to denigrate those other statutes; they have valuable purpose, but the OFPA standard was intended to be somewhat different and create a market that differentiated itself from the conventional market. And if we fall back on conventional definitions of insignificant and functional technical effect, then how are we different? How is this organic label differentiated? and over time, you know, to me that becomes

problematic.

So you're citing FDA. And when you do that, please help me by explaining how that aligns with OFPA. That's what I was --

MS. FERNANDEZ-SALVADORE: Miles?

MR. McEVOY: Yes, I just wanted to clarify why we used the term "other ingredients." We purposely used that terminology of "other ingredients" because we didn't want to presume that the term "incidental additives" would be all inclusive. So what the intent of the memo from 2011 was that we want the Board to look at all of these ingredients within ingredients that are on we specifically said 605 so that they're all reviewed as part of the review process for any substance that's being considered to be on 605. So that's why we used that term "other ingredients." Because some of the things are not ingredients, right? They're other ingredients and processing aids, and processing aids are not ingredients. So we

want to be inclusive, not restrictive.

And then the other point is that if it's not included in the review and it's not on the National List, then the substance can't be allowed. So that's the purpose, is to drill down deeper into these sub-ingredients or ingredients within ingredients to have a clear policy, clear recommendations from the Board on those ancillary substances and this universe of things.

CHAIRMAN STONE: So does this definition do that? Does this cover that world or sphere of --

MR. McEVOY: So the question is whether the baseline criteria covers all those different permutations? Was that the --

CHAIRMAN STONE: And item 1 through 4. Yes, that's the question.

MR. McEVOY: Well, I'd say we're not exactly sure because we haven't analyzed that in great detail, but it would be a starting place of the universe of things that

are allowed in foods, because they have to meet these baseline criteria to be allowed in foods in the first place.

CHAIRMAN STONE: So this is a recommendation and you hear our intent associated with the recommendation. So at this point when we -- be sure we're covered here, Jay, that it's their job if it's lacking in some way. They have the responsibility to let us know that. Zea?

MEMBER SONNABEND: In my perception the definition of ancillary substances is the baseline criteria as a starting place and then the five bullet points where it says "Other ingredients have the following characteristics," because just the baseline criteria by themselves is everything allowed in food whether it's a main ingredient or not an ingredient. But to distinguish between those things which we're calling ancillary and those things which are main ingredients are the bullet points, and all of

the bullet points characterize what constitutes something being called ancillary.

MEMBER FELDMAN: Does that include processing aids?

MEMBER SONNABEND: Yes.

MEMBER FELDMAN: That do not have a functional or technical effect?

MEMBER SONNABEND: Yes. Well, it includes ancillary substances within a processing aid that's on the National List. It doesn't include processing aids that were used to produce the other ingredients, because you can't even find that out.

CHAIRMAN STONE: Because they're no longer in the product.

MEMBER SONNABEND: They're no longer in the product and they're not on the label as an ingredient of the other ingredient.

(Laughter.)

MEMBER FELDMAN: I got that one, I think.

(Laughter.)

CHAIRMAN STONE: Jay?

MEMBER FELDMAN: Just another question is are we distinguishing here between who actually is doing the processing? So if I'm a certified handler and I'm doing the processing, am I held to a different standard than a non-certified handler who is doing the processing?

MEMBER SONNABEND: Of what?

MEMBER FELDMAN: Of the other ingredient, or of the ingredient that is utilizing other ingredients in formulating its end product. There's no distinction here between certified handlers and non-certified handlers, processors, that there was a reference here to certified handlers.

MEMBER SONNABEND: I still don't get it.

MEMBER FOSTER: No, I'm with Zea on this one. It's not clear to me.

MEMBER FELDMAN: Is there such a

thing as certified handlers?

MEMBER FOSTER: Yes.

MEMBER FELDMAN: Processors?

MEMBER FOSTER: Yes.

MEMBER FELDMAN: Is there such a thing as non-certified handlers?

MEMBER FOSTER: Yes.

MEMBER FELDMAN: Okay. Do products from both those sources end up in organic food?

MEMBER FOSTER: Sometimes.

MEMBER FELDMAN: Yes. Yes?

MEMBER FOSTER: Sometimes yes.

MEMBER FELDMAN: Yes or no? Sometimes yes? Okay. Under this proposal are the materials that end up in organic food, certified food held to a different standard of review when it comes to other ingredients if it goes through the channel of certified handler or if it goes through the channel of non-certified handler?

MEMBER SONNABEND: Okay.

MEMBER FELDMAN: That's the question. Sorry, I -- this is out of my world.

MR. McEVOY: This is --

MEMBER SONNABEND: Okay.

MR. McEVOY: Can I answer that?

MEMBER SONNABEND: Miles, yes.

MR. McEVOY: So any certified organic handler goes through the same process of verification that the final product meets the requirements. And so if it's an organic product --

MEMBER FELDMAN: Right.

MR. McEVOY: -- all the agricultural ingredients have to be organic and verified that they are certified under the requirements, unless it's a 606 material, and then they could potentially use a non-organic 606 material if they have evidence that it's not commercially available in organic form.

If it's a 605 material, then they can use that in their formulation. It has to

be verified that it meets the requirements. You know, those 605 materials are by definition non-agricultural and so they would not be coming from a certified organic source because they're not an agricultural input. So they're not coming from a certified organic handler. They're just coming from some supplier.

And the certifier needs to verify that those 605 materials meet the requirements. Just like on a farm any inputs that are used in farm production, they need to be reviewed and determined that they meet the requirements, that they're either non-synthetic or that they're a synthetic that's on 601. So it's sort of the same review process. So we don't have certified organic fertilizer manufacturers, just like we don't have certified organic suppliers of 605 materials. But there's still a verification process to verify that all those inputs meet the requirements.

MEMBER FELDMAN: And so under this policy those inputs -- presumably some could be other ingredients, right, would be reviewed or held to the OFPA standards?

MR. McEVOY: All inputs are reviewed. All ingredients are reviewed. So whatever the requirements are that are under 605, including any annotations, the certifier has to verify that those requirements are being met.

MEMBER FELDMAN: Including the other ingredients?

MR. McEVOY: If there are annotations that reference other ingredients, then yes.

MEMBER FELDMAN: Annotations in the rule?

MR. McEVOY: Right.

MEMBER FELDMAN: On the National List?

MR. McEVOY: Right, so there are some 605 materials that have annotations and

that is part of the process that the certifier goes to to verify that those substances --

MEMBER FELDMAN: So you're talking about current policy?

MR. McEVOY: Correct.

MEMBER FELDMAN: If it's not in the annotation, it would not be reviewed by the certifier currently?

MR. McEVOY: Okay.

(Laughter.)

MEMBER SONNABEND: It's haphazard.

MR. McEVOY: Yes, it's haphazard. That's why we're asking for this policy from the Board.

MEMBER FELDMAN: Right, but I'm just trying to get the current situation.

MR. McEVOY: Right.

MEMBER FELDMAN: So then to make sure we fix that, this policy is intended to fix the haphazardness of that problem?

MR. McEVOY: Exactly.

MEMBER FELDMAN: Okay. Okay.

Thank you.

CHAIRMAN STONE: You good?

MEMBER FELDMAN: I'm going to take a break.

(Laughter.)

CHAIRMAN STONE: All right. Anybody else? Nick?

MEMBER MARAVELL: Yes, it looks like we're the only fools here.

Okay. I need to seek some clarification here in terms of -- we have a section in this paper called "Recommendation." We have another section called "Discussion." Under "Discussion" we define other ingredients and we define baseline criteria. Am I to understand that the discussion portion carries the same weight as the recommendation portion? If that's correct, I am definitely going to make a proposal that we change "discussion" to -- start "recommendation" further up. I think it needs to be very, very clear what we are recommending here.

And then, so I'll entertain any discussion on that and then I want to go back to the five points.

CHAIRMAN STONE: So it's my thought that the -- and I'll ask the Program in a second, but this whole document is our recommendation, not just the paragraphs under the title "Recommendation." Certainly we could move the term "recommendation" back up the document to be inclusive if it's necessary. I would think not, but I'll defer to the Program.

MR. McEVOY: Yes, if you pass a final recommendation, the whole document becomes part of your final recommendation. So in your final recommendations you usually have a section that you call the recommendation, but it's in the context of the full final recommendation. So it's all part of the record that we would then utilize to implement any kind of either rulemaking or guidance that would need to happen. So the whole thing is

the recommendation.

CHAIRMAN STONE: And I would add that certifiers, when they look back at recommendations and TRs and petitions, the whole document is a reference document, not just that section.

Did you have something else, Nick?

MEMBER MARAVELL: Yes, and this follows on Jay's previous discussion. Hello, Jay. Wake up. One of the five bullet points is they are not added directly by the certified handler. So I think Zea can explain why that's an important provision to have there, but it's somewhat of a confusing issue, unless I'm the only one confused. Does anyone else want that one explained?

CHAIRMAN STONE: It's my understanding that if it's added directly, then it goes on the ingredient panel, and this is to address those that are not on the ingredient panel.

MEMBER MARAVELL: And does the

words "by the certified handler" make a difference? Why do we have to say by a certified handler?

CHAIRMAN STONE: Because they're the ones that verify that these other ingredients have been reviewed at some point in the process already, and that's partly what we're cleaning up. But we have authority -- the certified handler has a requirement under the regulation to do that, whereas to Jay's point I think was if it's not a certified handler, then they're outside of our purview. And this gets into our purview. That's the purpose of that.

MEMBER MARAVELL: Well, I'm going back to Jay's point under 605; I assume not under 606, but it could be, that there could be materials, other ingredients coming from non-certified handlers. Does that make a difference and is there any way in which that could cloud our transparency in reviewing all of the materials and perhaps not recognize a

material that we would otherwise not want to see in a final product?

CHAIRMAN STONE: If I understand your question right, that's what we're trying to do here. And this says that.

MEMBER MARAVELL: Well, that's what I'm questioning, whether that says that. You know, it may. And I'm showing my ignorance here, but I'm, you know --

CHAIRMAN STONE: Well, you can stop any time, if you want?

MEMBER MARAVELL: Well, yes.

(Laughter.)

MEMBER MARAVELL: Thank you, Mr. Chair.

MEMBER BONDERA: No, I think I had that question too of whether or not the word "certified" needed to be struck. Modify that or not.

MEMBER SONNABEND: Why would a non-certified handler go through all this trouble to sourcing stuff with -- look at

other ingredients? Certified handlers are the end users of the results of this recommendation, and so they're the ones who are making their recipes and what they add for -- you know, what is added directly by them is a thing like an enzyme or a vitamin or a dairy culture, and that's what they're adding directly. Those are ingredients. But they don't know in all cases that they're also adding growth media, preservatives, whatever. Those are the things we're going to review.

CHAIRMAN STONE: Yes, Jay?

MEMBER FELDMAN: Just for the laypeople, the confusion comes in that we know that we're accepting other ingredients into food, processed food that we label organic, and the organic consumer expects that there's been some degree of review. So if we know that's going on, we have to have some type of methodology to assess whether the non-certified handler whose product we end up buying and utilizing in the processing of a

certified product -- that that non-certified handler, whether he wants to be in the organic stream of commerce or not, regardless of what the intent is, his product or her product is ending up in the final certified organic product. And our consumers want to know that that has been subject to some review.

So if this does that, that's fine. But if it doesn't, then we need to -- just even a parentheses, you know, that -- and in a case where applicable, a non-certified -- you know, I mean --

CHAIRMAN STONE: John?

MEMBER FOSTER: So in the main those ingredients have had that scrutiny. That's it. I can't even tell you the thousands of hours I spent reviewing ingredients that certified operators were putting into formulated products. Thousands and thousands of hours. In the main that's been happening in accordance with the regulations.

What I think we're talking about here is refining that, drilling down more. But I don't want it to go out there that that hasn't been done. That has been, the vast majority. It's been a little inconsistent. Like any new regulation there's going to be inconsistencies. I think we're just trying to, you know, refine that a little bit more. But don't anyone mistake the fact that in the main since 2002 this has been happening. We're just getting better at it with this.

CHAIRMAN STONE: So like Flavor says, without synthetic solvents some of these have some clarifying annotations and some don't. And that's what we're driving for. But certifiers look at the regulations. They look at recommendations. They look at TRs and see what was in the TR. We defined it with DHA and ARA. And in others it wasn't because we don't do brand names. So this is a refinement to do exactly what you're concerned about. And the language I think says that.

MEMBER FELDMAN: And I realize that and I appreciate the work that you guys have done on this. This is an incredibly important area and I think the consumers will appreciate this. What I think may be helpful as we move this forward is to identify in the document where we think more work is needed, where we think more Board work is needed. I'm very uncomfortable handing over authority to, you know, parties outside this Board without adequate, you know, assurance that there's compliance with the underlying OFPA standards and the process.

And I said it earlier and we didn't have a chance to discuss it, but just the use of the word "insignificant" is extremely troubling to me having worked in chemical regulation for 30 years and having seen us go through classical toxicological reviews to inverse dose response curves with exposure to endocrine disrupters where we didn't conceive of this years ago where dose

no longer makes a poison but timing can affect the life of an organism from its fetal stage through the rest of its life. And we organic are on the cutting edge of that.

So to throw in terms like "insignificant" is very troubling to me. And we've discussed this before as a Board. We discussed this in Seattle in 2011. If that term is going to be used in a document like this, we really have to acknowledge as a Board that we need to work on defining it.

CHAIRMAN STONE: I can appreciate that. The way I read these bullets under other ingredients, we're specifically stating that items that are present in food at an insignificant level have no technical function of food are on the list of things to be considered as other ingredients, not excluded from. Zea?

MEMBER SONNABEND: This is the definition simply of what we're going to review. Then when we review them you can

decide if it's significant or functional or not. But this is just the definition of what constitutes another ingredient. And it has to be all of these things together, not just any one of them to constitute the definition. And then we're going to, you know, look at how much is -- you know or the relative proportions or whatever. And then you can decide as a Board Member if it's insignificant or not.

CHAIRMAN STONE: Nick?

MEMBER MARAVELL: So, Zea, if we said "other ingredients must have the following characteristics," would that still be a correct statement? Do we want them to have all those characteristics? They have to meet every --

MEMBER SONNABEND: That's regulatory language, not definition language. I mean we're defining. They have the following characteristic.

MEMBER MARAVELL: Well definitions

need to be somewhat precise if I'm going to vote to recommend them. I mean I need to know -- well, just let me know, would that be an inappropriate thing to say, they must have the following characteristics? They must have all of the following characteristics? I mean I'm literally trying to understand, Zea. I'm not trying to be critical here.

CHAIRMAN STONE: I don't see that that changes anything, but --

MEMBER SONNABEND: I don't see it as being a worthwhile change, no.

MEMBER MARAVELL: I don't see that as an answer to my question either.

CHAIRMAN STONE: Miles?

MR. McEVOY: Yes, if you change it to "must have the following characteristics," you're going to limit what you're going to be able to review. You don't want to limit what you want to include in this category, I don't think. I don't think that's what I've heard from the Subcommittee.

MEMBER FELDMAN: But you could always use language like "must have but is not limited to."

MR. McEVOY: You could do that.

CHAIRMAN STONE: If that helps, I'm certainly -- be able -- Jean?

MEMBER RICHARDSON: To my way of looking at it, the way it's phrased right now is the correct way. It remains broad enough to allow all the other ingredients to be included in the pot. And that if we start fiddling around with the language, we're just going to make it more complicated than it need to be. So I think we should just leave it the way it is. "Other ingredients have the following characteristics."

CHAIRMAN STONE: Tracy?

MEMBER FAVRE: Nick, explain to me your concerns about it just saying "have the following ingredients?"

MEMBER MARAVELL: It's not so much that I have a concern. I'm trying to

understand it. And if you bear with me, I used to draft regulations for a living, so these things do make a difference. As Miles has pointed out, he doesn't want to be limited and we don't want to send the wrong message. I'm just trying to understand. And as I said, I'm going to show my ignorance here. I am trying to understand.

CHAIRMAN STONE: Any other? Colehour, did you have your hand up?

MEMBER BONDERA: Yes, I don't know. I mean I could say in this discussion that when Zea was commenting on it and she did say it must have these following characteristics that are on that list, I was like, whoa, okay, it didn't say that when I had first read it. And so it made me do a double take to understand it. So I think that -- from my perspective it would add clarity, because that was a presumption. And then I think it would just make it more defined.

CHAIRMAN STONE: Jay?

MEMBER FELDMAN: Miles, I need to go back to something you said, and I wrote it down here. And this may be under the current policy. Maybe this is what we're trying to address. "If it's not included in the review and it's not on the National List, then it's not allowed." Aren't we trying to get around that somehow possibly with this policy, that we're trying to figure out another mechanism to ensure its review, ensure the public that it has been subject to review of OFPA standards, but not necessarily put it on the List? That's my sense of what I'm hearing about the end result of this policy.

CHAIRMAN STONE: Miles?

MR. McEVOY: Okay. So everything that's an input or ingredient has to be in compliance with the regulations, and there's various criteria for that depending upon what part of the agricultural system you're looking at. Crops and livestock is different than handling. We spelled that out in the memo on

this topic back in 2011.

For crops and livestock, especially for crops, it's very clear on what ingredients and ingredients within ingredients are allowed and not allowed. For livestock it's very good, not quite as good as crops, but it's very clear on the ingredients and ingredients within ingredients. The excipients is very clear. And we tried to clarify that in our final guidance on livestock feed supplements just recently.

For handling, as we mentioned in 2011, it hasn't been systematically looked at by the Board. It's been various levels of review for the various substances on 605. There is some guidance that the Board does provide in their review and the technical reports, and certifiers use that. And certifiers ensure that everything that is in a processed organic product is compliant with the regulations. What we're looking for is drilling down a little deeper into that area

to provide consistency on those ancillary substances-other ingredients in 605 and now 606 materials.

So from the way that we see this proposal, it's trying to then provide that structure and policy of how the Board would approach this larger issue of these other ingredients.

MEMBER FELDMAN: But are you saying that at the end of the day when all of this is done and reviewed to -- in a perfect world, I mean do we need to put these materials that have been reviewed on the National List, or can there be some other mechanism that meets the standard?

MR. McEVOY: Right, any input in a processed organic product has to be either an organic agricultural ingredient or it has to be on the National List. Right. So there's various ways that that can happen. So you can have individual ingredients, individual materials on the National List or you can have

categories. So it all depends on how the Board approaches this in the future. For instance, for crops you have List 3 and List 4 inerts.

MEMBER FELDMAN: Right.

MR. McEVOY: So you don't have individual ingredients. You have groups of substances.

MEMBER FELDMAN: Right.

MR. McEVOY: For livestock you have excipients. That's a group of substances. And some of the other materials are enzymes. That's a group of substances. It's not an individual enzyme-by-enzyme-type of thing. I would think that that would be the way that the Board would continue to look at listing substances as by categories. The inerts project, you're looking at categories of groups of substances.

MEMBER FELDMAN: Okay.

MR. McEVOY: So they're still on the National List. There's still that

regulatory basis for allowing it, but it might not be as individual as an individual CAS number.

CHAIRMAN STONE: Okay. So I'm going to bit of a time check here. I think we can have -- over lunch we can have more discussion, get more comfort, Nick, with those of you, the crafters of the recommendation. Before I just stop, are there other sections, pages, paragraphs that someone -- or is this sort of the last of our discussion that we need to refine, or are there aspects of this that are still hanging out there? Just kind of gauging time later.

Okay. Great. Oh, Nick? Sorry.

MEMBER MARAVELL: Unfortunately there are other aspects, but, you know, I'm not sure that they can be productively discussed here. So I'll try to do it at lunch, et cetera, and see. It gets pretty detailed.

CHAIRMAN STONE: Well, so, yes, if

you can work with Zea and John and those that worked on this in Committee, then -- it does get hairy, so we do have to figure out how to work it in in time.

Okay. Well, thanks. So I've got 11:15. We'll move to the CACS Subcommittee and I'll turn the program over to Joe.

MEMBER DICKSON: Thank you, Mac. The CACC or the CACS has only one item on the agenda for this meeting, our proposal on calculating the percentage of organic ingredients in multi-ingredient products. Dr. Jean Richardson has led our work on that recommendation and I would ask her to give us an overview and some recommended changes that the Committee has come up with.

MEMBER RICHARDSON: Thank you, Joe. The purpose of the document that we circulated and put out for public comment is on determination of percentage of organic ingredients in multi-ingredient products. And we put this out in order to be able to provide

some assistance to the NOP in the development of guidance for handlers and certifiers.

Consumers expect that labels on multi-ingredient products that are sold as 100 percent organic or made with organic reflect an accurate determination of percentage of organic ingredients and all certifiers have uniformly calculated such percentages.

And we had a discussion. Documenters, you recall from last meeting, sent out suggested changes and we got back excellent comments from 14 different organizations. We got responses from OTA, MOSA, Cornucopia, Smucker Natural Foods, Wolf DiMatteo, ACA, Beyond Pesticides, CCOF, OneCert, OTCO, NOC, PCO, CROP and White Wave Foods. There was a considerable consistency amongst all of the people sending in recommendations. Some suggested edits. Others supported other organizations such as supporting the OTA statements.

I'll fold my comments -- from the

people that sent in comments, I'll fold those into the recommendations as I go through them. And because we're asking for changes, this guidance needs -- basically I have to sort of read the recommendations into the record so that it is clear where we're coming from.

So the first recommendation that we had is to make a proposed regulatory change. We propose to change the regulation at 205.302(a), which in essence it says -- well, I'll just read it.

It says, "Calculating percentage of organic of organically produced ingredients. The percentage of all organically produced ingredients in an agricultural product sold, labeled, or represented as "100 percent organic," "organic," or "made with organic (specified ingredients or food group(s))," or that include organic ingredients, must be calculated by: (1) Dividing the total net weight (excluding water and salt) of combined

organic ingredients at formulation by the total weight (excluding water and salt) of the finished product."

But we have made a change where it will simply say "excluding water and salt of all ingredients" instead of "the finished product." So we'll be deleting the words "the finished product" and inserting the phrase "of all ingredients." And that's on the screen now, yes.

Similarly, at No. 2, it says, "Dividing the fluid volume of all organic ingredients, excluding water and salt, by the fluid volume of the finished" -- and we would insert "all ingredients" and delete "the finished product" -- "(excluding water and salt) if the product and ingredients are liquid. If the liquid product is identified on the principal display panel or information is being reconstituted from concentrates, the calculation should be made on the basis of single-strength concentration of" -- add the

word "all" -- "the ingredients." Delete "and finished product."

At (3): "For products containing organically produced ingredients in both solid and liquid form, dividing the combined weight of the solid ingredients and the weight of the liquid ingredients, excluding water and salt by the total weight, excluding water and salt of" -- insert the word "all ingredients," delete the phrase "the finished product."

And (3)(b): "The percentage of all organically produced ingredients in an agricultural product must be rounded down to the nearest whole number." No changes there.

It should be understood by those of you that are not familiar with processing, the language we're proposing here is in essence what everybody's been doing for the last 10 years. So it is reflecting the reality of the situation and it also meets the OFPA requirements.

Our second recommendation relates

to self-calculating forms. Section 205.302 states, "The percentage must be determined by the handler who affixes the label on the consumer package and verified by the certifying agent of the handler. The handle may use information provided by the certified operation in determining the percentage."

What the Subcommittee proposes is that handlers utilize a self-calculating form of their own or utilize a form provided by their certifier so that a more uniform method of calculation is established. We're not looking for absolute similarity, but for uniformity. And based on the input that we received from public comment, we add in the sentence which is underlined in red. We add back in the language "one standard NOP-generated form is not required."

That language is also in the discussion section of the document that was circulated and published and it's simply being repeated here in order that the NOP gets the

clear message that neither the NOSB nor the community at large wants the NOP to generate a form which everyone should require, but that the form should reflect the type of certifying organization that is providing the certification to the handler/processor. And that seems like a very reasonable suggestion to me.

The salt-excluded, No. 3, recommendation is that the CACS proposes that the only salt excluded from the calculation is sodium chloride. Potassium chloride listed on 205.605 and any item on the National List such as magnesium chloride or magnesium sulfate used as an ingredient shall be counted in the organic calculation.

And those writing in to suggest changes again recommended that we be sure to add back into our recommendation to the NOP language, which is in the discussion section, which is on the screen right now and underlined in red, which says, "Standard

practice is to require any additives such as anti-caking agents added to the salt to be on the National List at 205.605 or 205.606. If salt containing an additive on the National List is added to a certified product, the additive cannot be excluded. Therefore, the product may not be labeled as 100 percent organic."

This language is the same as in the discussion section, as I said, and is added in in order that it is clear to the NOP what the intent is of the NOSB and the certifying community at large. And I recommend that change.

Under recommendation No. 4, Water Excluded. Water is excluded from the percentage calculations, as you heard in my first reading of the rule, and that CACS proposes extensive detailed and clear NOP guidance to drive consistency among handlers and certifiers to determine how much water should be excluded from certain multi-

ingredient formulations that include such ingredients as chicken soup, soy milk, almond milk, fruit juice, vegetable juice or ready-to-drink teas.

There was some additional comments from, let's see, OTCO, which I was going to look at here. Yes, OTCO had some specific recommendations with regards to clarification here to the NOP. "When clarification and detailed guidance is provided by the NOP, we would like to see formal calculations being based on strong science and current industry practices. Calculations should be developed from items like extracts, hydrosols and flavors. If we can agree on a sensible extract calculation, we can use this calculation for a wide variety of ingredient calculations which can then provide the buyer of an ingredient with an accurate verification of organic content.

"Additionally, standard calculations for soy and almond milk-type

products would provide industry standardization. We would also like to see that strong science is able to be used alongside the FDA standards of identity and not just leave the exclusion of water to outdated FDA regulations."

And in doing the research for this we all recognize that the water excluded sounds simple, but in actual fact it's extremely complicated. And so we would recommend to the NOP really detailed guidance together with specific examples in detail on their Web site that everyone can then access, because at the present time there is a lack of consistency among certifiers as to their understanding of how this should be dealt with.

Recommendation No. 5, Processed Single Ingredients. Handlers or certifiers may request specification sheets from manufacturers of processed single ingredients if they desire more verification that the

ingredient was not processed in a way there would be remaining non-organic components in the single ingredient product. And example of such ingredients include oil, flour, sugar and syrup.

I think this was broadly accepted by everybody as being an important recommendation. And again to urge specification sheets, that was one of the things that many of those who commented would like to encourage more manufacturers to have, which would make it much easier to do calculations.

Under recommendation No. 6, the single sentence that was put out for general distribution is recommended to be deleted and replaced by a longer explanation because it was felt that the recommendation was too abbreviated. And so we would delete the sentence that says, "For multi-ingredient ingredients such as chocolate chips where as much as 5 percent of the ingredients may be

non-organic, the certifier must provide documentation of claims that the organic content is beyond 95 percent if requested by another handler or certifier."

We would delete that and replace it with something that is more explanatory. And it would state as follows, as you could see on the screen in red and underlined: "Formulated multi-ingredient NOP-certified products contain organic ingredients that are either single ingredients or multi-ingredient ingredients. For multi-ingredient products added to the formula of another product such as chocolate chips where as much as 5 percent of the ingredients may be non-organic, the actual organic content must be obtained if the contributing content is above 70 percent organic or 95 percent organic;" that obviously is depending on the category, "otherwise the ingredients should be calculated at either 95 percent organic or 70 percent organic, depending on how the product is classified on

the certificate.

"And further, handlers must provide certifiers with supporting documentation that substantiates the organic content claim of a multi-ingredient product used in a production formulation submitted for approval."

And this of course is all really in essence part of the discussion that comes before these recommendations, but I hope that that clarifies for those that several of the commenters including OTA, OneCert, OTCO and Smucker Natural Foods, everyone was supportive of putting in this type of expansion into the recommendation to be sure that it is clearly received by the NOP for the guidance that they would then develop.

Recommendation 7, Organic Label Versus Organic Content. As specified in 205.302, the organic content or the percentage of a product is based on a percentage of organic ingredients. Sanitizers and

processing aids are not ingredients, therefore they should not impact the organic percentage of a product. The use of a non-organic processing aid prevents the single- ingredient product from being labeled as 100 percent organic, but when the product continues to contain 100 percent organic ingredients and can be calculated as such when it is calculated into a multi-ingredient organic product. There was universal agreement that was appropriate.

Recommendation 8. Raw agricultural and single-ingredient ingredients can be assumed by handlers, manufacturers and certifiers to contribute 100 percent organic content in a multi-ingredient formulation even if they are listed as quote/unquote "organic" on a certificate except where it is clear that the ingredient is significantly different from the raw condition.

And No. 9, NOP Guidance. That is obviously extremely important. The NOSB

recommends that the NOP establish and maintain an easily accessible Web site with examples of how to calculate percentage of organic ingredients in multi-ingredient products and related topics such how to determine when a processing aid becomes an ingredient in calculation and of course how to determine excluded water. And again OTCO strongly urged a good Web site where this kind of information could be readily available.

This motion -- let's see, we didn't actually approve the amendments, did we? No? Okay.

The document which was circulated to the public without these changes in red that you're seeing today had been approved by our Subcommittee seven yes, zero no, one absent.

That concludes my presentation.

MEMBER DICKSON: At this point are there any clarifying questions on the presentation or the proposal from the Board?

Jay?

MEMBER FELDMAN: Yes, I'm trying to understand the connection between the calculation of ingredients and the labeling of ingredients. And so do you expect that as a result of this there will be more products in the marketplace that can be labeled 100 percent organic?

MEMBER RICHARDSON: No, I don't think that it will make any difference to the use of the 100 percent organic category. There's almost no formulated products that are on the market in the 100 percent category. And so I don't think this will make any increase in that based on my experience as an inspector and also from the research that I've done, and from input from the certifiers.

MEMBER FELDMAN: Okay. And everybody sort of concurs with that? Because conceptually if there's no analysis of certification of actual 100 percent ingredients -- so in other words if you've got

a calculation in which the individual ingredients are deemed 100 percent now under this new calculation and you add them into a multi-ingredient product, each individually 100 percent, does that multi-ingredient product become 100 percent for labeling? Just as a follow up, because that's my dilemma. I don't quite get that part of it.

MEMBER RICHARDSON: That's where the distinct difference has to be sort of understood in the difference between labeling as opposed to organic ingredient content of the product. So while it may have 100 percent organic ingredients for purposes of calculation, the label will not make 100 percent organic claim. It will only be making the organic claim.

MEMBER FELDMAN: And if you could just finish that thought. Because?

MEMBER RICHARDSON: Because that's how it's set up under OFPA.

MEMBER FELDMAN: Okay.

MEMBER FOSTER: The simplest way to finish that is because there is a difference in the regulation between composition and labeling. And that's what we were talking about on Monday.

MEMBER FELDMAN: Okay.

MEMBER FOSTER: Yes.

MEMBER FELDMAN: Thank you.

CHAIRMAN STONE: And this doesn't change any of that. This just helps clarify in that process of calculating, uniformity of the calculation. This doesn't change any of how it's already operating.

MEMBER DICKSON: Miles?

MR. McEVOY: Yes, I appreciate the work on this topic. It's very important to have clear guidance on how to calculate organic ingredients. And I note that in the water-excluded part on passing it back to the NOP to determine these out-of-date standard of identities in the water part, that's very complicated, as you mentioned. From our

perspective it would be nice if the Board continued to work on that particular topic, rather than just leave it up to the Program to make that determination.

Then the other comment is on I think it's 6, Multi-Ingredient Ingredients. I understand there's basically agreement on that, the changes to the document and the calculations there. I would just point out that maybe is not completely in alignment with the concept of sound and sensible. It's pretty complicated. Well, it's more complicated than a different approach. And those kinds of things put additional burdens on the smaller businesses that don't necessarily have the same kind of resources to get that information because they don't have the leverage to get the information from their ingredient suppliers. So just to point that out that it can be more difficult for a smaller bakery, for instance, to get that kind of information about the percentage of the

ingredients for an organic or made-with-organic product.

MEMBER DICKSON: Jean?

MEMBER RICHARDSON: Yes, while I respectfully agree with you -- I mean, or -- no, yes, sort of, I think that it does put somewhat of a burden on the processors. On the other hand, I think it's important that the NOP sends out a clear message to the manufacturers of the multi-ingredient ingredients that the processor has to buy that they need to make -- they need to know that we need to know all the things that are in the multi-ingredient ingredients. I mean it goes back to the other ingredients discussions and Jay's concerns, is that it should be relatively easy for the manufacturer of the chocolate chips to provide the processor, whether large or small, with that information on a specification sheet.

The present situation is when you go out and do inspections is that the

processor says, you know, I called the manufacturer and he says I don't have time to give you those specification sheets. So if the NOP sends out a message we expect those specification sheets and information to be available, then that will help reduce the paperwork from both small and large processors over the next few years.

MEMBER DICKSON: Understood.

MR. McEVOY: And just to make --

MEMBER DICKSON: Go ahead, Miles. Sorry. I just had a clarifying question that I just want to make sure I understand No. 6 correctly. It's only requiring additional documentation in a case where the manufacturer wants to take credit for more than 95 percent. Without that documentation 95 percent is still assumed.

MEMBER RICHARDSON: Yes, 95 percent would still be the default.

MEMBER DICKSON: Thank you.

MR. McEVOY: Yes, I understand

your point. It's a point well taken. Thanks.

MEMBER DICKSON: And, Miles, on your earlier comment on the water exclusion, do I hear you suggesting that we sort of hold onto that piece of the recommendation and perhaps your market for future committee work?

MR. McEVOY: Yes, exactly, that the proposal is great and that particular piece is complicated. And this is a great forum to work out those difficulties rather than just leave it to the Program to determine what is the appropriate percentage of water that you include or don't include in these reconstituted products, because there's a lot of opinions about it. There's a lot of different products out there and this would be a good forum to have that discussion and work out what is the appropriate way to calculate those types of ingredients.

MEMBER DICKSON: Thank you. Any other questions from the Board?

So a quick comment to those of you

out there in the audience from all the certifying agencies that have sent us in so many other comments. Obviously as soon as you'd like to start sending us stuff on water, feel free to do so.

MEMBER DICKSON: Thanks. Mac, that concludes our presentation of this recommendation.

CHAIRMAN STONE: Thanks, Joe and Jean.

We have three people that signed up for public comment specifically to this session and several others that Michelle very graciously worked with to work them into the agenda. They couldn't be here other days. But several of these had not signed in when we came back after the break. So I believe Mary Mann. I believe Mary is here.

As you make your way to the podium, let me call out these other names right quick. Gautami Makam. If you're here, raise your hand and John will help watch.

Aurelie Lawrence, Donald Stroub, Raymond Brown, Carol Ann Merchant, Sherry Lingerfelt, Stephen Bennett, and Mary Essex.

Okay. So we have Ms. Mary Mann. And if you weren't here, just to be sure you understand, there's the little stop light mechanism there. The green light will be on for three minutes, the yellow for one, and the red you will stop when it goes off. Thank you.

MS. MANN: Good morning. My name is Mary Mann. I'm an Oregon resident. I'm a mother, hopefully a future grandmother and I'm deeply concerned about the health of my family. We just welcomed 5 new babies into the family in the last 18 months. I'm an elected official. I'm a business owner. I'm a consumer. I'm in total denial I'm a senior citizen.

(Laughter.)

MS. MANN: I'm a member of the Cornucopia Institute and here today as a

citizen lobbyist and I have volunteered to help present testimony which I am concerned about the use of antibiotics in organic apples. I am a consumer and I was totally stunned, even as informed as I thought I was, that antibiotics were even used in sprays. And these are critical in human medicine and are used in organic agriculture. I'd like to see organics be part of the solution and not part of the problem. Consumer union polling data shows that I am not the only one who believes this, who believes apples or pears treated with antibiotics should not be sold as organic.

Cornucopia conducted a survey to find out if it was possible to grow apples with antibiotics. I'd like to read some of the comments from apple growers. They could not be at this meeting, but their voice is just as important as the apple growers who are here to give testimony. So here are a few verbatim comments to the words who returned

this survey.

From an apple grower in New York State: "I do not get it. Antibiotics are not natural, so why should they be used in the allowance of organic production? If you cannot grow organic apples with antibiotics, you should not be growing organic apples. I love how the rules get bent when they are not convenient."

From an apple grower in Eastern Washington: "If antibiotics are prohibited, I think I would be affected positively as antibiotics are detrimental to the explanation of organic."

From an apple grower in Western Washington: "These antibiotic should be banned now and not later."

From an apple grower in California: "We would be very delighted if antibiotics were prohibited for use in organic apples and pears. This will mean safer cleaner food for our customers, not to mention

healthier."

And finally from Barry Flamm. This is not part of the survey. He was a former NOSB chair, an organic fruit grower in Montana. "Materials that pose human health and environmental risk must not be used in organic production. Tetracycline is such a material and its use in organic crop production should not be allowed to continue. For many years I believe it has been clear that the National Organic Standard Board's intent to remove antibiotics from the National List for fire blight control in apples and pears."

And as that last note about the five new babies in the family, their parents are busy, busy people and I will share with you their very literal -- it's all they can do now to think about making sure that their babies are safe. And prior to that they probably ate convenience foods and all of a sudden they're highly aware of what's going

on. And when something says organic baby food that's putting in their baby, they want to know that 100 percent of that pear juice or that pear puree is organic. Thank you very much.

CHAIRMAN STONE: Thank you. Any questions?

Okay. Thank you. Joe, before I clarify for the vote; sort of make an executive decision here, but we have two categories and two winners of the public speaking timing. So I have Ms. Goldie Caughlan, who stopped the second that the red light came on.

So you get your choice between the cup or the water bottle.

(Laughter.)

(Applause.)

CHAIRMAN STONE: And Terry Shistar, you get the one that Goldie doesn't take for stopping. The timing was perfect when you stopped already. So thank you both

for respecting the time of your -- so thank you.

(Applause.)

CHAIRMAN STONE: So, Joe, are we ready?

MEMBER DICKSON: Yes, I believe we're ready to proceed with voting, if anyone has a motion to make.

MEMBER RICHARDSON: Do you want me to read the entire thing again? No? I make a motion that we accept the recommendations as written together with the amendments that were put forward this morning at this meeting.

MEMBER DICKSON: Is there a second?

MEMBER FAVRE: Second.

MEMBER WALKER: Second.

MEMBER DICKSON: I think Tracy won that. Is there discussion on the motion? Jay?

MEMBER FELDMAN: Does anybody feel like I do, that it would be helpful to put

into the document a clause that said 100 percent organic only for the purpose of calculating the organic percentage of multi-ingredient so that there is no confusion over how this gets used for purposes of labeling?

MEMBER DICKSON: Jean?

MEMBER RICHARDSON: I did propose that very language change, Jay, when were discussing it on the conference call and I believe it was Emily that said that such an addition was not necessary because it was fully covered under OFPA.

MEMBER DICKSON: And, Michelle, would you scroll back up to No. 7 on there just so we all can see it?

I mean my reading of the language in No. 7 also underscores that this doesn't impact the labeling claim around 100 percent organic.

MEMBER FELDMAN: Because, you know, I would propose as a friendly amendment if it was acceptable to folks, if it

reinforces existing law and is not at odds with or contradictory to -- I don't -- you know, but I'm not going to pursue it unless there's support for that.

MEMBER DICKSON: I feel like because it was the earlier advice of the Program not to make that redundant language, I'd like to ask the Program if they have an opinion on that question today.

MR. McEVOY: Yes, it looks like it's covered very clearly in 7, that it says specifically, "The product continues to contain 100 percent organic ingredients and can be calculated as such when it is calculated into a multi-ingredient ingredient product. But before that the use of a non-organic processing aid prevents the single-ingredient product from being labeled as 100 percent organic."

MEMBER FELDMAN: But the multi --

MR. McEVOY: So that seems to be saying the same thing that you're saying, Jay.

MEMBER FELDMAN: Is it? Does that refer to multi-ingredients as well?

MR. McEVOY: Does that what?

MEMBER FELDMAN: Refer to multi-ingredient products, with that clause you just read.

MR. McEVOY: Well, that is specifically about single ingredients. A multi-ingredient product could also not be labeled as 100 percent organic until it contained 100 percent organic-labeled ingredients as all the labeled ingredients.

MEMBER FELDMAN: I think so. I hope so. Thank you.

MEMBER DICKSON: Harold?

MEMBER AUSTIN: I guess a people of question, too, regarding No. 4, since the Program would actually like us to take that back and continue to work on that, would we want to pass it with the verbiage that we currently have in it now, or would we want to modify that?

MEMBER RICHARDSON: No, I would like NOP to give us some extensive guidance on it, personally.

(Laughter.)

MEMBER DICKSON: I mean I imagine that if we left that language as it is, the Program would perhaps ask us in the communication for elaboration on that point, or does it matter?

MR. McEVOY: Yes, it's possible. It's kind of up to your Subcommittee whether or not you want to work on this in terms of your workplan, that particular part of the calculation. We will certainly work on this if it's passed to provide further instruction to certifiers about how to do the calculations.

MEMBER DICKSON: But you wouldn't see an issue if we left No. 4 in and then did some more work on it?

MR. McEVOY: That would not be an issue, no.

MEMBER DICKSON: Okay. Thank you.

Other questions or comments from the Board?

(No audible response.)

MEMBER DICKSON: Well, shall we vote?

CHAIRMAN STONE: Voting begins with Harold.

MEMBER AUSTIN: Yes.

MEMBER TAYLOR: Yes.

MEMBER MARAVELL: Yes.

MEMBER THICKE: Yes.

MEMBER BONDERA: Yes.

MEMBER FAVRE: Yes.

MEMBER BECK: Yes.

MEMBER SONNABEND: Yes.

MEMBER FELDMAN: Yes.

MEMBER RICHARDSON: Yes.

MEMBER DICKSON: Yes.

MEMBER FOSTER: Yes.

MEMBER WALKER: Yes.

MEMBER FULWIDER: Yes.

CHAIRMAN STONE: Yes. Vote was unanimous and approval of the recommendation.

We have just a few minutes before 12:00. Did a lot of great work this morning. We have one, two, three, four, five, six topics to work on after lunch and a brief update on the Inerts Working Group, I believe. So it's been hard to get in and out, so we'll still take the hour and 15 minutes and come back at 1:15, which is a little more than an hour and 15 minutes. Thank you.

(Whereupon, the hearing was recessed at 11:53 a.m. to reconvene at 1:15 p.m.)

A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N

1:17 p.m.

CHAIRMAN STONE: I'm going to call the meeting back in session.

(Whereupon, the bugle call "First Call" was played.)

(Laughter.)

CHAIRMAN STONE: All right.

(Applause.)

CHAIRMAN STONE: You're making me homesick, Francis. That's good. And you just carry that everywhere you go, I guess, huh? Very good.

Okay. I think we're going to work back through. We have five materials, no four materials and two recommendations, if I got that right. No, four and one. So no particular order, but just sort of the way they are on the sheet here.

I'm going to turn it over to Tracy and I think we'll work through the pet food amino acids, unless Michelle's telling me

something different.

MS. ARSENAULT: You want to do that first?

CHAIRMAN STONE: Oh, yes, let's do the Inerts Working Group. Thank you, Michelle. Yes, let's do the Inerts Working Group just so we can get back in the flow here. Thanks, Lisa.

DR. BRINES: All right. Thank you. And Michelle's got me on a timer, so let's see how I do.

(Laughter.)

DR. BRINES: So the purpose of this brief update is to inform the Board and the public here at the meeting on progress since the last time on this work that the Board and the Program and the EPA is doing, collaborating on updating our approach to inert ingredients.

Okay. So we have two NOSB members in this working group who are both absent from the table right now. I'd like to recognize

Jay and Zea as part of the working group. From the Program it's myself and Emily Brown-Rosen and two members from EPA that are assisting with this work, Chris Pfeifer in the Biopesticides and the Pollution Prevention Division and Kerry Leifer, who works specifically on inerts issues with the EPA.

So as brief background, the Organic Foods Production Act indicates that the National List may provide for the use of inerts in pesticides that are not classified by EPA as inerts of toxicological concern. We do have definitions for inert ingredients in the NOP regulations, which are essentially adopted from EPA's definition in FIFRA.

So terminology can be confusing. Inert doesn't necessarily mean chemically or biologically inert in the same way that nitrogen is an inert gas, but we're working with regulatory definitions from EPA.

Okay. So the rule on inerts currently. Inerts are listed in several

sections of the National List. So List 4 inert ingredients were previously considered by EPA as inerts of minimal concern. This includes synthetic inert ingredients that were previously classified by EPA as either List 4A or List 4B. These inerts are currently allowed in pesticide products used by organic crop producers and organic livestock producers. So they appear twice on the National List at Section 205.601 for crop production and also at 205.603 for livestock production. In addition to the allowances for List 4 inerts there's also a limited use of List 3 inerts, and those inerts are allowed only in passive pheromone dispensers. And the citation is on the slide.

Okay. So what is the issue? So as we heard in public testimony earlier today, is that this list of inerts is no longer maintained by EPA. The last update to the List as published is actually 2004. So in 2006, EPA completed their reassessment of

these inert ingredients.

So instead of using this Classification List 1 through 4, which is sort of grouping them according to toxicology and their use pattern pesticides is that they have moved the allowances for those inerts into their actual EPA regulation. So if you go to 4 C.F.R., Part 180, which is the EPA regulations, they've either established tolerances or tolerance exemptions for these inert ingredients that are currently allowed for use.

So we here at the NOP are still operating under that obsolete list of inerts because of the way our regulations are citing that old EPA list. And so in the interim, since that last update was done, we received a number of petitions for inerts that are not on that old EPA list but that might be allowed by EPA in products as exempt from a tolerance, or that are just allowed and may be better than some of the things that are on our list.

So at the last meeting in Providence the NOSB issued a recommendation on policies and procedures for review of inert ingredients and pesticide formulations. So this recommendation took into consideration ongoing work from the Inerts Working Group and feedback. In February we responded to all the recommendations from the fall meeting, so I'll just go briefly through the highlights for that.

So in the fall what this Board had recommended was a series of steps to use for preparing inerts review, some screening guidelines, and a tentative list of proposed groups, including a time line for review. The Board also had requested that the Program identify a mechanism to notify manufacturers and the public regarding this inert review process, and specifically that that mechanism should include a list of which inerts are under review and also how to inform the working group of those inerts that are in use

but might not be on our radar, or on known list.

So a couple of issues in determining which inerts are going to be subject to this review. EPA governs pesticide labeling in the U.S. and they do not require that inert ingredients be included, disclosed on pesticide labels. So they do require the active ingredient, but you'll generally see a listing under that active ingredient that says either inert ingredients or other ingredients. So you have to indicate the percentage of those inert ingredients, but not necessarily identify them.

In previous work the working group had identified and grouped a number of inert ingredients. That was based on some feedback from two material evaluation programs. So we think we have at least a starting point for what this list of inerts will look like. List 4, if you look at it, there's a lot of inerts on that list, but what we know is that what's

currently in use is really a small subset of that list.

We have not yet published that full list of inerts. Again we did publish a list of the tentative groups as part of the last Board recommendation, but our intention is to publish that list and the groupings for public comment before proceeding further.

So in response to the Board's recommendation for a notification step, our intent is to notify the public of the inert ingredients that we know to be in use in organic production, and again, the basis for that knowledge is the information supplied by material review organizations; to also notify the public of the Board's review plan including how those inerts are currently grouped to get feedback on that, as well as how the Board intends to conduct this review.

That notice will include a request for public comments regarding again the inerts that are currently in use and that may not

appear on that list yet. And we have drafted a Federal Register notice which will include that official request for public comment. That notice is under legal review and I don't have an estimate on when that will be published just yet.

One additional, I guess, point for that Federal Register notice: It's not really our intent at this point in the process to be asking for feedback from the public on which inerts should be allowed in organic production and should not be allowed in organic production. Really the intent of this notice is to gather information, what's currently in use and will need to be reviewed by the Board in order to implement the update to the regulations.

Okay. So after that notice is published, the working group will use the comments to finalize the groups of inerts and initiate technical reports. So we've previously told the Board that based on our

current estimates there is about 126 inerts that we're aware of that may be in use in products that are marketed for organic production or for organic use. So we'll use the comments received to finalize those lists.

And for efficiency, our intent is to initiate the development of one technical report per group of inerts. So we understand that these will be longer technical reports typically than probably for single ingredient substances. But the intent is to not have one technical report per each individual inert ingredient that might be considered by the Board. And again, the Board, following the recommendation, will review these inerts by group rather than making individual recommendations for those substances.

So additional progress. Since last fall we've worked with EPA closely to refine those groups. We think we've got a good handle on, for the existing ones that we're aware of, how those will be grouped. So

that will be included in the Federal Register notice. Again, we've gone through the technical report template that is used for materials used in crop and livestock production. We've identified a couple of areas that we might update for these group reports, taking into consideration what was in the recommendation from the Board in the fall, as well as some of the issues that might need to be highlighted when things are reviewed as a group, rather than as individual substances. So, you know, there will be probably a learning curve as we do the first couple of these, but we'll see how it goes.

And we've also taken one of these identified groups and sort of done a test run using the NOSB checklist that you're familiar with in evaluating substances for crop production. So we don't have the technical report yet, so it is really a trial, but just to see how that would work and how things might work by running that through as a group

rather than one single individual substance.

Okay. So just briefly, timelines. So what was in the fall recommendation, the intent was to review four to six of these inerts groupings per year during the four-year period beginning in 2013 in order for the Board to complete most of its reviews by spring of 2015. So that timeline that was included in the Board recommendation was intended to allow time for the Program to complete any rulemaking needed to update the listing for inerts by the sunset date for List 4. So that's October 2017 for both the List 4 listing for crop production and for livestock.

Within that recommendation, the Board acknowledged that an implementation period will be needed. So that will depend on the public comment we receive. If there's additional time, that might be needed to complete the reviews and also time for reformulation and compliance, if needed. So

at this point we don't really know what the outcome of these reviews will be, so it's hard to gauge how many products may need to be reformulated or whether products will comply with whatever this outcome is, but we understand that if reformulation is necessary, we'll need to allow adequate time for that to take place.

So I guess the last step in terms of timeline is that the Board did agree in the fall recommendation to assess the viability of this proposed timeline after it completes its recommendation on the first few groups of inerts. So as the work continues, as the technical reports are developed, we'll see how the process goes, but we do have, I guess, an excuse to go and look back and reassess if we need to, if there are some tweaks that we need to make to the process.

And that's it. Thank you.

CHAIRMAN STONE: Questions for Lisa, or for Jay or Zea that's on the

Committee?

MEMBER FELDMAN: I just want to thank the Program for all the work that's going into this and has gone into this. This is an incredibly important area of review and strengthens organic tremendously in the market. Thank you.

CHAIRMAN STONE: Francis?

MEMBER THICKE: Is this going to be available for us? Lisa, could we have these PowerPoints in Dropbox or something?

DR. BRINES: Yes, the presentation will be posted for the Board and the public on our web site in the next few days. Thanks.

CHAIRMAN STONE: Okay.

DR. BRINES: All right. Thank you.

CHAIRMAN STONE: Thank you very much. Appreciate all y'all's due diligence on that one. Okay. I think that I'll turn it to Tracy, and we'll have Lisa read the proposal. And we'll check for declarations, just as a

reminder.

MEMBER FAVRE: Thank you for that reminder after lunch. That's always welcome.

It's my understanding we are going to have a revised recommendation for the proposal for the pet food amino acids.

Lisa, do you want to go ahead and -- do we have to do that again, or no? Yes. No? She says no.

CHAIRMAN STONE: And Michelle will bring it up while Lisa --

MEMBER FAVRE: She shakes her head no.

DR. BRINES: Yes, we've already done the introduction for the petition, so I think Subcommittee can take over from here.

MEMBER FAVRE: Thanks. Okay. Mac, you took the lead on this. While Michelle's bringing it up, you want to walk through the rationale and the discussion?

CHAIRMAN STONE: Okay. Thanks, Tracy. Yes, so based on written comment and

public testimony day before yesterday I guess -- yesterday morning -- seems like a long time ago -- we heard and the Committee felt compelled, I'll say it that way, to include or add taurine, synthetic taurine to be available in organic dog foods, not just cat food. And actually the amended motion is pet food. And that's a little bit the vernacular that's used in the rulemaking that will come out -- what date did I say? I think that was October 11th, Melissa, that I said on that one. So when the standards come out, you know, that's in line with what we think that language is going to look like versus saying dogs and cats or canine and feline, or whatever.

So I'll be glad to go back through any other discussion if Board Members have any clarifications or questions about that.

MEMBER FAVRE: Seeing no discussion, do we have any declaration of interest for this from the Board?

(No audible response.)

MEMBER FAVRE: Well, in the interest of full disclosure, I should say that I am a breeder of dogs and I do use pet foods with taurine in it.

CHAIRMAN STONE: Great. Jay?

MEMBER FAVRE: Okay. So are we prepared to vote on this again?

MEMBER FELDMAN: I'm sorry, I should have said yes when you asked if there were any questions.

MEMBER FAVRE: Go ahead, Jay.

MEMBER FELDMAN: The question I had yesterday I'm still not clear on. I came across one manufacturer, I think I mentioned, Natural Logic or something, that claims that because of the protein-based diet that they have, I assume it's meat-based, that they meet all of the whatever-the-trade-group-is standards for taurine and other amino acids and so forth. Is that true, or have you looked into that?

CHAIRMAN STONE: Yes. Sorry, Jay,

I should have followed up because I know you specifically asked about that. The Committee did a survey of -- it's a countable number, but there's a countless number of pet foods, and some manufacturers were producing dog foods that were called "complete and balanced" without any synthetic amino acids. There are several. Just glancing at the list here there's 8 or 10 or 12 that had no added taurine. Some had carnitine and lysine, but not added taurine.

But the issue I think that we felt -- because the large breed dogs specifically, and I think, Joe, you said cocker spaniels or something were sort of called out specifically, that because of manufacturer distribution and what not that there's -- the manufacturers and the Pet Food Institute felt like that to have the reach and not get tripped up, someone would be feeding their dog an inferior product if they met some of that, that the Committee was comfortable adding

taurine to dog food. It's still a degradation and processing sort of issue specifically to taurine.

MEMBER FELDMAN: But it is true then, the manufacturer's claim you believe to be true, that without added taurine that their ingredients provide adequate nutrition?

CHAIRMAN STONE: Yes, from looking at this label survey that we did, there are several that claim they can do it without taurine.

MEMBER FAVRE: Jay, I might add that it looked as though from the public comments yesterday that some of this research about heart disease and blindness is relatively new as it relates to taurine and giant breeds.

Any other questions?

(No audible response.)

MEMBER FAVRE: Okay. So we have a listing motion. Motion to list amino acids arginine, methionine, cystine, lysine,

tryptophan, threonine, histidine, isoleucine, leucine, phenylalanine, tyrosine and valine -- and I get extra brownie points for doing that after lunch -- on Section 205.605 for use in organic pet food. Do I have --

CHAIRMAN STONE: Technically we need to do a classification motion first.

MEMBER FAVRE: Oh, I'm sorry. Did I do the listing? And you know what, you told me not to do that.

(Laughter.)

MEMBER FAVRE: I was looking at the wrong page. Classification motion to -- I'm not reading them again unless it's absolutely required; somebody give me a nod -- as synthetic. Do I need to do it again?

CHAIRMAN STONE: I think just read them again, just for clarity.

MEMBER FAVRE: Oh.

CHAIRMAN STONE: You've practiced already.

MEMBER FAVRE: All right.

Classification motion. Motion to classify amino acids arginine, methionine, cystine, lysine, taurine, tryptophan, threonine, histidine, isoleucine, leucine, phenylalanine, tyrosine and valine as synthetic. Do I have a motion?

CHAIRMAN STONE: I'll make that motion.

MEMBER FELDMAN: I'll second that.

MEMBER FAVRE: I have a motion and a second. Any further discussion?

(No audible response.)

CHAIRMAN STONE: The vote begins with Jennifer. And I would remind everyone if you'll go just a little bit slower so Wendy and Calvin can be sure to -- and Michelle over there can get an accurate tally.

MEMBER TAYLOR: Yes.

MEMBER MARAVELL: Yes.

MEMBER THICKE: Yes.

MEMBER BONDERA: Yes.

MEMBER FAVRE: Yes.

MEMBER BECK: Yes.

MEMBER SONNABEND: Yes.

MEMBER FELDMAN: Yes.

MEMBER RICHARDSON: Yes.

MEMBER DICKSON: Yes.

MEMBER WALKER: Yes.

MEMBER FULWIDER: Yes.

MEMBER AUSTIN: Yes.

MEMBER FOSTER: Yes.

CHAIRMAN STONE: Yes. So that was 15 yes, zero nos.

Miss Tracy?

MEMBER FAVRE: Now we had a little bit of procedural confusion on this because these were listed as -- or petitioned as a group, but given the fact that we've come up with a recommendation for only taurine to be included, we have two listing motions. The first one is: motion to list amino acids arginine, methionine, cystine, lysine, tryptophan, threonine, histidine, isoleucine, leucine, phenylalanine, tyrosine and valine on

Section 205.603 for use in organic pet food. Do I have a motion?

MEMBER BONDERA: I so move.

MEMBER FAVRE: Okay.

MEMBER RICHARDSON: Second.

MEMBER FAVRE: Okay. I have a motion and a second. Is there any conversation/discussion?

(No audible response.)

MEMBER FAVRE: Okay. Hearing none, we're prepared to vote.

CHAIRMAN STONE: Okay. The vote will begin with Nick.

MEMBER MARAVELL: No.

MEMBER THICKE: No.

MEMBER BONDERA: No.

MEMBER FAVRE: No.

MEMBER BECK: No.

MEMBER SONNABEND: No.

MEMBER FELDMAN: No.

MEMBER RICHARDSON: No.

MEMBER DICKSON: No.

MEMBER FOSTER: No.

MEMBER WALKER: No.

MEMBER FULWIDER: No.

MEMBER AUSTIN: No.

MEMBER TAYLOR: No.

CHAIRMAN STONE: Chair votes no. That's 15 nos. Motion fails.

Miss Tracy?

MEMBER FAVRE: Our second listing motion is: motion to list taurine, CAS No. 107-35-7 at 205.603(d) as a feed additive for use in pet foods. Do I have a motion?

CHAIRMAN STONE: I'll make that motion.

MEMBER FAVRE: Okay. Do I have a second?

MEMBER FULWIDER: Second.

MEMBER FAVRE: Any discussion?

(No audible response.)

MEMBER FAVRE: Hearing none, we're prepared to vote.

CHAIRMAN STONE: Thanks, Tracy.

The vote will begin with Francis.

MEMBER THICKE: Yes.

MEMBER BONDERA: Yes.

MEMBER FAVRE: Yes.

MEMBER BECK: Yes.

MEMBER SONNABEND: Abstain.

MEMBER FELDMAN: No.

MEMBER RICHARDSON: Yes.

MEMBER DICKSON: Yes.

MEMBER FOSTER: Yes.

MEMBER WALKER: Yes.

MEMBER FULWIDER: Yes.

MEMBER AUSTIN: Yes.

MEMBER TAYLOR: No.

MEMBER MARAVELL: Yes.

CHAIRMAN STONE: Chair votes yes. Thirteen -- no, twelve yeses, two nos and one abstention. Motion is approved. Thank you, Tracy.

Jay, if you're ready, I'm thinking in terms if we do like polyoxin and IBA, sort of move those on through. Then we'll have the

balance of our day on other ingredients and tetracycline. Is that workable?

MEMBER FELDMAN: Thank you. If, Harold, you're ready, I think we could do polyoxin D zinc. Thanks.

MEMBER AUSTIN: Okay. We had, you know, some testimony yesterday. We kind of rushed this one a little bit during the Committee process, but I think we had some good testimony.

One of the concerns that we'd had with this material is its broad base as a fungicide. I think, you know, we had some descriptive explanations of its activity on soil beneficials. We had concerns over one test of how this material was controlled, its effect on a roach study that was done, and I think some of the concerns were dispelled on that by the process of the study. There were some environmental concerns with earthworms. The petitioner did provide us with some additional studies during the course of the

last week. I think all of the Subcommittee had received that.

So we've got a motion to classify as polyoxin D zinc salt as petitioned as a synthetic. That came out of the Subcommittee. And we'll move that to a vote, I guess, Jay, unless, you know, we want to go ahead and move the motion or open it up for some discussion at this point.

MEMBER FELDMAN: I'd ask if there are any questions on this.

MEMBER AUSTIN: Okay. Any questions from the Board at this time?

MEMBER FELDMAN: And this would be questions on the overall issue including the classification and the listing motion?

MEMBER AUSTIN: Correct.

CHAIRMAN STONE: I have one.

MEMBER AUSTIN: Mac?

CHAIRMAN STONE: If the source of the zinc were more well known or defined as a mined product, would that have affected some

of your all's votes, or perception of the material, I should say?

MEMBER AUSTIN: I think in some of the discussion that we had, the source of the zinc was a definite component of why the material ended up being classified as a synthetic. The petitioner themselves get the zinc, the product from multiple sources, so they couldn't define if it a natural mined material or if it was a product of sub-manufacturing. So that basis was really the main key basis why we went ahead and moved this forward as a synthetic, or at least that was our motion from the Subcommittee.

Any other concerns with that or questions regarding that issue? Jay?

MEMBER FELDMAN: Well, you know, there's been some lack of clarity around this whole thing, you know, this whole discussion regarding the broad spectrum or non-specific effect of the material. And we've been mostly concerned about the chitin-inhibiting effects

of the material.

You know, I was looking at the label on this; I was trying to pull this up as we were talking, but the label on this is pretty clear that it has these, fungistatic they're called, effects, which at least as it appears on the label, are generalized to the population of soil fungi.

So I guess my question from, you know, a soil standpoint is whether we should be allowing or listing a material that seems to work contrary to the statutory and regulatory standard to maintain or improve soil and environment. And I guess that is the general -- this chitin inhibition and the -- even, I think there was an acknowledgment yesterday by the professor that while it was generalized, he seemed to be less concerned because of the fact that fungi might bounce back or would bounce back afterwards.

I think, you know, if we're talking about all the stressors that farmers

experience with developing soil fertility, this just seems to run contrary to those practices. So it would be interesting to see if organic farmers as opposed to IPM farmers that have more leeway in terms of introducing other soil fertility methods would even choose to use something like this. It just seems contrary to and incompatible with organic practices.

MEMBER AUSTIN: Tracy?

MEMBER FAVRE: Jay, just to address that comment, I had those same concerns on the chitin inhibition. I'm not particularly for this material, but one of the presenters yesterday did say that not all chitin is the same and that the difference between this product and others is that it was specifically targeted for the kind of chitin in the cell walls of the particular fungi that caused the problem. And I think the issue about the cockroaches was sort of debunked anyway.

MEMBER AUSTIN: Zea?

MEMBER SONNABEND: In addition to looking at the direct effect on the soil that any one compound would have, we have to look at it in relationship to the alternatives to that material. And I do not see this one as having any greater effect than the other things that are on the List as fungicides such as copper and sulfur compounds. In fact, I think it has less effect overall because it is so short-lasting compared to copper and sulfur which have residuals that will last for quite a long time. And therefore, I feel that it is a valuable tool as the people stated, in an alternating situation where you can alternate this very benign material with a harsher material to avoid developing resistance.

So I do see it as appropriate. With any relatively new material, we're not going to have the benefit of grower experience to compare it to the alternatives that are listed on labels only because it has not been

allowed in organics so far. And so we just don't have growers who are stakeholders that are going to be able to report to us.

But I do think that it is a better choice in many of these harder-to-control diseases than what we have now, and truly for things like late blight in tomatoes and the disease which I can't pronounce, that Jerry Thomas was here about, those that truly are not other choices. You just take your lumps and move on.

MEMBER AUSTIN: Mac, do you have a question?

CHAIRMAN STONE: Excuse me. Apologize for disrupting the flow of the conversation, but I guess point of order. We should have a motion and a second for discussion purposes.

MEMBER AUSTIN: Okay. The motion that we had out of the Crops Committee was to classify polyoxin D zinc as petitioned as a synthetic.

MEMBER FELDMAN: Second.

MEMBER AUSTIN: We have a second. Do we want to go ahead with the -- should we go ahead and vote on this one, or do we want to continue to discuss now that we have a motion on the floor?

CHAIRMAN STONE: If there's discussion on classification, then we can have that discussion now. Then we can discuss --

MEMBER AUSTIN: Okay.

CHAIRMAN STONE: -- attributes in the next motion.

MEMBER AUSTIN: Any further discussion on the classification?

(No audible response.)

MEMBER AUSTIN: If not, I think we're prepared to vote.

CHAIRMAN STONE: Okay. Colehour is the first vote.

MEMBER BONDERA: Yes.

MEMBER FAVRE: Yes.

MEMBER BECK: Yes.

MEMBER SONNABEND: Yes.
MEMBER FELDMAN: Yes.
MEMBER RICHARDSON: Yes.
MEMBER DICKSON: Yes.
MEMBER FOSTER: Yes.
MEMBER WALKER: Yes.
MEMBER FULWIDER: Yes.
MEMBER AUSTIN: Yes.
MEMBER TAYLOR: Yes.
MEMBER MARAVELL: Yes.
MEMBER THICKE: Yes.
CHAIRMAN STONE: And yes. Sounds like unanimous 15-0. Harold?
MEMBER AUSTIN: Okay. For the listing motion itself, to add polyoxin D zinc salt to the National List at 205.601 as a synthetic substance allowed for use in organic crop production.
MEMBER BONDERA: I so move.
MEMBER THICKE: I'll second.
MEMBER AUSTIN: We have a motion and we have a second. Is there any discussion

on the listing motion? John?

MEMBER FOSTER: So the question about statutory-ness -- I know it's not a word, but I'll use it anyway -- I think the National List was designed to be a list of exceptions, so it's already a list of exceptions. And if that wasn't okay, we wouldn't have a list of exceptions. And the exceptions only go on after, I would say, a fair degree of scrutiny and those exceptions aren't allowed unless they're listed.

So I think the whole regulation was built, designed, intended to allow a spare number of exceptions, and I think this is a good example of a preferable material that in my view meets the criteria adequately and has the potential to replace more problematic materials. If it's a little bit better, then that's better and we should go with better. If it's not perfect, it joins a long line of things that aren't perfect. So I'm okay with a little bit better, and I'll stop there.

MEMBER AUSTIN: Francis?

MEMBER THICKE: Yes, I'd like to address the issue of it being a more broad-spectrum fungicide or, as it said in the technical review, it actually has been classified as an antibiotic by -- they listed eight references for that. And on the label, as I think Jay said, it's listed as a fungicide and it also has a warning about overuse and resistance, so we have to watch out for that.

And as far as being broad-spectrum, there are listed in the technical review 22 different pathogens that it's active against. And so of course that means it's pretty broad-spectrum and it would be as well probably, as they actually say, against a wide range of fungi, which would be beneficial as well. So I'm concerned about that.

There was something you said earlier and that in the petition that it's a fungistatic and not a fungicide, but if you go

on Google, the definition of fungicide, it actually says it inhibits or kills fungus. So it really is a fungicide.

And then the half-life is 32« days at ambient -- you know, at 77 degrees Fahrenheit at pH 7. So that's a long half-life for soil bacteria -- soil fungi to be, you know, working against it and then half is still left. And often it can be cooler, so it could have a longer time. So I'm concerned about the effects on beneficial soil life and especially, as I think Jay mentioned, if you're trying to build up your soil life and build that whole thing up in your soil, you're going to be working against that.

MEMBER AUSTIN: I think as far as the antibiotic part of it, the definition or the explanation that the petitioner gave us, the rationale that it was listed as a fungicide rather than an antibiotic was that this is not used in animal or human health, strictly in plant control and the disease

vector.

MEMBER THICKE: Okay. Interesting.

MEMBER AUSTIN: Francis?

MEMBER THICKE: I wouldn't argue, actually. I think the distinction is fine, but they did mention that. They called it an antibiotic. But I think a fungicide is actually more appropriate.

MEMBER AUSTIN: Yes. The other thing I would point out, because we really didn't cover this very well yesterday, we kind of rushed through it; and these were some of the concerns on the majority opinion coming out of the Crops Committee, from some of the speakers, also from the minority opinion coming out of the Crops, was, you know, I think we've heard it a little bit, was that this is a unique mode of action. It's a FRAC 19. It will aid in resistance management, rather than using the same fungicidal approach over and over and over again. So the grower

would be able to use it in a rotational fashion.

The other positive part of that was that it is a curative material, so that they don't technically have to go out in a prophylactic approach and apply it, that they would be able to apply it after they've had a infection rather than prior to infection, where the materials, the fungicides that they have currently would have to be preemptive and put on prior to an infection starting to take place and develop. So there are some advantages in looking at the mode of action, looking at how it would be applied, how it would be utilized.

I think total, I believe there were five diseases that the material itself would be effective in controlling. Alternaria was one of those. Yes, I'm not sure that was the one you'd been having trouble with. Gummy stem and then Southern blight were kind of the three that really stood out that really did

not have very good control methods or materials out there that -- especially in the coastal regions where they really had a lot of high humidity.

Any further questions? Jay?

MEMBER FELDMAN: I thought it might be interesting for folks to be aware -- it's interesting you mention resistance management, because on the label they have a box that's identified as resistance management, and they say that the fungicide contains a Group 19 fungicide. Fungal isolates with acquired resistance to Group 19 may eventually dominate the fungal population if Group 19 fungicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by -- and then this polyoxin D product which happens to be ENDORSE Wettable Powder Turf Fungicide, or other Group 19 fungicides.

And then they have a list of resistant management practices that they suggest in terms of utilizing, rotation -- uses like you're referring to, and monitoring treated fungal populations for loss of field efficacy. So there is, like we know from the conventional side, where you get dependent on these products you end up with a resistance problem.

MEMBER AUSTIN: Well, and I think that the general opinion or the practice or approach was going to be that it was going to be used as a tool, part of a rotational process. And if I'm not mistaken, in the information that we were presented with, this is the only FRAC 19 material out there.

Any further discussions? Any further questions?

(No audible response.)

MEMBER AUSTIN: Hearing none, I think we're ready to vote.

CHAIRMAN STONE: Okay. Thank you,

Harold. I'm thinking that Tracy is first.

MEMBER FAVRE: No.

MEMBER BECK: Yes.

MEMBER SONNABEND: Yes.

MEMBER FELDMAN: No.

MEMBER RICHARDSON: No.

MEMBER DICKSON: Yes.

MEMBER FOSTER: Yes.

MEMBER WALKER: No.

MEMBER FULWIDER: Yes.

MEMBER AUSTIN: Yes.

MEMBER TAYLOR: No.

MEMBER MARAVELL: No.

MEMBER THICKE: No.

MEMBER BONDERA: No.

CHAIRMAN STONE: Chair votes no.

MEMBER FELDMAN: Thank you. John, we'll turn this over to you for IBA. Thank you.

CHAIRMAN STONE: One second. That was six yes and nine no, is that correct? Six yes, nine no. The motion fails.

MEMBER FELDMAN: Sorry, Mac. Okay, John. I was a little preemptive there. Thank you.

CHAIRMAN STONE: That would be really the decisive/indecisive vote, wouldn't it?

MEMBER FELDMAN: Yes.

(Laughter.)

MEMBER FOSTER: So we have next up a petition material proposal, indole-3-butyric acid, CAS No. 133-32-4. Going to be referring to it as IBA from now on.

We heard the summary before. I think we'll go straight into the classification motion, get us set up for any discussion that might happen.

I'd like to move to classify indole-3-butyric acid, CAS No. 133-32-4, as petitioned as synthetic.

MEMBER BONDERA: I'll second that.

MEMBER FOSTER: Further discussion on the classification motion?

Seeing none, we can proceed to vote.

CHAIRMAN STONE: Thanks, John. We'll begin with Carmela.

MEMBER BECK: Yes.

MEMBER SONNABEND: Yes.

MEMBER FELDMAN: Yes.

MEMBER RICHARDSON: Yes.

MEMBER DICKSON: Yes.

MEMBER FOSTER: Yes.

MEMBER WALKER: Yes.

MEMBER FULWIDER: Yes.

MEMBER AUSTIN: Yes.

MEMBER TAYLOR: Yes.

MEMBER MARAVELL: Yes.

MEMBER THICKE: Yes.

MEMBER BONDERA: Yes.

MEMBER FAVRE: Yes.

CHAIRMAN STONE: And yes. Unanimous 15-0 to approve.

MEMBER FOSTER: Next I'll make a listing motion. I move to list indole-3-

butyric acid, CAS No. 133-32-4, as petitioned on 205.601 for the purpose of plant propagation via dipping. Is there a second?

MEMBER AUSTIN: Second that.

MEMBER FOSTER: Thank you, Harold. Is there any further discussion on the listing motion? Mac?

CHAIRMAN STONE: I'll just point out, so now in plant stock rootings - can't think of the term now -- but growers, if they were to use this product, they could then use it in planting stock that could become organic a year later, I believe, because of the way the regulation reads. So you couldn't use it and sell the plant. You couldn't if it's an annual or some of those types of things, but it -- yes.

MEMBER FOSTER: More discussion or comments on this?

MEMBER FELDMAN: Just for the record, could we explain the history on this? Would that be -- I guess it's in the written

material, but it might be useful to --

MEMBER FOSTER: Sure. It was petitioned first, I believe, in 2009. A prior iteration of the Board, I believe, in 2011 voted not to include it on the List. The petitioner came back, narrowing the application method. Also, pulling out some of the finer details from the extensive appendices in the first application, putting some of those -- I believe not a whole lot of new substantive information that wasn't in the appendices, but made it more readily available. That, along with the narrowed application, got it back on our plate for reconsideration.

With that, any more discussion or comments?

I guess I'll just let it be known that for four years I used this material; this was about 15 years ago, as a plant propagator. So I don't know if past financial interest counts here, but I assume not. I thought I'd

get it out on the table.

Hearing no other comments, we'll proceed to vote.

CHAIRMAN STONE: Voting begins with Zea.

MEMBER SONNABEND: No.

MEMBER FELDMAN: No.

MEMBER RICHARDSON: No.

MEMBER DICKSON: No.

MEMBER FOSTER: Yes.

MEMBER WALKER: No.

MEMBER FULWIDER: No.

MEMBER AUSTIN: Yes.

MEMBER TAYLOR: No.

MEMBER MARAVELL: No.

MEMBER THICKE: No.

MEMBER BONDERA: No.

MEMBER FAVRE: No.

MEMBER BECK: Yes.

CHAIRMAN STONE: Chair votes no. That's 12 no, and 3 yes. Motion fails.

Thank you, John.

Jay?

MEMBER FELDMAN: Thank you, Mac. I guess we'll return with tetracycline later. Thank you.

CHAIRMAN STONE: Right. So if my memory serves me occasionally, I think we're down to other ingredients and tetracycline. Is that the way the voting record looks?

So with that, I'd like to move back to the other ingredient conversation that several of us visited during lunch, got some clarity to some of Nick's concerns and we had -- I don't know if you all had some amended language that you -- so what I'd like to do I guess is let's get a motion and a second on the table. If we make amendments to the document, then it will be to approve as amended when we get to the end of any changes.

So we'll put, Michelle, the original document up before we add Nick's earlier OFPA criteria in that policy section. But I'll turn it back over to John.

MEMBER FOSTER: So then I would ask again, Zea, to kind of round us up, to move us through the process.

MEMBER SONNABEND: Is the motion we're putting on the table the revised document that I presented this morning, because those revisions have been approved by the Subcommittee already? Okay.

So I move to adopt the other ingredients -- oh, the ancillary substances policy, formerly known as "other ingredients," as revised by the Handling Subcommittee and presented.

MEMBER FOSTER: I'll second that.

CHAIRMAN STONE: So we can proceed to vote?

MEMBER SONNABEND: Okay. So for --

CHAIRMAN STONE: Now for the discussion.

MEMBER SONNABEND: In the way of further discussion, I will start by saying the

change that I heard us all agree to this morning I believe was to -- moving down to policy, the recommendation, policy and procedure under policy, the first sentence to read, "The NOSB intends to review other ingredients found in substances on and petitioned for the National List in accordance with OFPA criteria."

So I think we -- how do we proceed then? If it's consensus we just keep going with more amendments that are consensus? Okay. Then I do want to add one that we didn't exactly talk about this morning but that was sort of implied, which is: I would like to change the title of the document to be "Ancillary substances/other ingredients."

(Laughter.)

MEMBER SONNABEND: Well, we want to be consistent, don't we? Is there consensus around that? Okay.

MEMBER MARAVELL: I would suggest -- are we going to do one or the other? We're

going to have two names for the same thing? I would suggest just doing one or the other.

MEMBER SONNABEND: Well, how about other ingredients in parentheses instead of hyphen?

MEMBER MARAVELL: Fine.

MEMBER SONNABEND: Because people have been recalling it that for so long, we don't want to --

MEMBER MARAVELL: Right. That's fine.

MEMBER SONNABEND: Okay.

MEMBER MARAVELL: Would the text then reflect ancillary or --

MEMBER SONNABEND: Yes, and because it's very cumbersome to make every change in that regard now, if people will just trust us for the final recommendation to try and bring that language into consistency.

CHAIRMAN STONE: Or something like that.

(Laughter.)

MEMBER FOSTER: To make consistent?

CHAIRMAN STONE: I'm okay with the dual name in the title because the memo to the Board was called other ingredients.

MEMBER SONNABEND: Was called other ingredients.

CHAIRMAN STONE: And we've changed it, so this is the transition phase of that name change.

MEMBER SONNABEND: Okay. So that was the only consensus additional change I heard this morning, and so if people have other ones to propose now, the floor is open.

MEMBER FELDMAN: Okay. Yes, I have a change in the first paragraph that I think I can propose.

MEMBER SONNABEND: The very first paragraph?

MEMBER FELDMAN: Yes, the very first paragraph. You heard a conversation this morning about whether the law requires

that other or auxiliary ingredients be included on the National List, and I think the broad answer to that is yes. And where we have flexibility it appears is the form in which it appears on the National List. So as Lisa Brines explained, with inert ingredients we're choosing to at least for the moment discuss this things in group and presumably that will lead to their listing in groups. I don't know. I mean, that's one possibility.

So, and there are other groupings on the List, as Miles pointed out. Excipients I think was one, right? So I would propose that part of the confusion is that people are unsure as to what the intent here is, although I think if you parse through the document you might be able to find it. And you probably will, but I think it's helpful to get it up front.

So anyway, the first paragraph, last sentence I would suggest should read -- I'll read the whole sentence starting with

"Since" -- boy, that's a long sentence, Zea. "Since OFPA requires that each non-agricultural ingredient be specifically listed and because the National List does not specifically list other ingredients commonly found in formulated products, the NOP identified the need for clarity and requested that the NOSB develop a policy that specifies" -- delete the words "whether these other ingredients are allowed" -- that specifies that all non-organic constituents of organic foods be on the National List in some form."

MEMBER BONDERA: Can you reread that, please?

MEMBER FELDMAN: Let's see, strike the last one, two, three, four, five, six words, "whether these other ingredients are allowed," and say that "all allowed non-organic constituents of organic foods be on the National List in some form." Or maybe "constituents" isn't the right word, but --

MEMBER MARAVELL: Could you repeat

that one more time, Jay?

MEMBER FELDMAN: "That all allowed non-organic constituents of organic foods be on the National List in some form."

MEMBER BONDERA: Yes, Michelle, you have to strike the "allowed on" and the last six words. The final six words of your -- yes, right there. The second time you say "allowed," yes.

CHAIRMAN STONE: And just so those in the audience know, we work very hard for six months to avoid wordsmithing on the fly like this. But I'm not saying it's not necessary. I'm just saying that it's awkward.

Nick?

MEMBER MARAVELL: Yes, I have no objection to the word "constituents," but I would just like to receive some input or advice from the program or other members of the Board if there is a better word to use there.

CHAIRMAN STONE: No very strong

feelings about it. Tracy?

MEMBER FAVRE: This seems a pretty dramatic change from what the intent of what this document was. And I'm a little uncomfortable making this decision or this change on the fly --

MEMBER FELDMAN: Yes.

MEMBER FAVRE: -- because if I was reading this in a vacuum, I would make the assumption that all the ancillary substances would somehow end up being listed individually on the List, or it could be interpreted that way, and that's not the intent of this document.

MEMBER SONNABEND: Miles, could you explain what you explained at lunch to Tracy?

MR. McEVOY: Yes. Well, we're just trying to see what we said in 2011, and it seems like it's missing a couple of things there because we did identify the need for clarity and requested that the NOSB develop a

policy on this. We can't allow things that are not allowed in the regulation. And so it's clear in terms of other ingredients and crop production; for instance, inert ingredients, they're listed. They're on the National List. The same for in livestock. There's the excipients. They're on the National List.

So we do need clarity in the regulation in terms of how these ancillary substances -- what do we call them now -- ancillary substances are listed in the National List. So this seems like it could work. It does spell out what the intent of the proposal is, is that it clarifies what ancillary substances are allowed and which one are not. And you'd go through a process to do that and they have to be on the List in some form or another in order for us and certifiers and businesses to know what ancillary substances are allowed and which one are not.

MEMBER BONDERA: And I think my

understanding is that we, the NOSB, don't know what form that's going to take and that's why that "in some form" makes sense, because we don't know how they'll be listed as groups or whatever. But if they aren't there, like you said, they can't be dealt with. So that's at least my understanding.

MEMBER SONNABEND: There are a number of forms that this could take that do not necessarily mean each individual substance appears on the List. For instance, in crops inputs there's one clause on the National List that says "and inert ingredients not of toxicological concern." So it could be a parallel construction to that at its most general. It could just say, a clause, "an ancillary substance as identified in guidance." Or it could be item-by-item annotated by class, like all carriers, all preservatives -- you know, by class. Or in some cases it could be individual. But it leaves it open, until the Department can come

back to us with any further clarification and until we start our review and see what comes up in the course of review.

CHAIRMAN STONE: I think it doesn't tie our hands too much to see what form these things come in. I appreciate your concern. I don't think it overly constricts the Program and us to work together to figure out what form this monster is going to look like as we go forward.

I have a clarification question, a procedural rookie chair question, I guess. So I like because this group gets along well and respects each other's time and we can have conversation, but do we need to state -- have people be called on for the record so we know who is saying what, or is that captured automatically somehow? It might look like Tracy had said all of that discussion.

So let's go ahead while they're getting back to that. That's just for clarity later in the transcript. So any further

discussion here? I think we're okay on this language. Jay?

MEMBER FELDMAN: Okay. And then as I discussed this morning, I think it would be helpful since we are treading in -- well, a lot of you know a lot about this area, but for some of us in waters that are sort of like net pens in the ocean. Sorry about that. When we talk about baseline criteria and other ingredients, I really think we do need to put a clause in there "as defined below but not limited to." And that's under baseline. And where we have those lists of categories, I think they're well-intentioned lists, but we may be missing something.

Oh, God, you think I can do that? Where's baseline? Well, I don't have the page number because I've edited this so much, but it says, "The baseline criteria are as follows: Other ingredients." And then there's (1) and (2) and then (3) and (4). So "are as follows, but not limited to," and then

we would have the list.

MEMBER SONNABEND: Are you sure you want to say that, because already it's everything that's possibly allowed in food in the United States?

MEMBER FELDMAN: Well, is it?

MEMBER SONNABEND: Yes, that's what EFIS is.

MEMBER FELDMAN: See, that's why I prefaced my comment.

CHAIRMAN STONE: So just so you all know, Tony the transcriptionist, he is clued in partly by microphone position, but he knows our names and he knows our voices by now, so he can capture that kind of conversation. I like that it can be a little less formal since so far in this conversation we're doing well of not arguing across the table with dueling microphones. So thank you all for that. And it allows for a little cleaner and faster conversation, a little less formal conversation.

So, Zea?

MEMBER SONNABEND: So you're withdrawing that change, right, Jay?

MEMBER FELDMAN: Okay.

MEMBER SONNABEND: Other suggested changes?

(No audible response.)

MEMBER SONNABEND: Does that mean we're ready to vote?

MEMBER FELDMAN: Yes.

MEMBER SONNABEND: Yes? Awesome. Nick, you're ready to vote?

MEMBER MARAVELL: Yes.

CHAIRMAN STONE: Going once, going twice.

MEMBER MARAVELL: Am I ready to vote, Mr. Chair?

CHAIRMAN STONE: Yes, I believe you are.

MEMBER MARAVELL: Okay.

MEMBER FELDMAN: I just want to say that I hope that there's some openness to

tweaking this document as we move along, because as we dig into this we may find that we are limiting ourselves. But I think the intent is clear. If we follow the National List criteria and the compliance with OFPA, I think that's what important here. How we go about generating the list and so forth is going to be an ongoing process, I hope. Hope we're not setting this in stone.

CHAIRMAN STONE: I'll suggest that, yes, we're -- Program asked us to help figure it out. We will be very much a work in progress with the Program, but I'm sure they're going to kick a lot of this back to us and consider our capabilities of time and expertise and they'll have theirs. And it will take a little while to flesh this out and I'd like to be sure that the record reflects how much energy and time this Board has put into getting this document in an effort to further refine and clarify the product that carries the seal on behalf of the public

confidence.

And I'll ask --

MEMBER SONNABEND: Point of order, Mac? Sorry.

CHAIRMAN STONE: Oh, yes, ma'am?

MEMBER SONNABEND: I'm just not sure, you know, the parliamentarian could say, are we then supposed to vote on the amendments suggested now as amendments and then add them to the whole motion, or is it just one vote?

CHAIRMAN STONE: Well, if you hadn't interrupted me, I was going to get to that.

MEMBER SONNABEND: What?

CHAIRMAN STONE: If you hadn't interrupted, I was just getting to that.

MEMBER SONNABEND: Okay. Sorry.

(Laughter.)

CHAIRMAN STONE: So if Zea or Harold that made the motion and seconded see these as friendly amendments, say yes for the record.

MEMBER SONNABEND: Yes.

MEMBER AUSTIN: Yes.

CHAIRMAN STONE: So having that being accepted as friendly amendments, we can now vote on the motion. Any further discussion?

Very good. So the voting will start with Jay.

MEMBER FELDMAN: Yes.

MEMBER RICHARDSON: Yes.

MEMBER DICKSON: Yes.

MEMBER FOSTER: Yes.

MEMBER WALKER: Yes.

MEMBER FULWIDER: Yes.

MEMBER AUSTIN: Yes.

MEMBER TAYLOR: Yes.

MEMBER MARAVELL: Yes.

MEMBER THICKE: Yes.

MEMBER BONDERA: Yes.

MEMBER FAVRE: Yes.

MEMBER BECK: Yes.

MEMBER SONNABEND: Yes.

CHAIRMAN STONE: Yes. Unanimous yes. Very good. Very good. Thank you all very much. But don't feel too good about it because look what we got to do now?

(Laughter.)

CHAIRMAN STONE: Okay. Seeing the time, the agenda, I know everyone in the audience has been sort of like when are we going to get to it? We're going to get to it, the tetracycline conversation, right after a 15-minute break. It's 2:30. We'll come back at 2:45. Thank you.

(Whereupon, the above-entitled matter went off the record at 2:26 p.m. and resumed at 2:44 p.m.)

CHAIRMAN STONE: I'll call the meeting back to order. Appreciate everyone's interest. Appreciate those in the audience that have stayed with us the entire week. I hope you can see and hear and feel the anxiety, the decision that we're about to make one way or the other. I know some people will

be glad or excited, but fully realize there's people sitting next to you that may be upset, whichever way this thing goes. So we hope that in one way or the other we're advancing the organic seal, the integrity of organics, short term and long term. But I just thought about it at a break there, that remember there's people that could be hurt by this whichever way it goes. So just remember that.

Okay. Jay, I guess at this point we'll ask for a motion and a second to get the conversation started.

MEMBER FELDMAN: Thank you, Mac. I'm going to turn this over to Harold to manage this because he has been carrying the majority position and leading the Subcommittee on this.

We've already had all our disclosures on this, so we're all set to go. Thank you, Harold.

MEMBER AUSTIN: Okay. Michelle is going to throw this up on the screen.

Based off of the oral comments and testimonies that we heard yesterday, the Crop Subcommittee has met and we're going to come forward with a little bit of an alternative motion compared to the one that we had originally listed, a little bit of an inclusion taking some commentary out of this interest position that Lynn presented to us yesterday. Trying to put this motion as we move it forward, because this is a very difficult issue with a lot of stakeholders on every side of this equation being held in the balance. So we're trying to bring something forward that may be just a little bit more balanced from the original proposal.

The new motion as adopted by the Crops Subcommittee recommends amending the listing for tetracycline to remove the expiration date of October 21st, 2014 and add the following annotation: "205.601, Synthetic Substances Allowed for the Use in Organic Production as a Plant Disease Control.

Tetracycline for fire blight control in apples and pears only until October 21st, 2016. Tetracycline may be used if the grower has implemented an integrated system of practices and materials to control fire blight. Orchard management systems must demonstrate an annual increase in the extent or number of the alternative practices for managing fire blight."

That's the motion.

CHAIRMAN STONE: Is there a second?

MEMBER MARAVELL: I'll second, or I'll make the -- are you making the motion or --

MEMBER AUSTIN: I'll go ahead and make it as stated.

MEMBER MARAVELL: Okay. And I will second.

MEMBER AUSTIN: Thank you, Nick.

Mr. Chair?

CHAIRMAN STONE: Thinking about

this a little bit as we enter this discussion phase, a lot has been said over the last few days, last few years around this conversation. Specifically to the Board, I would suggest that we discuss it openly and people can speak their views. And then at some point I'm going to call time and each of us will go around the table and just each of us will have a few minutes -- we won't use a stop watch/stop light, but each of us have a few minutes to go around, and others that may not be comfortable entering the fray, if you will. And once we get through that round, there may be a few closing remarks. But we could go back and forth on this for a long time and not change very much. So I just suggest we have that process. And I'm thinking -- I'm not going to say a time, but the -- okay. Thank you.

MEMBER AUSTIN: Okay. We have a motion and we have a second. We'd like to open it up for discussion at this time. Are there questions or comment from the Board?

(No audible response.)

MEMBER AUSTIN: Seriously?

(Laughter.)

MEMBER AUSTIN: Let me do that again.

MEMBER SONNABEND: Well, I'm confused because Mac said we'll talk about it and then we'll go around. And so I don't know whether to talk about it or wait until we go around.

CHAIRMAN STONE: I guess I made a presumption that there would be some start, but maybe we've discussed it. Maybe we do just go around. I just don't want to go back and forth and back and forth and back and forth. And so maybe we are ready to go around. Why don't you start? Go for it.

MEMBER SONNABEND: Okay. The majority position, you know, and I hope really both positions in this issue feel a lot of compassion and concern for the other side of the issue, even if we are on one side of the

issue. This is a hardship for everybody. It's no doubt about it, no matter which way we go, as Mac said, it's going to be a hardship for some group of people.

So those of us in proposing to have an extension, because we feel that it is so vital for the growers to be able to transition out of this material in a way that is feasible for their livelihoods, want to do so in a way that it creates the most definitive statement that we can possibly make to consumers that this really is the end of the material and acknowledging the concerns that consumers have about the effect on human health and the environment.

Well, I'll save the rest for my wrap up. But this is the reason that we modified our first motion, because we were told by the interest people in the room that acknowledging the concerns as some consumers as far as definitive oversight and definitive quantification of alternative practices would

help appease their concerns. Even though some people on the Board and some people off the Board think this is already covered in the law, we're absolutely willing to say it again if it helps ease anybody's concern. And so that's how the new motion is crafted.

MEMBER AUSTIN: Nick?

MEMBER MARAVELL: Yes, I'd like to ask a point of clarification. We have a resolution in addition to this, and my understanding is regardless of which way the vote goes on the listing motion, that we will also vote on the resolution. The resolution will be amended slightly because some of what was in the resolution is now in the listing motion.

Am I correct in assuming that there will be a second vote on the resolution, which basically says we're phasing this out and we're asking for research priority? So there will be a second vote? Okay.

MEMBER AUSTIN: Right, I just

wasn't going to bring it up until after the first vote had taken place.

Questions? Comments? Nick?

MEMBER MARAVELL: Well, I'd like to comment on this basically from a producer perspective, because that's the stakeholder group that I represent.

You've heard quite a bit of this before, but I think that I don't see this as a majority and minority position. I see us all on the same page. We attempted in Seattle to start a process, and I think it's a process we can be proud of. And we have come together as a group.

So I think we need to consider what a farmer is thinking. We've worked with the research community; I have for over three decades, and I understand that certain things just don't get worked out the way they do at the research station. And also understand that going forward we have nothing but extremes in our weather outlook. We're being

whipsawed from hottest to coldest, from driest to wettest. There is no such thing as a normal year anymore.

My concern is that this could be a win for everyone because some of us got into organic production because we believed that we could have an impact on the larger agriculture in this country. My hope here is that if we were to follow the advice that we're getting from the research community, which is that we're on an edge here of transitioning out of antibiotic control for fire blight -- we've got little bumps in the road here in terms of speed, registration of products, getting established field trials up and running, getting farmers to accept this.

And as you can hear from farmers who have worked with the research community the past who testified with us, there are always things that come up that are unanticipated and you have to have that ability to gather some real-time on-the-ground

experience, particularly in this case when you're dealing with a biological control agent that needs to be handled very carefully, needs to be applied according to very strict protocols. And it's not easy. I mean I have worked with biological control agents with the research community over the years. Things that work in the experimental stations or in the lab sometimes fall flat.

Now what I'm suggesting in my mind is that if we take the time necessary to introduce this with the maximum chances for success, we will have validated a process where everybody can come together. And guess what, this could be adopted by the much larger tree fruit industry. And the consumers who are saying they don't like antibiotics in organic tree fruit can then say we don't want them in any apples or pears.

If we make the sledding go pretty rough, it's not going to take well in the producer community. It's not going to be as

successful. It's not going to be perceived as an accommodating type of entry whereby innovative practices are being introduced in a positive manner.

So for those reasons, the Subcommittee tried to balance all of these concerns. And we have one proposal before us which I feel balances those concerns, but it doesn't balance them in the way that everyone would like to see. I don't see in my mind any division between what we're calling the majority and the minority on this issue. I see, you know, 24 months of difference, and that's it. That's my statement.

MEMBER AUSTIN: Thank you, Nick. Colehour?

MEMBER BONDERA: Okay. Thank you, Nick. I'm not really sure where to start, but I'll try anyway.

You know, I kind of want to respond personally at some level because you and I, Nick, started on the National Organic

Standards Board at the same time, the same meeting in Seattle, facing this same topic. And I remember quite clearly; and I'm sure many people that are sitting here were in the room at that time, we went to what I consider -- and this is personal, I understand, but for me it was a compromise, suggestion and process that ended up getting voted through. It wasn't one way or another. And I think that that is probably how this topic can get dealt with, is if the players want to compromise, which means nobody's going to get everything they want. That's what the word "compromise" means.

And I feel that if you decide, okay, let's figure out a compromise that we can all work with, then that's one approach. But if the approach is black or white, either or, has to do this, has to do that, it makes it very hard to get everybody that's affected or involved to be working together and strategizing together to come up with

something that they can accept and that they can work with.

And I think I feel that, you know, in dialogue directly with you you've stated, you know, we came with that compromise that it would go until 2014 to make sure that things have started to move along. And I feel uncomfortable saying, okay, well things have started to move along and therefore let's let them move along further the same as they're moving along. It's like since they've moved along, my personal approach to life is, okay, so let's figure out how to channel them further down the path that we were identifying that we wanted to do.

In this particular case we're speaking of tetracycline exclusively. At that point in time we were talking about tetracycline and streptomycin. And I think in today's meeting we were talking about another antibiotic, and people were trying to even open the doors wider. So I think that we're

realistically not exactly having the same conversation we had then, but it makes me feel like, you know, are we talking about guiding ourselves down a path and it's getting narrower and we're trying to reach a conclusion, or are we talking about extending the same thing further?

And I think those are two very different approaches, honestly and frankly. And to be frank and honest and open with the people in the room, we've had discussions about, okay, what are some of those options? And I think that from my perspective some of the options that are starting to be thought about related to can we consider, you know, looking at the emergency option, because -- and I don't know.

I don't grow apples and pears and I don't know -- and I could give you pretty detailed personal experience on growing coffee, which is also a perennial, and we had the varroa mite come in -- not the varroa

mite. That's honey. When we had CBB come in and there was nothing to work with and nowhere to go, you know, we had to go to the state -- they had to go to the Federal Government to get guess what, Beauveria bassiana to be allowed to be used to control the CBB. And that was super hard work and everybody was freaked about it for a long period of time, like almost a year. And we had all these special meetings at the state level with the State Department of Ag and everybody else, because I think that people do get concerned.

And I understand quite personally, quite directly how farmers -- you know there's not a clear answer. And if you don't know what the answer is, people get very worried and wearied about these processes. But specifically on this topic I think that we have to -- well, I mean I won't be so specific quite yet. I'll come back around, because I think like in that case the CBB was in one area of the Kona coffee region and it wasn't

in the other areas.

So a huge percentage of people had zero problem with it. And I think that, you know, then we're talking about a very small segment, and so it's very easy to start talking about that. And I think with this whole topic with tetracycline we're not talking about a very big percentage of the apple and pear farmers that are certified organic. We are not. We're talking about a single-digit percentage.

So I think that we just have to make sure that we're talking about what we're really looking at and not sort of trying to make out for the worst case scenario, like everyone's going to lose all of their Kona coffee tomorrow if we don't find an answer. Well, that's true, but we're going to have to work through the process.

And I think that my feeling at this point in time with this topic is, you know, if we're not willing to work through a

process and we're just going to stand firm in certain conclusions, then I myself don't see that I'm feeling like we're working that carefully together. And I think whether or not I can feel in my heart as an organic farmer with organic integrity that I am representing not just farmers, but the whole organic community, when I try to speak about it. So I need to be careful.

And I don't mean this to be a response directly to you, Nick, but I'm following what you said, and I think it's true that now we need to make sure that we are as a group, the 15 of us, coming up with a solution that we all can feel comfortable with and that we work with. And that's my personal desire and goal, and I hope that we all want to do that and can and will do that, because I think that -- you know, I'll just wrap up by saying, you know, as not just a small scale farmer, but I direct market all my products and, you know, losing 40 percent of my income

because coffee disappeared like that was not, you know, something I was seeking or wanting. And I can completely understand that, but I can also completely understand, you know, having to directly sell to the consumers, you know, being able to talk to them and/or having to not tell certain truths. So I think that we need to be very careful, is my feeling. And so I think I hope that other people have some things to say that will bring us together, because that's what I would like. Like you said, let's all be together, and that's what I'd like.

MEMBER AUSTIN: One of the things that I'd like to point out is that as we sit as a Board and we are trying to weigh the balance for all stakeholders, this isn't just about tree fruit. This is about all stakeholders because this will impact a lot of people and a lot of lives. This Board, eight of the members sitting at these tables right now sat in Seattle, as you said, Colehour.

There was an annotation made at that time to extend that expiration date. I was in Seattle. I heard you guys loud and clear, as well as the rest of the industry did. The challenge that you put forth with the annotation to the industry, the stakeholder group, the orchardists, was to go forward and show us that you could make progress.

The comments made at that time were that we haven't seen that attitude. We haven't seen you make that attempt. Go forth. We're going to give you to 2014. You come back showing us that you can make some progress and then we will take this conversation back up again. That's exactly what has happened. You know, Ken Johnson, you know, immediately after the Seattle meeting, you know, the Organic Tree Fruit Working Group was put together from individuals across the country. Ken Johnson got an OREI research grant and started working on alternatives.

Prior to 2008 the volume of

production in organic tree fruit was nothing to compare to what it is today. When those numbers were so small, no government agency wanted to put forth the type of dollars for the research money that would go forward to take and help the researchers and the growers try to find alternatives solutions to this problem. It wasn't big enough of an issue. The chemical manufacturers would not put the money forward because there was no money in it for them.

Now there's volume. Now there's acreage. For the organic community as a whole we've known grown to a point where we have adequate access on all different fronts, whether it's at farmers' markets, whether it's sell from your farm to your clients, your customers, your consumers, or whether we're into the main chain source now. We can all take pride in where we've been able to grow together as an organic community, organic today as it stands.

To stand here and make the commitment to those organic stakeholders in 2011 that that Board made and to turn our backs on the challenges and the promises made to those guys would be a travesty. It's a disrespect to the organic integrity, to the organic integrity of this Board itself and to the stakeholders. We've got the same issue in front of us in 2016 with banana growers and rotenone. The same type of annotation was made to them. Go forth. We're going to give you to this date. Come back. Show us that you've made progress and we'll take the issue back up.

So if we're going to make these promises to organic stakeholders, we've got to take and have enough moxie to stand up, be the type of people, show the integrity as an NOSB that our organic stakeholders and community can be proud of and that we as individuals can be proud.

It's not that the organic tree

farmers, the pear and apple growers, don't hear the consumer concerns. They hear it very loud and clear. David Granatstein brought test results on residues yesterday showing seven different samples that were taken at harvest time with zero detect, applications of one to five applications of oxytetracycline. You know, maybe we can take and send forth a resolution or a demand that the growers start to take more physical results. You know, pull some samples two weeks prior to harvest. Let's start taking and helping and ensure and build the consumer confidence and trust back in what organic stands for.

This isn't about trying to take and pull something over the eye of the consumer. We all appreciate the consumer, because if it wasn't for the consumer, the organic farmers wouldn't be in existence today. The flip side of it, it wasn't for the organic farmer, the consumer wouldn't have the access to organic products that are available

today compared to where they were 10 years ago.

Further comments? Questions?

(No audible response.)

MEMBER AUSTIN: Nothing? Really? Come on, guys. Jay, you got to have something.

(Laughter.)

MEMBER FELDMAN: I was waiting.

MEMBER AUSTIN: Okay. You're waiting for the go-around? Okay. Mac, you know, I don't think we're getting enough commentary as we thought we might. You know, I guess it looks like we might be ready to do the around the room.

CHAIRMAN STONE: Okay. I'll be glad to start. I think I have the similar emotion that I saw and heard in Nick's voice. I think as a farmer and a direct marketer of organic products, and the conversations that I have, and looking people in the eye when they ask why should I buy your organic kale or

your organic chicken, and I explain to them the differences. And they don't understand all of the farming practices and all of the angst playing God with a hurt animal and deciding how to treat that animal or work with that animal.

So without going off the deep end, I think that we've heard that the growers feel very much they need this tool. We know that the growers that are organic thinkers will avoid this material as much as they can, whether it's pragmatic expense. But they know. I would sense that these growers are not just happy, but proud if they don't have to use this material. But the end of the day, I have reservations that we let retail dictate farm policy because Mother Nature in a great way dictates farm policy.

I'm going to support this vote to extend to this because I think the growers need this tool. Because this is a farm policy problem and it has a public perception issue,

but it's a farm/Mother Nature policy that the farmers are dealing with.

MEMBER WALKER: I would like to begin by saying that this vote is a very difficult vote. Dr. Mildred Smalley, the Vice-Chancellor for Research at Southern University, she said, "Research, if you know the outcome, it is not research." My issue is that even 2016, it appears to me as a researcher, a teacher, more time would probably still be needed.

USDA every years requests scientists at the 1890 Land-Grant Institutions, the 1862 Institutions on accountability and adaptability. USDA is concerned about what can we do to get stakeholders to adapt our practices, that they give us these thousands, sometimes millions of dollars worth of grant money. The difficulty that we have found, I can say in the State of Louisiana and maybe in other states as well, is that even if the science is there, getting

stakeholders to adapt it is also even a longer and a slower slug.

With that in mind, I would like to say what Colehour had said and I had mentioned when were dealing with animal welfare, a consensus is a situation where at the end of the day some will be happy and some will be pissed off. But I'm reminded of the three words of Nike: Just do it. So we are at a point in time that we have to do what we have to do.

And I was appointed by Secretary Vilsack to articulate the constituent group in which he appointed me, and that was to be a consumer and a public advocate. And based upon that, I line up behind the consumers and the public interests what I have heard, although how difficult it is, is very difficult. Because I would love to see the extension to 2016, 2018, but I just don't believe that even then it's enough time.

So I would like to say that I

think in the end that the organic community will be ever stronger and better for whatever the decision that we make.

MEMBER FULWIDER: I want to talk first about what I've heard from consumers and then what I have heard from producers.

With the consumers there's been a range of those who want complete prohibition of antibiotics, and there is also those who support their local producers working toward eliminating antibiotic use. And we've heard testimony at this and at past meetings that children are willing to eat tasty apples, but not necessarily the one that come from disease-resistant varieties. From producers, not all of the producers are requesting antibiotic use. They don't all need it, and those who do are using it sparingly.

I would like to see the university research completed to support the producers in the effort to eliminate antibiotics. Livestock producers in the organic industry

are required to use antibiotics to relieve animal suffering. Those treated animals are allowed to live out their lives. They get to go to another farm and the farmers do not necessarily have a financial loss because they can move those animals at the going conventional rate.

Orchardists do not have this option. They can't pick up the tree and sell it to their conventional neighbor. And I would much prefer to live next door to an organic orchard that's using antibiotics occasionally under the supervision and oversight of their certifier than to live next to a conventional orchard.

MEMBER AUSTIN: Anybody else?

Just go around the room now?

CHAIRMAN STONE: Yes.

MEMBER AUSTIN: Want me to go? Why don't I pass it over to Jennifer and we'll just come back. Jennifer?

MEMBER TAYLOR: I think that the

Board, this Board with a lot of the conversation that may support any kind of resolution that does not adhere to the previous board's recommendation to withdraw in 2014 -- I think that that hinders the progress of the farming population, as well as it doesn't benefit the consumers either. And I think that the thought of the previous Boards have not been reflected and won't be reflected if we continue this process of moving the date. And I think that I would have to represent my role as an advocate for the consumer, the public interest, and I would actually revert back to the 2014 deadline.

MEMBER MARAVELL: I would just like to acknowledge what Colehour said, that there's a very small percentage of antibiotic use on organic farms, and that's a testament to the ingenuity and commitment of organic farmers. But I would like to point out at the same time that there is fire blight pathogen on virtually every orchard in the United

States and if the conditions are right; and that may only happen once every 5 or 10 years, that that -- you don't know. It's like Russian roulette. You don't know if you're going to get it. The research community may eventually come up with a field test so that you could verify in time, but we're not there yet.

And so, Calvin, yes, there will always be a need for research. Well, you need job security.

(Laughter.)

MEMBER MARAVELL: But I think on balance, you know, getting that research into practical hands is what this resolution, the Committee resolution as currently proposed would do.

MEMBER THICKE: Well, I would first say that I was really impressed with all the people speaking on this issue that on both sides was very heartfelt. Everybody believed strongly in what they were talking about. So

there is really no bad position on this in some way.

Myself, I have the environmentalist position. I'm also a producer. So I look at both sides. Actually I would prefer more of a compromised position. And I may be speaking out of school, but if this proposal fails, there will perhaps be another one that's more of a compromise that would allow an amnesty for three years, meaning if a producer had to use antibiotic, the crop could not be sold that year as organic, but they would remain certified. And since it seems like maybe only once every five years is when they have to spray, the likelihood of having to spray is not real high and they have a relief valve, another opportunity. So I think that's the way we really need to go because it's kind of an amnesty.

On the other side, the NOSB has been, because of maybe the turnover, has been

saying over and over we're going to end this. And then new Board Members come on and then we're going to end this. So that's more of an amnesia-kind of a program, is that we just keep on forgetting what we said we're going to do and then we say we're going to do it again. And I really can't support that.

And from my experience with the field trip, we saw three producers and two of them were very committed and they didn't spray that often. And I am quite certain that the small producers -- and they have a local market that they would be able to make this work. And so I will not support extending to 2016.

MEMBER BONDERA: I mean I feel a little uncomfortable. I feel like I already said a few words. I mean the only thing I could add to anything that's gone in my mind since we've talked and I guess from the perspective of some of what you all said, I really frankly and honestly and in my heart do

not feel this is an either/or kind of discussion. I do not feel it's a both discussion.

I really feel like the approach that I at least carry and from my experience dealing with other people who are producers carry, they're not -- producers aren't looking for the bottom line of money. What they're carrying, organic producers are carrying is a different world view of understanding how things work. And you can't only factor in, well, the consumer perspective, well, the farmer perspective, you know, which one are you going to choose? Well, in this case, like in this room at this table you have to acknowledge the fact that the environmental perspective is equally represented, and has to be. And so you're already up to three even if you only count that portion of the people.

And so I think for me when we're talking about looking at it, the critical thing is really to make sure we're looking at

the whole picture of what is involved and what's affected and making sure that we're thinking about those issues. So not only does the fruit carry that whatever we're going to call it, contamination or whatever -- so you have that product and you're eating it, but, okay, is it on the leaves? Okay. Is it going to be there later in the soil? And we're talking about soil health. And we're talking about a lot of broader issues, you know, water and things like that.

So I think we need to make sure we're considering all of those factors and not one component. And that's how I look at and think about organics as a farmer. So I think that that's all I'll add. Thank you.

MEMBER FAVRE: For my part this has been a very difficult decision. I don't know if it's a blessing or a curse that I was not on the Board when some of those earlier decisions were made. It would be very easy to wish that previous boards had taken this

decision off of our plate so that we didn't have to make this decision.

But having said that, I think that the difficulty in this is that we've been dealing with in some cases people that have been getting sound bites of information converted to black and white issues when this is a very nuanced issue with shades of gray answers. And I've said this multiple times in our conversations, if these problems were easy to be solved, they would have been solved already. So it's important for us to not make a decision based on not having the full picture.

I also think it's possible that the farmers that would be impacted would feel that this was a fairly capricious decision on our parts when there's finally progress being made. So from my perspective, I would like to have the research completed. I would like to give the farmers the time to have the tools in place so that we aren't potentially

devastating their operations. And let's be very clear: These are individuals with families and livelihoods that are looking at being potentially significantly damaged either in the short term or permanently based on these decisions.

MEMBER BECK: So I had to prepare a statement. I'm going to read it, because otherwise I'll get nervous. I also feel like this is very -- it has me nervous, very nervous because so many people's interests are at stake here. So I'll go ahead and just read.

So I respect and acknowledge the concerns of all who will be impacted by this proposal. I'll state that I am unequivocally in favor of an extension until 2017 at the earliest. However, in an attempt to compromise I'm in favor of voting for the revised and annotated centrist proposal with a 2016 expiration date. This proposal was revised to take into account the very real

concerns of both consumers and farmers alike. And as others have indicated, we have a real opportunity today to pass a proposal that is relatively acceptable to all who are members of this organic community.

The arguments that have resonated with me over the past few days include some of the following: The U.S. domestic organic apple and pear industry must be preserved. We're talking about farmers' livelihoods who have been following their OSPs and have been in compliance with the National Organic Program. The conversion of organic acres back to conventional acreage is for me, and for many probably could be quite heart wrenching. And honestly, to shrink the organic industry to me would be a real shame. I also feel that the arguments that fact-based expiration dates based upon the availability and outcome of research must be proposed. The tendency to propose arbitrary expiration dates for the sake of compromise has not been a good

practice.

Also the work of the current research is very promising and I commend the progress that's been made. I wholeheartedly feel that the researchers should be provided the adequate amount of time needed to complete their studies and to allow the time for growers to learn about and adopt these alternatives.

And lastly, I feel that there is an opportunity to better educate consumers so that, as Tracy was saying and others, they have the holistic picture of both sides of -- or the whole story. And I think that in many instances it feels that there's just an opportunity there for them to know the entirety of the issues that are on the table.

And so that's what I've got for you all. Thank you.

MEMBER SONNABEND: Thank you. Well, we here as Board Members have listened over the last three days, and for some of us

much longer than that, to everyone's concerns on this issue. And we all agree, as was stated at the outset, that really every one is appointed to this Board to try and make the organic community better and try and make the organic community grow from whatever way we feel is appropriate.

The consumers in the room feel understandably concerned about their food and feel that efforts to remove this from the list have been stalled several times. I think antibiotics potentially has some real reasons to be concerned for, and it goes beyond what the science says or doesn't say and into just what people feel in their hearts about this going forward. Growers feel dis-empowered from this process because of being closed out from commenting entirely in 2008 and feel like they weren't heard in 2011.

I think that really both growers and consumers are the victims here. They're the victims of a system that doesn't

prioritize organic research and development of alternative products and the victims of just not having political power to be able to force these through our government/corporate system.

In 2011, a statement was made for growers and consumers to work together towards the ending the use of this material. Since that date this has happened with some success. In the grower community we're committed to following the trajectory that we're on towards tools for everyone to have success with alternative control measures, but we're not there yet. For pears in the Western U.S., for apples in the Midwest and East, and certain microclimates that are different than the ones the materials have been tested in already.

Key products are not even registered yet and will not be by 2014 expiration. Therefore, the grower community feels that we need to have the extension so that growers and consumers of organic fruit can reach together towards an end use of this

material. Any steps we can take to achieve an extension and reassure consumers at the same time we are willing to take. This is the reason for adopting some of the centrist annotation language into our proposal.

As I said yesterday and will say again clearly, that with two more years this will be the end of it. Disruption to people's orchards and livelihoods is too depressing for me to contemplate. After spending my entire career on having sound and sensible rules for organic consumers and farmers alike, I just cant see that ripping their organic orchards out, period, or converting back to conventional is appropriate at this time. So therefore I am going to support the proposed motion for an extension.

MEMBER FELDMAN: Thanks for calling on me earlier, Harold. I don't have a prepared statement and I'm not even sure what more I can add to the discussion. I wanted to give you more of a sense of how I

personally come to where I am on this.

You know, I see, and I'm sure you all see similarly in your own decision making process, you sort of -- I approach this on different levels. I approach this from a science perspective, science and policy perspective, I approach this as an advocate representing constituents who like many of you have mentioned, and I approach this as a parent of children that grew up in an organic household.

You know, the first thing that I do usually when I am confronted with these -- really all of them are difficult decisions; this one is particularly difficult -- is start with the science. And when we first got on the Board, our class, we didn't have the technical reviews that we have today. We were doing a little scrounging around for our own research, and John was sending us down rabbit holes, and other people had their own charts of how to get information. And at one point

we had six rabbit holes lined up that we would sort of follow.

And we didn't even know where the historical records were on the decisions that had preceded us. And we all labored over that, but we yearned for information and it started with what had happened before, what had previous boards done, what was the substance around those discussions, what did the science say, and then where is the new science on this? And, you know, I know that doesn't help when you're in an immediate crisis, because a lot of crises, as I've experienced working on the conventional side, are born out of decisions that keep going and going and going and never stop. The crisis is quite predicable, but it's identified as an emergency and unpredictable.

And we see a lot of this crop resistance where conventional monocultures result in resistance that is very predicable. But some people wake up and say, oh, I had no

idea my crop was going to fail and I don't have a pesticide I can use and I need to be able to use an unregistered -- or a chemical, one that's not registered for this use.

So I say all this because you never know when you're at the right spot to make a decision. You can't know it while you're in it. And I find that over and over again and I tend -- some of the people I represent say I'm too flexible, though I know you guys wouldn't see it that way.

You know, and so the question really is how do you really feel comfortable with the decision you make after having been in a conversation, tracking the history of the Board on this issue for so many years? Even before 2008, you know, the original Board grappled with this.

As an advocate, as you all do in your different groups you represent, you have to sort of look at where the people are that you're representing, and everybody I think is

doing a good job of doing that. And, you know, that was built into the statute. The statute really forces us to communicate with each other so that we can try to find a way to do what others have said, grow the industry, grow organic agriculture.

And so we do the best we can to explain the viewpoint of the people that we represent. And on the public interest side we search around for bringing science into this discussion, because we know the need is there and we know the people that rely on materials can express themselves and need to defend what they do and their livelihoods and their families and so forth. But we have to balance that with the science. So I'm really pleased to see in this last meeting in Providence and now in this meeting we have the benefit of bringing in people steeped in the science who can help us make these tough decisions.

And I think on the issue of antibiotics, it's one that I really didn't

expect the level of concern when I first dug into this. I figured this was a small use, that this -- you know, we had taken care of animal agriculture. The medical community was concerned about, you know, therapeutic uses, clinical uses. How could this really make that much of a difference? And I was sort of shocked to learn the level of concern when I spoke to about a dozen physicians before someone referred me to Dr. Morris.

So the science -- and I'm not going to obviously go through the science -- but the science I think is clear. The advocacy and the positions that people take in the environmental community is really often unpopular, historically. I mean, Nick, you referred to climate change and, you know, environmentalists took a lot of abuse in raising climate change in many years, earlier, you know, that their models were no good and this and that, whatever. We took a lot of abuse in advocating organic agriculture in the

'80s.

And so, you know, that need to stay in touch with the people that are supportive of organic, buying organic, consumers, environmentalists that are making the case for organic growth, why it's so important and all these arenas from, you know, trying to protect against global climate change, drought resistance, protection of soil, health, water, air, food, et cetera.

So in many ways my constituents are really shareholders of the organic industry. They're shareholders and they're investors. And you know how mad shareholders can get sometimes, right, if you don't deliver the goods. You know, and investors want to see the entities they invest in do the right thing, or make money, or do something. But they have a stake, they have a stake in certain things happening and they're not disconnected from what they have a share in or what they have an investment in.

And I'm seeing, you know, as I travel around the country, I talk to people everyday on the phone from around the country, that that stake that people feel in organic is very strong. And so there is this element of feeling that, either from their own ignorance or for whatever reason, that they don't have the right information or they were misled on this particular ingredient.

Now, as a parent, you know, when you raise kids in an environment with organic, you have a lot of discussions with your spouse about whether it's worth the investment, especially if they're not coming out of an environmental background. And so you have not only abuse at work from people beating up on you, you have the abuse of your constituents who don't feel you're hanging tough enough. Then you go home in the evening and you have to argue for putting a high percentage of your family budget into purchasing organic food. So I've been abused up and down the line here.

It's a good thing.

But I do have a lot of agreement with my wife about how important it was and is to raise our kids with organic, but I'll tell you funny story. And, you know, they know all the reasons why that go well beyond what they put in their mouth. They understand I started out working on organic because I was mostly concerned about farm workers and farm worker exposure to pesticides in the fields and that we could reduce our reliance on chemicals in the workplace and protect workers. And, yes, we could protest consumers, but that wasn't ultimately -- at least originally my concern.

And so my kids went out on their own. They went to college. They got their own places. And I get a call one day from -- I forget whether it was my son or daughter -- and my daughter goes, dad, I just got back from the store and I was standing over the dairy case and I couldn't believe it, butter was $5 a pound organic and there was butter

sitting right next to it was half the price. I said what did you do? Oh, I bought the organic, but I can't believe I had to pay that much for it.

But the important thing is that I want you guys to understand, and I think you do, that the investment that people have in what you guys do as growers is incredibly deep and even young people like that can understand that they have to dig deeper in their pockets to support this. So we on the flip side might need to do things that aren't easy, aren't the things we would rather do, but we believe we need to do to retain that trust and support among the people that in the past generation and the next generation will support organic production.

So with that, I apologize to any harm that may be caused by my vote. That is not the intent. I believe that in the end I pray and believe that we will work through this, at the same time that I feel deeply that

this is a necessary step to protect people's trust and faith in organic production as we move forward. Thanks.

MEMBER RICHARDSON: This is tough, you know, and I really respect all of the comments that have gone before me. So passionate. Zea, I love what you said.

So let me be clear for the record that I have not read or heard any scientific peer-reviewed evidence that persuades me that there are residues of oxytetracycline in or on organic apples and pears, and I'll continue to eat U.S. organic fruit.

I urge, at the same time, residue testing on harvested fruit as soon as we can, this year starting, to refute the inaccurate and misleading information that presently is in the media and on the internet. However, consumers assume that there are no antibiotics used in organic agriculture and the ongoing use of this antibiotic obviously undermines consumer confidence in the integrity of the

U.S. organic label, especially, as I say, in the face of all the recent media frenzy filled as it is with half-truths and inaccuracies. You can tell that makes me mad.

As a scientist, I understand that research takes many years to provide results. Indeed, it may be years before we have a clear understanding of the efficacy of new products for controlling fire blight, especially in the face of climate change. And therefore, if we pass this, I expect that continued extensions for use of oxytetracycline may be requested because many will wait to make changes in their agricultural practices and won't make the changes in their agricultural practices until they're really pushed to do so. That's been my experience in agriculture over the last 30 years.

Meanwhile, antibiotic use is not permitted in European or Canadian organic apple and pear production. In the broader context -- and it's important to look at this

-- tetracyclines are critically valuable in world public health and the low-level, sub-therapeutic intermittent application of antibiotics in production of apples and pears, whether conventional agriculture or organic agriculture, poses a serious health risk for development of bacterial resistance to this important antibiotic, and its use in fire blight control should be rapidly phased out if we're to continue to use this class of broad-spectrum antibiotics for human health.

I recognize that my vote against this recommendation will have serious economic impacts on many hard-working farmers, and I'm sorry about that.

MEMBER DICKSON: I've been coming to these meetings since 2004, and you know, this is obviously a board that only works on complicated, gray, difficult issues, and I think this is the hardest one I've ever seen and thought about. And, you know, I want to start out by saying that I'm completely

humbled to have seen so much openmindedness and willingness to engage and argue and open our minds in hallways and at dinners and in this room and at this podium and, you know, the candor and the courage, frankly, has been amazing.

As the retailer on this Board I have approached this issue from several different perspectives, but at the end of the day, one where, you know, I've talked to both a lot of shoppers and customers and the people who deal with them directly, and I've talked directly with a lot of growers and the people who buy products from those growers. And as a retailer we consider both our customers and our growers and our suppliers to be stakeholders in our business. And in an ideal world we make decisions that satisfy both of those groups and help them grow together and add value to the organic supply chain.

You know, my phone started ringing on this issue months and months ago. Our

buyers out in California and Washington and the Upper Midwest and the Northeast have all heard from their growers that are at serious risk. And our customers who've heard other messages are frankly and correctly shocked that antibiotics are part of organic production. That is, you know, a really big disappointment for any customer who hears about this issue. That's not a question.

You know, in deliberating on this issue as a company, the only way we could even feel comfortable explaining to our customers that we would support an extension on the use of tetracycline is if we could say there is a concrete hard-dated end time for this and this is not going to happen again, that there is, you know, 24 extra months that are there for a very specific reason, and after that we cannot support any extended use of this material.

Sometimes that's a satisfactory explanation. A lot of people do, you know,

just like within this Board -- none of those conversations are black and white. None of them are simple. We all stood in orchards on Monday morning and talked to growers who were showing us their blocks of trees that had been eviscerated by fire blight. You know, I don't know if anyone on the Board talked to the barista across the street this morning, but he was really worked up about this issue. And, you know, so was my mom and so are our neighbors and our families and our friends. And they're hard conversations, just like the one we're having right now.

Like I said, I believe the use of antibiotics in livestock or in terrestrial agriculture is not consistent with consumer expectations of organic agriculture, and I think we all agree on that. Antibiotic resistance is a real problem and one of the reasons that we should ensure that antibiotics are not part of organic agriculture. However, consumers and our stakeholders expect this

Board to make a decision that carefully balances the needs and expectations of many different stakeholders, consumers, retailers, growers, certifiers, the environment.

And in this case, you know, the question is not whether to ban antibiotics from tree fruit production. The question is when and how, and can we give the growers a bridge that, you know, balances the very clear right thing to do and expectations of consumers with the survival of those growers. And, you know, I don't necessarily have anything dramatic or new to add to the conversation, but just to say that this has been excruciatingly difficult to process for everyone here, and I do plan to vote yes on this proposal.

MEMBER FOSTER: So I remember that first year, too, Jay. And as I remember it, I just was mapping the rabbit holes. And then we all went down them together, for better or for worse. But I'm glad you mentioned that,

because it reminded me of those early days, which shocks me to say because it seems like just eons ago already, and I know it was just a couple of years ago.

But I still feel so fortunate to be part of the process. And as I've said many times in these meetings in the last few years, I feel endlessly privileged to be part of the process, as agonizing as it is sometimes for a whole bunch of reasons. But even today I'm just in awe of our collective wisdom and relative civility. It's very meaningful to me.

So I'm really glad to see what I think of as really robust, promising, inevitable progress toward removing tetracycline off the List entirely, and I think we're really close. No surprise, I'll be voting in favor of the extension proposal. I think that that progress has been genuine and heartfelt and sincere, and I think we owe the growers that are part of our community

that institutional good faith that we've shown other parts of our other constituencies in the past.

I know, you know, as a group or as individuals, we/us as individuals, there's going to be criticism, and that's kind of -- we all kind of signed up for that. And it's not the first time. Won't be the last. None of us like it, but no matter which way it goes, that's part of the deal.

What can I say other than the Dude abides.

(Laughter.)

MEMBER FOSTER: Obviously a lot of facets here, a lot of interested parties. And it's as it should be. That's our process, albeit if it's imperfect. As most of you know, I'm generally not compelled by kind of reductionist or extremist arguments. They just don't hold a lot of truck for me, of any stripe, either side, but especially those that appear to be designed to kind of cloud things

over. I don't care for that. Yes, I don't care for the intent. I don't know, it's just not compelling to me, so I tend not to put a lot of water in that bucket.

Those on the Board who have been on conference calls on Crops or Handling the last few years have heard me say that, you know, materials like this -- this is a good example -- used very sparingly, strategically and then only in the context of a very thoroughly vetted organic system plan, system of inspection, verification, reinspection, and that verified OSP and 205, 206 -- all those cascading requirements for pest management, I think, is in the context of a very solid regulatory system that I have faith in.

Again, not surprisingly, I don't want to lose that context. I think that's an essential context. And when we talk about materials in Subcommittee, or in a larger context like this, I think we forget that they exist outside of a vacuum, and I want to keep

driving that point home. I think that's a very important point.

I've heard a lot of kind of word choices and syntax that seem to drive us away from the critical question. They're driving us toward implication. And as one of my good friends used to say, innuendo and out the other.

(Laughter.)

MEMBER FOSTER: And I would much rather just hear direct answers to direct questions. That would be much more helpful for me in the future.

So since the proposed use extension, it doesn't feel to me to be really based in developing science, really, or even method. It's I think a derivative of compromise. I really anticipate, predict, if you want to call it that, that the existing 2014 deadline is going to fall far short of what's going to be required to register, test, implement, distribute, manufacture, all those

things. That commercialization process is not going to be there for these alternatives, I don't think. I'd be happy to be proven wrong. I really would be. I just don't see it. That's not my experience in the past.

I share some others on the Board's opinion. I don't know that 2016 is enough, but it could be. I'm willing to move the ball a little bit farther if it needs to be. I think we're close and I'd like to see that.

I think the vagaries, variability of the crops, the plant pathogens at hand -- I don't think the existing deadline allows a realistic commercial scaling. It seems more than wishful thinking to me. It seems fantastic in the truest sense of the word. Remote from reality I think is one definition. It doesn't feel realistic to me.

I think a lot of the resistance concerns can be very serious. I believe those have been sufficiently addressed by the science we have heard. That's my opinion. It

doesn't sound to me like an additional two years would cause anything but -- and I had to write this part down -- an unlikely possibility of unlikely transfer of something that is unlikely to exist more than a few days every few years in any given relevant environment. There's a lot of things that can happen. The world's an imperfect place. Things are going to happen.

It doesn't sound to me like this is worth the penalty that a significant portion of our own community has been counting on for a while, and I think we're so close. I just don't see penalizing that cohort, that part of us, with certain undue burden and hardships because of a chance of a chance of a chance of a concern, especially not when we are so -- I do think we are really close, and to remove the concern entirely.

And as others have pointed out, not just from the organic community, but if these work in organics, we have lots of

empirical evidence in the most dyed-in-the-wool conventional environments, like the valley I'm used to growing in. We've got a lot of experience that the benefits of organic reach far beyond organic ground. And this could be another great example of that, that as we develop these tools for organic, the rest of conventional agriculture can move a little bit closer to us. That's what I really like about this.

I know we are all working to remove the materials completely. We all agree on that. We're really close. And it's in this context -- and context is critical to the decision -- that this extension makes reasonable process and it makes reasonable sense. So I plan on supporting it. Thank you.

MEMBER AUSTIN: Okay. I'll wrap us up and then I guess then we'll take it to a vote. As all of you in the audience could hear, there's a lot of passion from the 15

members of this Board. Everybody is voting with their heart. Everybody is talking with their stakeholders at their best interest. I think the science came from two different directions and I think there was compelling evidence to displace some of the concerns, I think both from Dr. Stockwell's presentation -- I also think from the residue sampling that Granatstein was able to take and provide for us yesterday.

I think the point that we're missing is that the organic growers right now -- this is not a carte blanche use. Not every organic acre of apples and pears is getting treated. Those that need the treatment are the ones getting treated. And as has been pointed out, it's pretty minuscule, but yet it could have a serious impact to handlers, to producers, to processors, wholesalers, retailers and ultimately the consumer. I hear the concerns with those that have to represent the consumers.

There's been a lot of things going on in the news that have got the consumers scared. They've got them wondering about the safety of their food, but has anybody shared with them the information that Dr. Granatstein just provided to us yesterday, that out of seven samples there was zero detectable residues? The one stat that was used was what the development of the standards by the EPA, which is totally different than what any industry will use to sample residues on a normal basis, would be. And that's misleading and it's not based on what I feel is the way we should be presenting the information.

I also think when it comes those that have to take and stand up and protect the rights and the concerns of the consumers have to vote with their conscience and with their stakeholders. I think the one opportunity that we have that we're missing is that by denying the ability to move forward, by denying the opportunity to increase the

residue sampling, by showing that the concerns -- maybe are real -- maybe they're not as large of a concern as they're being made out to be. And I'm not going to sit here and say either way. I'm just making the statement that there's an opportunity.

I think the opportunity is for us as collective organics stakeholders -- shareholders, I think, Jay, is the word that you used -- I think all of our shareholders or stakeholders have a place at the table. They all have an invested interest in this process. They all have an invested interest of where we have brought the organic industry today from where it was 10 years ago, 20 years ago, 30 years ago. These growers have put a lot of blood, sweat and tears into this. They're up in the middle of the night frost-protecting their crops this time of the year. They're out in the middle of the winter. When you're sitting in your nice warm rooms, offices, businesses, they're out in the cold freezing

their butts off taking and pruning, protecting their crops, doing the things that need to be done in order to protect the trees, prune the trees. It's a way of life for them.

This isn't just about taking and putting something out that maybe it's right, maybe it's wrong. It's a way of life for them. They're doing this because they're passionate about it, just as each of you in this room are passionate about what you do.

The final thing I want to say is I think if we don't move this forward we're going to miss an opportunity for the organic communities from all fronts to come to the middle to find balance. If we don't find balance, we're turning our backs on the very essence of what the organic principles stand for.

The final point to state is I'm proud to be sitting on this Board as a handler's rep listening to everybody's passion. But even further, I'm proud to be a

member of one of the truest, the purest environmental groups in this country, and that is the American farmer. Not just the American farmer, but the organic farmer, because the organic farmers are passionate about what they do. They have to depend on that life, on that soil, the land, for their living. Are they going to intentionally go out there and do something that's going to destroy that ground? Hell no. They're not. They're going to protect it with every fiber in their body.

You know, and I'm sorry, but I'm starting to get a little bit passionate, and I apologize. But it's an issue. And we're going to disrupt people's livelihoods if we vote and vote this measure down. I will vote for it, and I'm going to vote for it not on behalf of the grower, not on behalf of the apple and the pear people. I'm going to vote for it on behalf of the organic community, because it's the right thing to do.

Any further discussion?

(No audible response.)

MEMBER AUSTIN: Mr. Chair, I think we're ready to vote.

CHAIRMAN STONE: Well, I want to thank all of you all. I know that those of you in the room could feel what just happened here. So we'll go for a vote. Jean, we start with you.

MEMBER RICHARDSON: No.

MEMBER DICKSON: Yes.

MEMBER FOSTER: Yes.

CHAIRMAN STONE: And let's go slow to make sure we get this one right.

MEMBER WALKER: No.

MEMBER FULWIDER: Yes.

MEMBER AUSTIN: Yes.

MEMBER TAYLOR: No.

MEMBER MARAVELL: Yes.

MEMBER THICKE: No.

MEMBER BONDERA: No.

MEMBER FAVRE: Yes.

MEMBER BECK: Yes.

MEMBER SONNABEND: Yes.

MEMBER FELDMAN: No.

CHAIRMAN STONE: Yes.

Six no, nine yes. Motion fails.

Jay?

MEMBER FELDMAN: I'd like to introduce a motion, if that's okay -- and I think Michelle has it -- on tetracycline. I'm sorry. I just need a minute here. Sorry, I lost it.

Why don't we go to the resolution first? Sorry. I'll be prepared for this. Zea has a resolution that follows on the previous motion.

MEMBER SONNABEND: Yes, we proposed a resolution along with our original motion, and I am looking for it. Okay. Even though the motion for extension fails, I feel like we need to have some resolution to indicate the need for high priority for research still. And so I would like to put forward the amended motion that I circulated

to everybody. It says, "The National Organic Standards Board is committed to the phase-out of this material. In addition, the Board strongly advocates to USDA a high priority for increased support for research into the alternative practices and materials." It really should say "for control of fire blight."

Is there a second?

MEMBER BONDERA: Second.

MEMBER RICHARDSON: Second.

CHAIRMAN STONE: Discussion? Sorry, Nick?

MEMBER MARAVELL: Yes, just because we sort of changed the context a little bit, we may want to say, "The National Organic Standards Board is committed to the phase-out of either tetracycline or antibiotics in organic practice," whichever -- you know, we just sort of "this material." I mean, it may be sufficient, it may not be.

MEMBER SONNABEND: That's true. I

guess there's no motion to precede it that passed, so I guess we would say phase-out of tetracycline. I accept that as a friendly amendment. Does the second, whoever seconded it?

MEMBER BONDERA: Yes.

MEMBER SONNABEND: Okay.

MS. ARSENAULT: Zea, instead of "this material" you want to insert "tetracycline?"

MEMBER SONNABEND: Yes, instead of "this material" in the first sentence.

MEMBER FELDMAN: Do you want to ask for the vote?

MEMBER SONNABEND: Well, I thought Mac was supposed to ask for the vote, but I think --

CHAIRMAN STONE: Sorry. I was making sure Michelle spelled it right while everybody's watching.

Any further discussion?

Okay. We'll call for the vote,

and we start with Joe.

MEMBER DICKSON: Yes.

MEMBER FOSTER: Yes.

MEMBER WALKER: Yes.

MEMBER FULWIDER: Yes.

MEMBER AUSTIN: Yes.

MEMBER TAYLOR: Yes.

MEMBER MARAVELL: Yes.

MEMBER THICKE: Yes.

MEMBER BONDERA: Yes.

MEMBER FAVRE: Yes.

MEMBER BECK: Yes.

MEMBER SONNABEND: Yes.

MEMBER FELDMAN: Yes.

MEMBER RICHARDSON: Yes.

CHAIRMAN STONE: Yes.

Vote is unanimous.

MEMBER FELDMAN: Okay. Mr. Chair, sorry for this, but that was the appropriate order. I'd like to introduce a motion and then we can have a discussion on this. You should all have an emailed copy of this, and

we have it up on the screen as well.

This is tetracycline for use on fire blight in apples and pears. I won't read all of this, but I'll read portions of it. And if you'd like to make any amendments to it, we can discuss this.

"But the Crop Subcommittee proposes to let the tetracycline listing of 205.601 expire and recommends that the NOP declare an emergency program for fire blight control in apples and pears running from October 21, 2014 to October 21, 2017.

"In order to minimize potentially devastating loss of trees during the period that growers believe is necessary to make the transition, the NOSB recommends that the NOP facilitate use of emergency provisions of the Organic Foods Production Act."

And then we explain in here the legal authority under 7 CFR 205.672, "when a prohibited substance is applied to a certified operation due to a federal or state emergency

pest or disease treatment program and the certified operation otherwise meets the requirements of this part, the certification status of the operation shall not be affected as a result of the application of the prohibited substance, provided that any harvested crop or plant part to be harvested that has contact with a prohibited substance applied as a result of the federal or state emergency pest or disease treatment program cannot be sold labeled or represented as organically produced."

So the motion is, "without any change to the NOP rule and without extending the 2014 expiration date of tetracycline on the National List, the NOSB advises the Secretary to create a national emergency disease treatment program for fire blight control in organically certified apples and pears authorizing the use of oxytetracycline until October 21, 2017, in accordance with 205.672 and 7 U.S.C. 6518(k)(6).

"The NOSB advises the Secretary that such a program will require a certified farm to document to its accredited certifier that non-antibiotic control methods had already been employed, that conditions indicate the need for treatment, such as predictive disease outbreak on models based on temperature and moisture conditions and the stage of growth of the full trees or extreme weather conditions, the date and locations of the trees sprayed with oxytetracycline, and the procedures to prevent commingling of any resulting non-organic harvested product with certified product.

"If growers use tetracycline during this period, they will not be able to sell the treated crop as organic, but they will not lose their certification if the certifier finds they have implemented an organic systems plan."

And then there's a recommendation to the NOP on guidance on alternative

practices that fit into several categories. I'm not going to read them all. And this comes partially out of the centrist proposal. "Implement a systems-based approach that integrates prevention, monitoring and control of fire blight, monitoring techniques, control techniques, steps to address long-term strategies, monitoring of the orchard for fire blight to determine if it is likely to become a threat to the orchard, and informing of the certifier about antibiotic applications."

So that is the motion and I'm looking for a second on that.

MEMBER RICHARDSON: I'll second that.

MEMBER FELDMAN: Discussion? Thank you. Go ahead.

MEMBER SONNABEND: If no one raises their hand, I guess I start. I have mixed feelings about adopting such a motion. And while conceptually I would like the emergency way out for the growers who feel it

would help them, I am completely opposed to this very prescriptive and detailed guidance, stuff that's in here because this was never vetted to any of the organic community except for those in the centrist know. And it's completely inappropriate for what we're dealing with in California where we're dealing with a lot of other problems that have to do with balancing scab treatments with these treatments and completely unrealistic suggestions about bloom thinning, which doesn't apply California, etcetera.

So I just really can't go for this very prescriptive language. And I would want to hear from the NOP whether they really feel guidance is necessary at all, because you do cover this in your points within the upper part of the motion, one, two, three and four.

MEMBER FELDMAN: Right.

MR. McEVOY: Well, this is a very new proposal here. We haven't had time to sit and analyze it. So if it passed, we'd have to

take a look at it and get back to you, because there's a lot of information in here and a lot of new concepts that we'd have to have reviewed by staff, including legal staff.

CHAIRMAN STONE: I talked to Brenda about this a little bit and the certifiers can manage this. The committed growers, they've got some source separation for EU compliance that they're sort of working through, which is brand new for them this year I guess, as well last year. So it's doable. It's burdensome, but you heard how committed they are to their growers and they work to great lengths. I should have said during the other ingredients discussion how much work John alluded to and how many countless hours that the certifiers work to verify that integrity of those products out there.

So this is doable on the ground. There's the other marketing sort of structures and that kind of thing, but this is something that could provide a safety net for some

people, and I just want to give a shout out to the certifiers that will bear the work load on behalf of this, what we're working through.

MEMBER FELDMAN: Harold?

MEMBER AUSTIN: A couple different things to point out, and I guess it will provide somewhat of a safety net, although I don't think much. A couple things. Bloom thinning. You know, there are certain varieties depending on how they're planted, especially in apples, that actually get blossom thin. So not every variety, every block, every type of planting is going to get a bloom thinner on it. Density is already -- you know, on the existing ranches that we're talking about, it's already established. They can't modify that. I mean it is what it is.

And the same thing would apply to the genetic resistance and rootstock and scion. I mean if this is a temporary order, it's an order that is talking pretty much about stuff that's already in existence.

To divert their crop, most of the growers in Washington are involved in a food safety program either SQF1000 or GlobalGAP Tier 1 or Tier 2. If they're a GlobalGAP certifier with a fruit cooperative, it means that they then have their food safety certificate as a part of that warehouse's certificate. So if they have to convert their fruit from organic over to conventional for that crop year, they may have some problems trying to move it, because a certificate -- if you're a Tier 2 you're underneath the warehouses and it's not a stand-alone certificate for you as a grower. So that's going to create an issue.

Processors wouldn't accept the fruit as well under the climate that we're now in where everybody is gearing up trying to head towards what the FDA's Food Safety Modernization Act is going to be. Washington State, our growers have really gotten ahead of this process and I don't know of very many

that are not certified either SQF1000 or GlobalGAP Tier 1 or Tier 2 at this juncture. So that creates an issue. It really does.

Smaller growers probably could handle it a little bit more so I think if their acreage was really small, but you know, if you've got any kind of volume at all, it's going to create some serious problems where that fruit's going to end up. Most likely a little bit of it gets sold. A lot of it's going to end up going to the landfill. And if you're that type of grower, a smaller grower, you may not be able to afford that. I mean that's your livelihood.

So, yes, I think there's some things in here that could help. I think there's some things that we're already doing as organic growers, but I do think, as Zea pointed out, some of this stuff isn't practical in certain specific areas. But I do think the bloom thinning, that's not going to be, you know, a one-size-fits-all because not

everybody's bloom thinning because some are doing it be hand. And we do have the fruit as a concern, too, where it's going to end up at.

MEMBER FELDMAN: Thank you. Jean?

MEMBER RICHARDSON: I might suggest that we might be able to amend the motion as it is on the floor; and I'm the seconder of the motion -- is that we simply stop the recommendation at the end of the first paragraph and that it simply goes on to say, "The NOSB recommends that the NOP issue guidance on alternative practices to implement a systems-based approach that integrates prevention, monitoring and control of fire blight," and simply leave it at that and eliminate the prescriptive detail which will vary enormously as we understand in its application in the different areas.

MEMBER FOSTER: If that were done, does that change the uncertainty I thought I heard in the Program's thinking about this?

MR. McEVOY: No, there's a lot of

things here that we have not run through any kind of review process. So it could be fine, but we haven't had a chance really to analyze how this would fit into the existing emergency pest provision under 672, what kind of authority we have to do this. So there are a number of questions here.

CHAIRMAN STONE: Yes, along those lines I think this -- I know there's some fancy footwork that the Program will have to do to -- the existing regulation doesn't allow for the rapid -- the growers have to have full capability to make the decision-this-morning-and-go-do-it-this-afternoon-sort of an approach, not waiting on approvals from government agencies, or certifiers for that matter. So it has to be structured in a way that's functional on the ground, or else it looks like we did something but didn't really.

But I guess that also suggests that -- this is a recommendation. The Program a lot to ruminate on this one, and as Miles

said, get legal counsel involved in stuff. So I don't know that we need to overly wordsmith it because it is a recommendation and they'll have to turn that back around, and we'll have time to see this again before anything happens.

MEMBER FELDMAN: Nick?

MEMBER MARAVELL: Yes, I'll ask Miles and anybody else who might know, has this section of the regulation ever been invoked before?

MR. McEVOY: Repeat that, Nick, yes.

MEMBER MARAVELL: Yes, I asked anybody whether in the audience, at the table or on the NOP staff, has this aspect -- maybe not in just this way, but has this aspect of the regulation ever been invoked before? It's generally referred to as the Emergency Spray Provision.

MR. McEVOY: Six-seventy-two, the Emergency Spray? Yes, it's under

consideration currently with the citrus -- what's it called, Asian citrus --

MEMBER SONNABEND: Asian citrus psyllid.

MR. McEVOY: Psyllid.

MEMBER SONNABEND: But that's a true government-mandated --

MR. McEVOY: Right.

MEMBER SONNABEND: -- emergency spray, not just organic.

MR. McEVOY: Right. So I don't know if they've started the spraying, but they're going to be spraying some organic citrus orchards in California for the psyllid.

MEMBER MARAVELL: Well, I would point out this is a very important distinction that Zea has just mentioned, that this would only apply to organic growers. The conventional growers, this would be of no value to anyway. And so that does put, you know, a limitation on it which might make it easier, might not.

MEMBER BONDERA: Yes, I just want to say that I think given where we're at right at this moment, from my perspective, I agree that this isn't necessarily perfect. It was put together very quickly. Like Harold was saying, it's not going to work for everybody and do everything, but it may help some and I think it may be worth the time and energy and effort that is put in. And I mean I can understand from the programmatic perspective the costs, but I just don't see the negative aspect. So I would say my perspective is let's try to move forward with some potentially positive opportunity given the circumstance where we're at right now.

MEMBER FELDMAN: Zea?

MEMBER SONNABEND: I too have some concerns about whether it actually can be implemented or not, but to address Harold's concerns, it's better than we have now for those people who can work it. And the people who can't work with it because of GlobalGAP

and the like just have to make their choice based on the other options. So, you know, I don't think they have to send fruit to the landfill, but they may have to pull out of organics altogether or find an alternative way to control fire blight. But to help those people who we can help through this program if it can be adopted seems worthwhile to try.

I would feel more comfortable if it said in the part that the NOSB recommends guidance -- I would feel more comfortable if it said "the NOSB suggests that the NOP issue guidance," so it's not part of a recommendation, because I see that the very complicated issue of guidance might distract from getting a rulemaking done on this. So if it's a suggestion, they can work through it and not have to have the same weight as a recommendation.

CHAIRMAN STONE: Jay, I'm going to suggest that if a couple of you Crop Committee maybe get together and decide on some

wordsmithing and where to draw the line here. Basically we just lobbed an IED in the Program's lap and they're trying to see just how they can handle it and just what -- and then they can better advise us.

So if we take a break for I'll say 15 minutes. After the break we'll finalize this. We've got workplan and a little bit of a wrap up. So I hope everyone will stay in the audience because there's a few things yet we'd like to convey to the audience. Thanks.

So I don't know what time it is. Back at 4:45. So 12 minutes.

(Whereupon, at 4:31 p.m. off the record until 4:43 p.m.)

CHAIRMAN STONE: Okay. We're going go on back to work. We'll wrap up this meeting.

So I think what we've decided; and again with consultation from many of you in the audience, this is an attempt, because of the tough emotional decision that we made a

little bit ago and a safety net, if you will, but this Board normally scrutinizes every word, Nick, and we think we need to give this more time to senesce into a document and a process and a procedure. The Program has a lot to consider at the -- just the inner workings of this on our behalf. Consumers and industry, everyone needs to have a look at this. That's our normal open policy.

I don't like the precedent setting of just throwing something together and people haven't read it and fully digested it. But we do want to get the word out to the growing community, growers, that we're considerate of their concerns and may be able to craft a methodology that can provide some safety net to some individuals.

So I think what we decided was that we'll keep this basic motion, keep this basic language as a recommendation and make a motion to the Program to work with us in this next term, put this subject on the workplan

for the Crops Committee for the summer term and the Program will be working with us obviously to see if we can implement something like this, what would it look like and get input and feedback from the related shareholders. I like that word, Jay and Harold.

So if you want to -- I'm not sure, Jay, just how we want to take this intent and make the motion is more about this consideration.

Nick?

MEMBER MARAVELL: Yes, I respectfully want to go on the record here because "we" does not represent my opinion in this particular case. And let me just say what we're trying to do and why I feel that we might be overplaying this a bit.

Under the statute, the Organic Foods Production Act, it enumerates several responsibilities that the Board has to carry out. It says "the Board shall." And one of

those is we shall advise the Secretary regarding emergency treatment programs. I have no problem with vetting this and making this a public discussion, but that's not the Board's call. That's not our process. Our process stops when we provide advice to the Secretary. I can see that the Program may want to get further input on this in terms of advising the Secretary. The only thing that we're doing is carrying out our mandated responsibility under the statute.

So I don't really think that the United States we can rework this until the cows come home, but I don't think it makes any difference. All we're doing is providing some advice to the Secretary. That's all we're doing. And we are mandated in law to provide that advice when we find conditions that we feel warrant the Secretary being advised of that. And particularly to slow this down within the NOSB with procedural activity in the case of an emergency treatment program I

think is a bad precedent. I think we simply tell the Secretary, hey, we got a problem here, and then it's up to the Secretary to evaluate that and take whatever process the Secretary wants to do.

And I would also think that if this is something that the Secretary wants to evaluate, it would probably be better to have a motion on the record rather than, well, you know, they're sort of thinking about doing this and we're not quite sure what they're going to say. I mean we should just put it out and say it. And if it turns out that we're wrong and we should do something else, we'll certainly take appropriate action at the next meeting.

So that would be -- I know you're not pleased with this, Miles, but that would be -- yes, I understand this is not going to make your life easy, but it's not making our life easy. We're in a very tight spot here. If there were a condition where we did need to

invoke this because something was happening right now, I don't see how we could take the attitude, well, let's wait until the next meeting and put it out for public comment when that's not what this is about. I don't feel that was ever the intent of the statute.

So I can fully understand how I may be wrong in this case. That doesn't upset me at all to be wrong, but I would respectfully want to be on the record as saying I would not vote to table this motion. I would send it forward. And if it turns out that we are wrong, I don't think we've done a lot of damage, but we may have done the right thing.

CHAIRMAN STONE: Colehour?

MEMBER BONDERA: Yes, I would like to -- and I know it's not the case, but I would like to second Nick's motion, even though he didn't make a motion. But I agree with what -- I agree honestly and that's what I was feeling during the break, too, is what

if this couldn't wait? What if this was right this second? And using this process to block I think is a very poor precedent. And I don't know what the Program imagines or thinks, but I think that that's not the appropriate strategy for us to be carrying out our role here. We are not implementing action. We are advising, and our advice can't just be in an emergency put it on the table. So that's my -- I support what he said.

CHAIRMAN STONE: Zea?

MEMBER SONNABEND: Do you guys not realize that tetracycline is still allowed this bloom season and next year and it's not until 2015 that this would have to kick into effect if it passes? I mean we're not talking about having an emergency right now. It's still allowed for two more seasons.

CHAIRMAN STONE: Correct. How many more times you want to have this discussion?

MEMBER FELDMAN: Why don't we

withdraw our motion and convert this into a motion that requests that the Program investigate the ability of the Department to adopt an emergency program that enables the apple and pear producers with fire blight to utilize tetracycline from October 21, 2014 through October 21, 2017?

MEMBER MARAVELL: Is that under the Emergency Spray Provision?

MEMBER FELDMAN: Yes, I'm sorry, under 7 U.S.C. 6518(k)(6) and Rule -- I don't have it here, 205.672. Do we want to adopt that as a motion? Does that work?

MR. McEVOY: Yes, that sounds fine.

MEMBER FELDMAN: Anyone type it out?

MEMBER RICHARDSON: Can you read back that motion, Michelle?

CHAIRMAN STONE: Yes, somebody's going to rewrite that and I think it needs to -- so we can repeat it.

Nick, did you have a question?

MEMBER MARAVELL: No. Well, I'd like to make a comment that, you know, part of my concern here is specific to this instance, but part of my concern here goes more generally to the statutory authority of this Board. So I think people should consider that in terms of setting this as a precedent.

CHAIRMAN STONE: Okay. So somebody's succinct-ifying that motion on paper?

MEMBER FELDMAN: Yes, I'm writing it out. Should we go on and come back?

CHAIRMAN STONE: You want to go on and come back to that?

The last thing on our agenda is work plans and other business. So if Michelle's not having to work on that motion, then we'll go ahead and pull up work plans. We'll put Crops off until last, Jay, so you all can work on that.

So the work plans, again for those

in the audience, when we're wrapping up preparations for this meetings; recommendations, proposals, et cetera, we also look at work plan. The Subcommittees develop those. We get petitions. We have sunset. We're looking forward. We take input from written comment and personal comments at the meetings and develop these work plans, what's priorities. We discuss that with the Program because we have to be pragmatic in what we can get done, not just what we want to get done.

So I guess if Committee chairs -- we're going to put Crops off until last. I'm not sure just the order they're in. So if the Committee chairs can sort of be a little bit ready here, we'll work through these. And it looks like Joe is up first with CACS.

MEMBER DICKSON: Thank you, Mac, and pardon me while I open my work plan document here. Oh, look, it's on the screen.

Our fall work plan for the Compliance, Accreditation and Certification

Subcommittee are -- the main piece of it is the follow-up on the fall 2009 NOSB recommendation on retail certification. That was a process sort of started by several earlier boards and not quite completed. And we're looking to sort of resolve a few very important questions about how the various exemptions apply to retailers and how they don't, and retail organic certification and some of that territory.

We have a discussion document centered around how certifiers apply 205.206(e), that John Foster's leading the work on. And we offer our services to the Program should we be able to provide any guidance or work around implementing the Sound and Sensible Initiative and look forward to more dialogue with the Program on that.

And then finally, as we learned today we will also be potentially working on a discussion document or a proposal around the exclusion of water related to the percentage

of organic calculation and some of the subtleties around nut milks and teas and various high water content materials and how their percentage is factored into organic product calculations.

And that is our work plan as I know it now.

CHAIRMAN STONE: Does anyone that's not on the CACS have any questions or comments about that work plan?

Okay. I don't have my binoculars with me. That looks like Crops sunset and petition, so we'll scroll on down. We'll come back to Crops. GMO ad hoc, that would be Miss Jennifer.

MEMBER TAYLOR: Yes, sir. I can't read that, but is it the same as what we had previously? Okay.

We are very excited about the opportunity to use the transparency communication docket system. And under that system, when it's implemented, we will be able

to take information such as the seed purity document and the excluded methods documents and receive additional information from our public community.

What we have on our work plan as we move towards the fall meeting is to proceed with information gathered from the public and from this meeting and develop a proposal perhaps looking at seed purity, or maybe we'll study it for awhile; we're not quite sure in that direction how we'll take that, as well as the excluded methods document that we received information on. We are hopeful that we will also be able to take that information and receive additional information maybe through the docket system as well or other methods and bring that to a possible proposal for the fall meeting again.

Other topics that we will be looking at are prevention strategy guidance for excluded methods in crops and handling and tracing GMO's input. Is that on there,

tracing GMO's input? I have that on my work plan here. It is? Okay. And that's a proposed discussion document also for the fall.

I'm hopeful that we will be able to look at farmer's choice. That's something that I have been talking about and the Committee talked a little bit about with Mac as well, but have not presented that information to the Subcommittee yet.

So that's our plan as we proceed towards the fall.

CHAIRMAN STONE: All right. Thank you, Jennifer.

Any questions or clarifications from Board Members?

All right. Waldo, you're up with handling.

MEMBER FOSTER: Gibberellic acid could be on our list. The current status is on hold at the moment. I believe we're waiting for a response from the petitioner.

We have ammonium hydroxide; which Jean has been working on, a petition to remove glycerin from 605. We have a petition for PGME as a boiler water additive. We'll also be working on 2015 sunset items; four of them I believe, gellan gum, marsala, sherry, tragacanth gum, I believe. And we've assigned all -- I believe a total of eight items we have leads for.

Depending on how these go, we may or may not have more room to work on materials. We also will, I'm sure, continue discussions, if nothing else, on ancillary substances. I would imagine that we'll have continuing dialogue on that, given the level of interest I think the community has expressed in that.

That's all I have at the moment.

CHAIRMAN STONE: Thanks. Any questions or clarifications from other Board Members?

Okay. Tracy will be swimming in

work this session. Livestock.

MR. FAVRE: As we're going to be the all aquaculture all the time channel on the Livestock Subcommittee, although we do have one outlier with the methionine for the organic poultry feed proposal we'll be addressing, we've got one, two, three, four, five, six, seven eight, nine, I believe, aquaculture materials that have been proposed, as well as the omnivore diet response, or the next step for the discussion document which I'm going to have some feedback for you here in just a moment, as well as we have added to our work plan the vaccines from excluded methods from the GMO ad hoc committee.

Will you go ahead and pull that up for me, please?

We do have a little bit of feedback from specifically the methionine issue in regards to the omnivore diet discussion document that we put out for the last meeting where we got absolutely

unequivocal feedback that the community did not want meat scraps in poultry or pork diets. So as we're moving forward with this we have some summary statements here, and it's basically that we are continuing to seek feedback for input on ways to solve this dilemma for omnivore diets, and are really exploring all sorts of potential options, and looking at promising alternatives, and looking at the options for encouraging, and promoting research into those areas. These are just some of the summary statements that we put together.

We did get some feedback on the herbal methionine option that we were looking at from a report back in December 2012 that essentially that trial was ineffective. And so there needs to be some more research done into that to see if it truly is a viable alternative or if we need to abandon that as a potential option. And the Methionine Task Force has just funded a major research study

to be conducted looking at the implementation of the step-down proposal, and there's going to be quite a lot of work put into that between now and the fall meeting, and we're looking forward to hearing from them on that.

So really the final thing we really want to say is that we've got to find a way to reduce synthetic from this industry. Still struggling with issues. It's not probably -- or maybe it is on the same order of magnitude as we've gone through here with oxytet, but it's a similar issue where there is no good replacement yet. So we're struggling with it. And we want to really keep the stakeholders and the public abreast of what we're doing.

At the same time we want to emphasize even though the proposal for meat scraps in the omnivore diet discussion document was rejected pretty soundly, we still want to make a statement as a board that we want to encourage the natural foraging

behavior part of that discussion document. And so we'll be providing some additional feedback at the fall meeting.

And I think that wraps it up for Livestock.

CHAIRMAN STONE: Thanks, Tracy. Any further discussion, clarifications from the Board?

Okay. Materials. Miss Zea, if you're not working on that motion.

MEMBER SONNABEND: Thank you, Mac. So our big work plan item for the next time is to examine and update the petition on the technical review process. The Department has sent us a number of bullet points to work on and I believe plans to send us some more. I imagine we are going to fold into it the process for limited scope TRs and in fact the confidential business information portion as part of that. And we may also undertake the issue around convening of technical advisory boards and/or a working group policy.

Also the definition of production aids from this discussion document may continue to be worked on. And then yearly we will present our yearly list of research priorities from all of the committees. So we will be nagging or asking all of the committees to assemble their research priorities and give it to the Material Subcommittee.

Our ongoing project is petition and TR tracking. We don't have to do too much these days because Lisa does such an admirable job of sending a monthly update on where we stand and we all look at it over. And then at some future time we may undertake how to address scientific uncertainty. Thank you.

CHAIRMAN STONE: Okay. Any questions, clarifications? That reminded me that we've a little conversation, Executive Committee and individually, that one way that maybe we can -- we talked about reducing the number of people on each committee, depending

on the work load for that term. But we've also talked about we may combine a committee or two here, save some staff time with the program so they can work on other ingredients or some of these other items. So it may look a little different when we come back when you see recommendations in the fall, or it may not. I'm not sure.

Okay. Policy. Colehour.

MEMBER BONDERA: Thank you. So the Policy Development Subcommittee intends to regroup around what happened with the material initiation discussion document that we worked through at this meeting. So that is still at least tentatively ongoing.

I think our primary emphasis will be on review and updates to the Policy and Procedure Manual. At this point in time we are essentially trying to redo the whole thing, which is not something that's been tried to be done in one fell swoop. So as I've communicated to both the Subcommittee and

the Executive Subcommittee, it seems like we may need to have that also be on at least the spring '14 agenda.

And although they aren't on the screen in front of you right now, I still have on this list some things that are going to have to get I think clarified. For example, the program came out with a memorandum on the subject of conflict of interest, however, the NOSB in no format adopted or updated our conflict of interest policy. So like was stated in the last Executive Subcommittee meeting before we came here, what we have to work with is what exists right now in the Policy/Procedure Manual. They have put forth a memo, but that is not our adopted policy. So my personal opinion is that will need to be on an agenda.

And it's also not on this screen right now, but we have talked about decisive/indecisive determination of NOSB votes. And the program has told us that they

would be providing a memo on that topic, but we kept it on the work plan because we didn't know what that would entail or when that would happen. And so, my feeling as the Chair is that that should still be on the work plan at this time, unless we agreed to withdraw it.

So I think that that's all that I -- yes, I think that covers what I wanted to share. Thank you.

CHAIRMAN STONE: Thanks, Colehour.

Any questions, clarifications?

All right. I've asked John, the Vice Chair of Crops, if he can run down the crop list while Jay -- are you ready?

MEMBER FELDMAN: Yes.

CHAIRMAN STONE: Oh, okay. I thought you were working on the motion still. Sorry.

MEMBER FOSTER: And let me just step away from being Vice Chair of Crops right now.

CHAIRMAN STONE: Oh, yes, Nick,

who is Vice Chair?

MEMBER FELDMAN: I got it.

CHAIRMAN STONE: Okay.

MEMBER FELDMAN: Sorry. Okay. For the fall meeting we have vinasse on the agenda. This is a petition. We have a petition that recently came in on streptomycin. We have aquaculture. These are used in aquatic plants, so carbon dioxide, chlorine, micronutrients, lignin sulfonate and vitamins B1, B12 and H. We have a petition on magnesium oxide as well. And then we are still working on the inerts, so the Inerts Working Group is working away and we may have some work to do, at least do an update. Hopefully we'll have some good news to report.

And then one of the new issues that we'd really like community input on is contaminants in farm inputs. This started out being called compost, but we've adopted a broader construct of how we move forward on this. So that is on the list as well.

And then we'll be starting to work on issues that will not be on the fall '13 agenda, but spring '14. And these are sunsets. Sulfurous acid, sodium carbonate, peroxyhydrate and aqueous potassium silicate. We'll start our TRs on that.

Then the other thing we haven't really talked with the program yet is when we should start or could start working on guidance related to the bio-mulch, whatever. We're calling it biodegradable mulch. So that is something we may ask the program about starting work on. I don't know what the time table is for that.

Did I get everything?

CHAIRMAN STONE: That's enough.

MEMBER FELDMAN: Thank you. Yes, and then we'll also be working on the emergency provision for -

CHAIRMAN STONE: Okay. Questions or clarifications on the work plan?

All right. Thank you very much.

So do you have a motion drafted over there?

MEMBER SONNABEND: Here's the motion while Jay's looking for it. Move to request that the NOP investigate the ability of the Secretary to invoke its authority under the Emergency Spray Program's provision of the Organic Foods Production Act, 7 U.S.C. 6518(k)(6) and Act 7 C.F.R. Section 205.672 to allow the emergency use of oxytetracycline for fire blight during the period of October 21st, 2014 to October 21st, 2017.

MEMBER FELDMAN: I guess we should introduce this as a motion.

CHAIRMAN STONE: Yes, let's maybe see if we're going to -- the language is going to change any. Or we could get a motion and a second on the floor.

MEMBER FELDMAN: Okay. I'll introduce this as a motion. Can I get a second?

MEMBER RICHARDSON: Second.

CHAIRMAN STONE: All right. Nick?

MEMBER MARAVELL: I have a point of order. Was there a previous motion on the table that was made?

MEMBER FELDMAN: I think the record will reflect that it was withdrawn and seconded. I think you --

MEMBER MARAVELL: It was withdrawn? I wasn't aware of that.

CHAIRMAN STONE: It wasn't withdrawn at the table, so we do need to withdraw it at the microphone.

MEMBER MARAVELL: Right. Because --

MEMBER FELDMAN: Oh, okay.

MEMBER MARAVELL: So if you want to make a motion to withdraw it, I would welcome the opportunity to vote against it and then I can --

MEMBER FELDMAN: Okay.

MEMBER MARAVELL: Just do it in a hurry.

MEMBER FELDMAN: I'll introduce a motion to withdraw the original motion in deference to the Department's need to investigate this issue in good faith so that we can move forward a program that addresses emergency conditions for growers who are experiencing fire blight. I need a second, please.

MEMBER RICHARDSON: I second that.

CHAIRMAN STONE: Motion and a second to withdraw the original emergency spray plan. Anyone like to comment?

Seeing none, I guess we still have to do this formally. So we'll proceed to the vote, and John goes first.

MEMBER FELDMAN: We don't need to do that. We withdrew the motion. You never voted for it. We never got to a vote. We were in discussion.

MEMBER MARAVELL: Excuse me?

MEMBER FELDMAN: We never voted on the previous motion.

MEMBER MARAVELL: No, we didn't.

MEMBER FELDMAN: Right. We withdrew it before you had a chance to vote.

MEMBER MARAVELL: I'm not trying to vote on that. I'm trying to vote on the motion to withdraw it.

CHAIRMAN STONE: I think we still have to -- we have a motion and a second.

MEMBER FELDMAN: No, I think we can just withdraw it.

MEMBER BONDERA: Nick, we have to vote on withdrawing the motion, is that correct?

MEMBER MARAVELL: I don't know if we have to. I'd love to, but I don't know if we have to. I mean I'm not a parliamentarian, but normally when there's a motion on the table you can't just -- you can make a motion to table which then requires a vote. You can make a motion to withdraw, or you can vote it down. But I'm not a parliamentarian and I'm not trying to give the Chairman a hard time.

I'd just like the opportunity to vote against withdrawing it. That's all.

CHAIRMAN STONE: All right. So let's go this way: All in favor, say aye?

Any opposed?

MEMBER MARAVELL: No.

CHAIRMAN STONE: Very good. Okay. The ayes have it.

MEMBER FELDMAN: Thank you, Nick, for getting that on the record. And I do think you're raising an issue that we should resolve. So are we back to the motion --

CHAIRMAN STONE: We're back to the motion --

MEMBER FELDMAN: -- just to get back on track here?

CHAIRMAN STONE: Right.

MEMBER FELDMAN: I introduced the motion. Jean seconded the motion that was read by Zea.

CHAIRMAN STONE: Can you blow that up just a little, Michelle, please?

Can you all tell? Is that enough to work with without being prescriptive?

MR. McEVOY: Yes, we can work with that.

CHAIRMAN STONE: Any other Board Members see -- not going to give you too long. Okay. Kind of like the aye and no thing, but -- so we'll proceed with the vote. And let's finish this out formally and we may think about this aye and nay thing, but -- so, John, you get to start.

MEMBER FOSTER: Yes.

MEMBER WALKER: Yes.

MEMBER FULWIDER: Yes.

MEMBER AUSTIN: Yes.

MEMBER TAYLOR: Yes.

MEMBER MARAVELL: Is it my turn? Yes? No.

MEMBER THICKE: Yes.

MEMBER BONDERA: Yes.

MEMBER FAVRE: Yes.

MEMBER BECK: Yes.

MEMBER SONNABEND: Yes.

MEMBER FELDMAN: Yes.

MEMBER RICHARDSON: Yes.

MEMBER DICKSON: Yes.

CHAIRMAN STONE: Chair votes yes. So that's 1 no, 14 yes. Motion carries.

Thank you.

Miles, we appreciate you all's interest in working with us to develop a system if and in fact it can be workable, it may not be helpful. We hope it might be or provide some safety net.

Okay. Does anybody else that's on the Board have any other business or something to bring to the attention?

Well, I'll just like to -- oh, I'm sorry, Miles. Go ahead.

MR. McEVOY: Yes, I just wanted to let people know that the President released the budget yesterday and in the budget for USDA includes a $2 million increase for the National Organic Program for --

(Applause.)

MR. McEVOY: -- enforcement and international trade arrangements. So a $1.5 million increase for increased enforcement and half a million dollars for working on international trade arrangements. So that's just one of a number of things that would need to happen. Currently we're under about five percent less money this year than we had last year. And that's just some information for you. There you go.

CHAIRMAN STONE: So even more work for you. That's good.

I'd like to close out this meeting with just a couple of thoughts. This Board recognizes that nobody rotates off next year. These 15 of us, we get to share the next year-and-a-half, almost two years together. So I look forward to us furthering the relationship-building that this afternoon really did. I think it brought us closer as individuals. Having breakfast this morning

with people that were on each side of this difficult issue and the share and the love that they showed for each other was just really rewarding.

But I also have to say to some of those in the community that created an environment of mistrust and often used twisted or misleading language, it doesn't really pass the sniff test of organic principles to a lot of us that on this side of the microphone have to really wrestle with these things. And a strong consumer advocacy is very important to this whole process, but it makes it harder to do our job on this side of the table.

I want to recognize not just the NOP staff that's here, but those of you all back in D.C., and many of you work from around the country, for all the work you do. And I'd like for those of us on the Board and everyone in the audience to give Michelle Arsenault a big round applause for all that she does.

(Applause.)

CHAIRMAN STONE: So last I'll just say, and I'll try to do it without crying, but I've never been more proud of a group of people than today. Thank you.

(Whereupon, the above-entitled matter went off the record at 5:23 p.m.)

C E R T I F I C A T E

This is to certify that the foregoing transcript

In the matter of: National Organic Standards Board

Before: USDA

Date: 04-11-13

Place: Portland, OR

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

Neal R Gross

Court Reporter