UNITED STATES DEPARTMENT OF AGRICULTURE

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NATIONAL ORGANIC STANDARDS BOARD

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SPRING 2018 PUBLIC COMMENT WEBINAR

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TUESDAY,
APRIL 17, 2018

The webinar was held via telephone at 1:00 p.m., Tom Chapman, NOSB Chair, presiding.

BOARD MEMBERS PRESENT
TOM CHAPMAN, Chair
HARRIET BEHAR, Vice Chair
SCOTT RICE, Secretary
JESSE BUIE
SUE BAIRD
ASA BRADMAN
A-DAE ROMERO-BRIONES
LISA DE LIMA
STEVE ELA
DAVE MORTENSEN
EMILY OAKLEY
DAN SEITZ
ASHLEY SWAFFAR

STAFF PRESENT

DR. PAUL LEWIS, Ph.D., Director, Standards Division, National Organic Program
MICHELLE ARSENAULT, Advisory Board Specialist, National Organic Program
DEVON PATTILLO, Materials Specialist, Standards Division, National Organic Program
GERALDINE GONZALES, Intern, Standards Division, National Organic Program

C-O-N-T-E-N-T-S

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

(1:00 p.m.)

MS. ARSENAULT: Hi, everyone. Welcome. It's Michelle at NOP. I have straight up 1 o'clock, so I see some folks are still trying to dial in and get online. But I think, I think we can probably get started and people will just join us, as, as we go.

Welcome. So this is the first comment webinar for the April 2018 NOSB Meeting. We have a full house today, so we'll probably be on the phone until almost 4 o'clock, I would think, Eastern, and we have a second comment webinar on Thursday.

So I'm going to do a little housekeeping before we get started. So if you're on the line, you should be on the webinar -- excuse me. You should see an introduction slide. I'm going to move, I hope nothing on my screen is blocking it.

There's a welcome screen and some instructions on this slide about how to dial in,

how to mute and unmute your phone. If you don't actually have a mute button on your phone, you can hit star six to mute yourself and star seven to unmute yourself.

We ask that people stay on mute and self-mute throughout the call, unless it's your turn to present comments to the Board. That'll help minimize background noise. And if we have to mute everybody on our end, then we have to take time to unmute the person that needs to speak next and it just takes a little bit more time.

If noise becomes a problem, we will do that, and mute everyone on our end and unmute you, as necessary. I think the last few webinars went really well and background noise wasn't too much of an issue, so -- but we will remind you, throughout the call, about muting and, and keeping the noise to a, to a minimum.

Also, please don't put us on hold, if you are calling in from a business. We'll probably all be subjected to your Muzak, and so

-- don't put us on hold if you need to step away from your phone.

Each commenter is going to have three minutes to speak, and we're going to use a timer. So we'll start the timer, we'll give you a few seconds to introduce yourself and I'll start the timer, and then it'll beep when your time is up. And then, the Board Chair, Tom Chapman, is going to take over and -- open it up for questions from the Board Members.

So we're going to practice the timer in a little bit, so, to make sure everybody can hear it. So as a participant on the call, you have the ability to chat and raise your hand, but we're not using the raise your hand function.

So we'll be calling on the speakers, because you had to sign up in advance, in order to provide comments to the Board. You can chat with us and we'll be able to see it, and there's several of us on the staff here who are responding, so hopefully someone will be able to answer your question quickly.

If you're having technical problems, the best thing to do is to -- email readytalk.com. They're pretty responsive. And if you go to their website, there's also a number that you can call in to talk to someone. And I, I've had really good luck with their support people. So that's an option.

We only have one PowerPoint presentation today, with one slide, so if you can't be on the web portion, it, I think it'll be okay and, and just listening in will be fine.

So we're going to test the timer, so everyone can hear it and know what it sounds like, for the speaker.

One second here.

(Pause.)

MS. ARSENAULT: Did everyone hear that okay? Is it loud enough? Board Members? Guests?

MR. PATTILLO: I heard it, Michelle, loud and clear.

MS. ARSENAULT: Okay, thanks. All

right then --

PARTICIPANT: Yes, I'm good.

MS. ARSENAULT: With that, I'm going to turn it over to Paul Lewis, the Director of the Standards Division at NOP, to officially open the meeting.

MR. LEWIS: Thank you, Michelle, and good afternoon. I'm Paul Lewis, Director of the Standards Division with the National Organic Program, and our responsibility is to provide support, administrative support for the National Organic Standards Board.

I'd like to welcome NOSB Members and the public to today's meeting of the Board, the public comment webinar. And I appreciate NOSB Members' participation in this call and for all your work serving on the Board.

This webinar provides the opportunity for the public to provide comments to the NOSB, as part of the Board's upcoming public face-to-face meeting, scheduled for April 25th-27th in Tucson, Arizona, and please consult the

NOP website for further information, including the agenda, about the face-to-face meeting.

The webinar we're having today, like other meetings of the National Organic Standards Board, operate under the auspices of the Federal Advisory Committee Act.

I'm looking forward to hearing comments from the public to assist the Board in preparing their recommendations to USDA. I want to particularly thank my NOP Standards Division colleagues for their help, especially behind the scenes work, to bring us today's teleconference.

I'd like to close by turning now to Mr. Tom Chapman, Chair of the NOSB. And, Tom, thank you, again, for chairing this webinar and for all your work along with the rest of the Board. Thank you.

CHAIR CHAPMAN: Thank you, Paul. And thank you to the NOP Staff for helping facilitate this call. On behalf of the Board, I'd like to welcome everyone to the public comment webinar, prior to our spring meeting.

And, Michelle, if you could be so kind, could you take a roll call of the Board present?

MS. ARSENAULT: Sure. Sue Baird.

MEMBER BAIRD: Here.

MS. ARSENAULT: Sue's on the line. Harriet?

VICE CHAIR BEHAR: Harriet's here.

MS. ARSENAULT: All right, Asa Bradman.

MEMBER BRADMAN: Asa's here.

MS. ARSENAULT: All right. Jesse Buie?

MEMBER BUIE: Here.

MS. ARSENAULT: Thanks, Jesse. Tom Chapman, I know you're here. But --

CHAIR CHAPMAN: I'm here.

MS. ARSENAULT: -- would you like to -- thank you. Lisa De Lima.

MEMBER DE LIMA: Here.

MS. ARSENAULT: Thank you, Lisa. Steve Ela.

MEMBER ELA: I'm here.

MS. ARSENAULT: Great. Dave Mortensen.

MEMBER MORTENSEN: I am here.

MS. ARSENAULT: Hi, Dave.

MEMBER MORTENSEN: Hello.

MS. ARSENAULT: Emily Oakley.

MEMBER OAKLEY: I'm here.

MS. ARSENAULT: Great, thank you. Scott Rice?

MEMBER RICE: Present.

MS. ARSENAULT: Great. A-Dae Briones. A-Dae, are you with us?

(No audible response.)

MS. ARSENAULT: Maybe not. Maybe on mute.

PARTICIPANT: She sent an email saying she was having difficulties, so.

MS. ARSENAULT: Oh, thank you. Thank you.

PARTICIPANT: No problem.

MS. ARSENAULT: Okay. I'll catch up

with her the day after and make sure she, she was able to get on. Dan Seitz?

MEMBER SEITZ: I'm here.

MS. ARSENAULT: Thanks, good to see you on there. Ashley Swaffar?

MEMBER SWAFFAR: I'm here.

MS. ARSENAULT: All right. I believe that is all 13 of you. Tom, would you like to address that?

CHAIR CHAPMAN: Okay. Twelve of the 13, we didn't have --

MS. ARSENAULT: I'm sorry, 12 of 13, yes.

CHAIR CHAPMAN: Yes.

MS. ARSENAULT: Thank you for that.

CHAIR CHAPMAN: Yes, and right now, we have two vacancies on the Board, so 12 of 13 Members present, at this time. We do have a quorum.

So before we get into the public comment, I'm going to review some logistical information about the webinar, kind of repeat

some things that Michelle said.

And that's, first and foremost, please, remember to keep yourself on mute when you're not giving public comments. Star six to mute, star seven to unmute, or use your mute button on your handheld device.

So like we have done in previous times, we'll proceed down the public comment list, in order, starting with Charlotte. If you're on the line, you're on deck, so you're coming up first.

If someone's not present when we call upon them, then, and there is time remaining at the end of comment period, we'll run through the list of those missed and give them an opportunity at the end.

If you are a commenter on the line, please message in your phone number so we can identify you. So if we have to unmute, we can unmute.

I'll call out the speaker who's up, read out their name, and then the next one or two

who are on deck, when you come up and speak, we'll just do a brief interaction to make sure we can hear you and you're unmuted, and then we'll start your public comment time.

Now when we start with you, we do ask that you start with your name and affiliation, for the record. And we ask that you include all relevant affiliations pertaining to the matters of business before the Board.

If Members of NOSB need further clarification, I do encourage those Members to ask questions after the public commenter has finished their comments.

You will hear that buzzer when the three minutes are up, and we have to have respect for the Board and the other public commenters that you finish your sentence after hearing the buzzer. I will then facilitate the questions from the Board.

For Board Members, we are trying to use the raise your hand feature so I can call upon you, but if that's not working for us,

please speak up and I'll call upon you in the list that I get.

We don't take any questions from the public for other public commenters, so the questions are for the Board to the public comments. All public commenters are only allotted one time slot, either in person or at the webinar.

And just so you guys know, there will be transcripts of this call, bundled with the transcripts for the entire meeting that will be available at some time later after the full meeting has concluded. Michelle, did I miss anything?

MS. ARSENAULT: No, I was actually just thinking, oh good, Tom remembered to say something I forgot. Thanks, Tom.

CHAIR CHAPMAN: All right. So, so we'll get started now with the public comments. The first up is Charlotte, followed by Robert Landers, and then Sam Earnshaw. Charlotte, are you on the line with us?

MS. VALLAEYS: Yes, I am.

CHAIR CHAPMAN: All right, Charlotte, we can hear you, so if you could start with your name and affiliation?

MS. VALLAEYS: All right, thank you. My name is Charlotte Vallaeys, and I'm a Senior Policy Analyst with Consumer Reports. First, I'd like to thank the Board for your time and commitment to this important work.

I'd like to say a few words about Consumer Reports. We're an independent non-profit organization working side-by-side with consumers to create a fair, safer, and healthier world.

We work in many areas, including efforts to create a safe and sustainable food system. In many ways our vision for a safer and more sustainable food system aligns with organic.

And that's why we believe the integrity of the label is worth protecting and where warranted its standards should be improved. And it's why we are very concerned with the issue

of fraud, which we see as being not only an imports issue.

Whether it is imported grain mislabeled as organic, organic eggs from hens without any meaningful outdoor access, or organic milk from cows that were not able to graze on pasture, these are instances where consumers' expectations are not met.

If these serious problems of enforcement are not dealt with, more and more consumers will rightfully question whether they can trust the organic label.

To deal with import fraud, we think that testing should be required from identified countries with high risk. Our recent 2018 Consumer Survey results have shown both that organic consumers expect testing to be part of the verification process and that they expect organic foods to be produced without pesticides.

Therefore, we think the focus should be on testing imports from regions with documented fraud, and the priority should be on

testing for pesticide residues.

We also agree with the CACS that the need for qualified inspectors has never been greater. We would support a proposed requirement that all inspectors be licensed for the scope and scale of the operations they are inspecting, which will help ensure that inspectors are knowledgeable and qualified to carry out the inspections.

We encourage the Board to continue this work and develop a proposal. We also support the proposal to eliminate the incentive to convert native ecosystems to organic production.

If the organic label is to continue to signify to consumers that the food is produced in a more environmentally sustainable way, then the destruction of native ecosystems must be prohibited.

On sunset review, fructooligosaccharide should be removed from the National List. Sometimes, the line between what

is considered a necessary material in organic processing, which is a criteria in OFPA, and what is merely useful or convenient is not clear.

However, in the case of fructooligosaccharides, it is abundantly clear that this is not a necessary additive and, therefore, fails to meet the criteria for inclusion on the National List.

Finally, we do not oppose the re-listing of any of the gums, which provide safer alternatives to carrageenans. We do urge the Board to list each gum separately to facilitate their removal from the National List, when organic alternatives are commercially available.

Thank you for considering our comments and, again, thanks for your work, and my colleague Jean Halloran from Consumers Union, the Advocacy Division of Consumer Reports, will be in Tucson to give additional comments on other issues. Thank you.

CHAIR CHAPMAN: Thank you, Charlotte.

Any questions for Charlotte?

(No audible response.)

CHAIR CHAPMAN: Hearing none --

VICE CHAIR BEHAR: Oh, this is Harriet. I'm sorry --

CHAIR CHAPMAN: Hi, Harriet.

(Telephonic interference.)

VICE CHAIR BEHAR: Somebody's making noise.

CHAIR CHAPMAN: Yes, yes.

VICE CHAIR BEHAR: Hi, Charlotte. I would like to know how, you know, I know, as a Consumer Reports person, you would like to see the organic marketplace thrive. And so once something has been on the National List and, and it, and then it might be removed and then affect the marketplace somehow, how would you see that?

I mean, maybe some of your consumers would be looking for a product that they could no longer get or the price would go up significantly because an additive that had been on the National List was now removed and the natural alternative

caused the product to be higher. How do you deal with that sort of change in the marketplace when something is removed?

MS. VALLAEYS: Well, I mean, we, we can provide information to the Board in terms of what consumers expect and what happens in particular instances when something is removed. I don't really have any information about that.

But we do consistently do new surveys that are nationally representative, or we ask, not just of all consumers what they expect, but we specifically design those surveys to ask whether consumers -- frequently or always look for organic, so those are what we consider the organic consumers.

And so we can provide information on that, just showing what, you know, what do the consumers, who are, that's where those $47 billion are coming from, right, they are a very important part of this, what is it that they expect?

And so things like no pesticides and

-- but also no artificial additives. That's the kind of information that we can provide so that the Board can make its decisions based on that, kind of, getting into the details of what, you know, whether consumers will pay x amount or a percentage more for a certain product, I don't have any information on that.

CHAIR CHAPMAN: Thank you. Any other questions for Charlotte?

(No audible response.)

CHAIR CHAPMAN: Thank you very much, Charlotte.

MS. VALLAEYS: Thank you.

CHAIR CHAPMAN: Up next we have Robert Landers, followed by Sam Earnshaw and Julia Barton. Robert, are you on the line? We haven't been able to identify your phone number, Robert.

(No audible response.)

MS. ARSENAULT: I don't see him on the line with us, Tom. I am -- I don't think he'll be with us.

CHAIR CHAPMAN: All right. Robert,

you're on the, if you're on the webinar, please message in and we'll move back to you.

Otherwise, we'll move on to the next public commenter, who is Sam Earnshaw. So following Sam Earnshaw is Julia Barton and then Steve Etka. Sam, are you here?

MR. EARNSHAW: I am, can you hear me?

CHAIR CHAPMAN: Yes, we can, Sam.

MR. EARNSHAW: Great.

CHAIR CHAPMAN: Start with your name and affiliation for the record.

MR. EARNSHAW: My name is Sam Earnshaw and I'm with Hedgerows Unlimited. I've been an organic farmer for 15 years and (telephonic interference) hedgerows and other conservation plantings on farms to increase biodiversity of (telephonic interference) ecosystems.

I learned to farm on a conventional farm and became an organic farmer because I had worried about the toxic chemicals that we needed to (telephonic interference) growing organic vegetables (telephonic interference) that

protects the environment. I strongly believe in the integrity of the organic label and feel it's inconsistent with the intention of organic food to incentivize native ecosystems to be plowed up and be destroyed (telephonic interference) certified organic.

There are many programs (telephonic interference) and options for small farmers to access land, and that same valuable land, plowed up native ecosystems, often in marginal sites (telephonic interference). The concern of some small dairy farms may be addressed in a guidance because in the last 15 years about a million acres of (telephonic interference) converted forests (telephonic interference) they want to be called native ecosystems.

Finally at your supermarket or natural foods brand (telephonic interference) ask them how do they feel about the (telephonic interference) that Ohio's native prairies and all native ecosystems could be part of that (telephonic interference) make it organic.

Organic consumers are not always going to understand the complexity of this issue, but undoubtedly do not believe that native prairies and tropical forests are destroyed to increase production of certified organic grains, palm oil -- and other products.

Agriculture (telephonic interference) continues to reduce (telephonic interference).

Converting tropical forests to agriculture results in a loss of -- five to 10 million hectares every year. I support the notion that (telephonic interference). I'd also encourage that guidance be written -- that it's really helpful in compliance.

(Telephonic interference) secretly regulate action (telephonic interference) organic farming and (telephonic interference) environmental standard (telephonic interference).

Thank you.

CHAIR CHAPMAN: Thank you, Sam. Any questions for Sam?

MEMBER OAKLEY: This is Emily, I have

a question.

CHAIR CHAPMAN: I see Emily, yes, go ahead, Emily.

MEMBER OAKLEY: Thank you. Thank you, Sam. You said that you work on hedgerow plantings, and I was wondering if you think that the types of activities that farmers might do on their farms to add hedgerows or conservation plantings can replace native ecosystems that are being converted to organic agriculture?

MR. EARNSHAW: (Inaudible due to telephonic interference.)

MEMBER OAKLEY: Thank you.

CHAIR CHAPMAN: Thank you. Any other questions for Sam?

VICE CHAIR BEHAR: Yes, this is Harriet.

CHAIR CHAPMAN: Harriet, go ahead.

VICE CHAIR BEHAR: I'm, I'm wondering, Sam, if you have any experience, or you can give us any resources that we can use to help us understand when an ecosystem that had been

damaged would then be fully functioning again.

So when you were talking about the old growth forests and that sort of thing -- are there any tools that we can refer to, so we can help the certifiers and the operators understand when there has been a second growth, are they really a fully-functioning ecosystem, comparable to the native one that would've been there, previous to the first cutting?

MR. EARNSHAW: (Inaudible due to telephonic interference.)

CHAIR CHAPMAN: Sam, we're, we're losing your connection. Are you able to speak up a little louder?

MR. EARNSHAW: Did you hear any of it?

CHAIR CHAPMAN: A little bit about the maps, can you --

MR. EARNSHAW: Okay. The USGS had some tools. And the question, Harriet (telephonic interference.)

VICE CHAIR BEHAR: Yes, and, and would be considered to be as diverse and regenerative,

as the native one that had been destroyed, you know, decades earlier, or even centuries.

MR. EARNSHAW: Well there's resources on what those different ecosystems contain in terms of characteristic and dominant plants, so I think that (telephonic interference) certain species may come back, but that's not the entire complex of things, so I think the first rule of doing this is to really go through the research, go through the documents and literature that's there, the USGS -- NRCS has great resources on this -- NRCS has (telephonic interference) you go through this sequence and can actually bring you back to the original ecosystem (telephonic interference) back in balance, but they're not native, the native ecosystem is (telephonic interference).

VICE CHAIR BEHAR: Thank you.

CHAIR CHAPMAN: Thank you very much, Sam. All right, our next commenter is Julia Barton, followed by Steve Etka and Harold Austin. Julia, are you on the line with us?

MS. BARTON: Yes I am, can you hear me?

CHAIR CHAPMAN: Yes we can. Julia, if you can start with your name and affiliations?

MS. BARTON: Sure. Thank you. Good morning. My name is Julia Barton, I'm speaking on behalf of the Ohio Ecological Food and Farm Association. OEFFA is a grassroots coalition of more than 4,800 members working to build a healthy and sustainable food system.

Our certification program certifies over 1,250 organic producers and handlers. I'd like to thank the NOSB and the NOP for your attention to the issue of fraudulent imports and for the myriad questions posed to the community.

During this webinar and the next, you'll be hearing from several of OEFFA's grain grower chapter members, for whom this issue hits close to home.

I learn a great deal from the grain growers every time I reach out to them or attend a chapter meeting or refer a transitioning

producer to them, and I imagine you might also really appreciate their candid input.

They'll be sharing how the fraudulent imports have impacted their businesses directly and how they think this issue ought to be mitigated moving forward.

As we discuss better international oversight, it's also important that our domestic oversight be strong and consistent. For example, we know there have been challenges with inconsistent enforcement of the pasture rule. Some of the initial tools for calculation and enforcement of the pasture rule were confusing for producers and certifiers alike.

OEFFA has recently developed some new tools for calculating DMI from pasture and a risk-based protocol to be used to better evaluate the compliance of organic dairy operations.

It's our hope that the organic community can work together to address issues of fraud in both domestic and international markets to protect the organic integrity of those meeting

and exceeding the organic standards and the spirit of OEFFA.

We encourage the NOSB to look closely at the issue of inconsistent enforcement of the pasture rule. Finally, in that same vein, I'd like to address another issue of organic integrity, the real and current impact of oil and gas industry infrastructure on organic farms.

Please add this important topic to the NOSB's work agenda and consider the development of a discussion document to unpack the many ways organic farmers are currently being impacted by oil and gas industry infrastructure.

We at OEFFA would be happy to support you in this work in any way we can. Thank you for your consideration and for your service to our community.

CHAIR CHAPMAN: Thank you, Julia. Any questions for Julia?

VICE CHAIR BEHAR: I'm sorry, but Harriet has crashed in, and I was wondering --

CHAIR CHAPMAN: Go ahead, Harriet.

VICE CHAIR BEHAR: I know that, Julia, you work a lot with transitioning farmers, and I'm wondering if -- if they are hearing about the fraud, that is somehow lessening their desire to transition to organic, and what we really need is to increase domestic production, and my concern is that, perhaps, the import fraud issue is, is working against increased organic production, but maybe you can tell me if that's true?

MS. BARTON: Well, yes. Hi, Harriet. The short answer, I would say, is yes, just in, in working with transitioning producers. I think one of the reasons for that is the impact on crisis and relationships with buyers when the grain is coming in from international locations and there are questions about the status of that grain, the organic, the true organic status of that grain.

Those -- I have those conversations regularly with transitioning producers, particularly the grain growers, which is why we thought it would be really important for you to

hear from them directly.

And, and we really appreciate the webinar format, so that some of the existing organic grain producers can get on the phone with you all.

That's actually a pretty good point, we probably should've reached out to some of the transitioning grain producers to have them call in as well.

But, but yes, it's a topic that comes up regularly on the phone, and not just in, not just in, with regard to organic imports, but with regard to other issues of organic integrity.

People are hearing all of the same things that we'll be discussing at this meeting, just in less depth, and so those questions, certainly, come up as part of that transition conversation.

CHAIR CHAPMAN: Thank you. Any other questions for Julia?

(No audible response.)

CHAIR CHAPMAN: Seeing none, Julia,

thank you for your comments.

MS. BARTON: Thank you.

CHAIR CHAPMAN: Up next we'll have Steve, followed by Harold Austin and Peter Nell. Steve, are you on the line with us?

MR. ETKA: I am, can you hear me?

CHAIR CHAPMAN: Yes, we can, Steve. Start with you name and affiliation, please.

MR. ETKA: My name is Steve Etka, and I am Policy Director for the National Organic Coalition. The establishment of consistent and enforceable organic standards is one of the essential tenants of OFPA.

Another is the establishment of NOSB as an essential venue for the full-range of organic stakeholders to interface with the NOP. The NOSB must have the ability to advance issues of importance to organic stakeholders in collaboration with the NOP.

And we appreciate that the NOSB and NOP have published and updated work agenda to provide more details about the timing from those

being worked agenda items forward.

Two items that NOC would like to see on the Fall 2018 NOSB Meeting Agenda are the excluded methods terminology issue and the field and greenhouse container production issue. Further action on these topics is essential to ensure consistency and to prevent conflicting requirements across certifiers.

With regard to enforcement, NOC thanks the CACS for all the work that has gone into the imported, import oversight document, discussion document.

It's important that the NOSB develop recommendations for additional regulatory oversight procedures that clearly address shortfalls in our current system and that the NOP has the will and resources to enforce such recommendations and regulations.

NOC's written comments focus on the need for improved effectiveness across -- of control throughout the organic supply chain, both home and abroad.

For those of us working on organic policy in Washington, D.C. this is a really busy time because tomorrow the House Agriculture Committee is meeting to pass their version of the 2018 Farm Bill.

The House's draft Farm Bill includes some positive reforms for organic and some troubling ones as well. On the positive side, the Bill includes expanded authority and funding for the NOP to address fraudulent organic imports and includes significant increases in organic research funding as well.

On the troubling side, NOC is opposing provisions in the Bill that disrupt the delicate balance of the NOSB's statutory structure and authority.

The Bill also fails to provide funding for organic certification cost share assistance, which is a critical tool to ensure that small and medium scale farms and handlers can afford annual certification costs.

As we focus on import fraud, we must

also remain cognizant of the need to improve enforcement domestically. We are particularly concerned about enforcement in the dairy sector with regard to the pasture rule and will continue to push USDA for updated regulations on the origin of livestock.

The economic crisis in the organic dairy sector, related to oversupply and low pay prices is alarming. Tightening up enforcement in the dairy sector is critical to ensure the investments organic farmers make -- are making to meet organic standards are not undermined by bad actors skirting those standards. Thanks for this opportunity to testify.

CHAIR CHAPMAN: Thank you, Steve. Any questions for Steve?

MEMBER SEITZ: This is Dan. Can you hear me?

CHAIR CHAPMAN: Go ahead, Dan. Yes, I can hear you.

MEMBER SEITZ: Steve, just interested in, in just a few words, what is the change in

the NOSB composition that's being written into the proposed bill?

MR. ETKA: There's three provisions in the draft House Farm Bill, one would say that if the NOSB is reviewing materials that have been already greenlighted, either by FDA through their process or EPA through their process, that the NOSB would have to establish a task force with FDA and EPA to allow them to give you all their input on the review that they did and, and to explain why they considered the material to be okay.

It doesn't then -- it just requires you to get that input and establish a task force, it doesn't then give them a vote or anything like that.

The concern that we have about it is that it would be very cumbersome at that point, if you have to establish a new task force for every material that's been approved by FDA or EPA.

Another provision that we are

concerned about would establish expedited petition and review procedures for materials dealing with crop protection and human food safety issues, and it's very vague and we're concerned that that language could be a loophole that would bypass existing materials or review requirements.

And then a third provision would clarify that the farmer seat, the handler seat, and the retailer seat that it could be employees of those companies, not just the people owning those companies, themselves, and we think that language is largely unnecessary.

MEMBER SEITZ: Okay, thank you.

MR. ETKA: Yep.

CHAIR CHAPMAN: Any other questions for Steve?

(No audible response.)

CHAIR CHAPMAN: All right. Thank you, Steve. Up next is Harold Austin, followed by Peter Nell and then Casey Schoenberger. Harold, are you on the line with us?

MR. AUSTIN: I am, Tom, have you got me?

CHAIR CHAPMAN: I do. So, Harold, you can start with your name and affiliations.

MR. AUSTIN: Will do. My name's Harold Austin, I'm a past member of the NOSB and part of the tree fruit industry and stakeholder groups in the Pacific Northwest. Good day to everyone.

I would like to thank each of you, current members of the NOSB, for your time commitment to this process that's so vitally important to all of us organic stakeholders. Thank you for this.

For the Crops and Materials Subcommittee, the materials that they are reviewing, I support all three listed uses for elemental sulphur. This is still a material that plays a very intricate role in our organic crop production, providing insect control for various pests, as a key material for disease control, especially for powdery mildew on apples,

cherries, wine grapes, and blueberries, and as an essential nutrient used in balancing our soil pHs.

It plays an important role in both resistant management as well as integrated pest management programs on most of our farms.

I also support the continued listing for the two uses of lime sulphur, as currently listed. This is still a very important part of our insect control program and organic crop production, especially in the dormant season. With the loss of the two antibiotics streptomycin and oxytetracycline, it plays an even more critical role in our disease prevention programs, especially during the bloom period, to help control the fire blight bacteria. We do not have a viable alternative material for this specific use in pining, where lime sulfur is used.

I also support the continued re-listing of sulfuric acid as a plant or soil amendment for on farm generation, be it the use of our sulfur burners.

In many of our farms and also in many of those of our organic neighbors, we have a tendency to have to deal with high pH water and soils.

This is a phenomenal tool for organic farmers to deal with those types of situations and helping improve water penetration, remove calcium carbonate buildup from our fruit and our foliage, and also to help provide a better and healthier environment for our soil beneficials to flourish in.

This form of sulfuric acid should not be confused with the harsher form of the commercial material that's produced, which is much more concentrated than that which we create on-site.

I do support the other substances currently under review by the Crops Subcommittee for re-listing onto the National List. I would also give my support for you to consider adding Polyoxin D zinc salt to the National List.

This substance is not only compatible

with a system of sustainable agriculture, but I do feel that it provide, would provide growers with a -- from certain disease control issues that we currently struggle with.

For the Handling Subcommittee, I support the re-listing of those items currently under sunset review by the subcommittee. In past sunset reviews these substances have all shown to be used and needed by various organic handling operations.

Most of these substances have just recently gone through a very rigorous review process, of which I was part of, and I see no reason why they should not be allowed to continue to be re-listed under this current sunset review cycle. I would also support the proposal to reclassify magnesium chloride.

For the Materials Subcommittee, I would like to mention that I do not agree with adding, on the current agenda, under the other projects, for sanitizers.

I do not see a truly valid rationale

for this to be added to the subcommittee work plan in the future as an action item. Each material is currently listed for a specific use for each appropriate subcommittee.

The need, the use, and the necessity will vary for each and thus to lump them into a single category seems pointless. Especially, when there are so many other things that you NOSB Members could be spending your valuable time on.

With that, I thank you, and I'm open for any questions, if you have any.

MEMBER BRADMAN: Tom, this is --

CHAIR CHAPMAN: Any questions --

MEMBER BRADMAN: Tom, I have a question.

CHAIR CHAPMAN: Go ahead, Asa.

MEMBER BRADMAN: Okay. Sorry to interrupt, I'm not on the computer. I just wanted to ask about sulfur. We put a question out there about dust application versus wettable formulations, and there's been several comments submitted so far that actually support taking out

dust application for sulfur.

So I want to be clear, we're not talking about -- eliminating elemental sulfur, but preferentially supporting the use of wettable applications over dust applications, and I wonder if you have any input on that?

MR. AUSTIN: Yes. Steve. I've been, I've been a part of the tree fruit industry and, and, as a licensed consultant for well over 35 years.

In our specific farming uses in the Pacific Northwest, most of our sulfur that we apply is the elemental sulfur form, one, one version or another.

We as an industry here in the Northwest have really gotten away from the use of the dust. I, well, I, I couldn't think of, in the last 15 years, a dust application being applied here in the Pacific Northwest.

I know in some other areas, it seems like some of the public comments are saying in California and some other areas, they are still

using the dust, but we've pretty much gone away from that because of drift issues in the Pacific Northwest.

MEMBER BRADMAN: Thank you.

MR. AUSTIN: You're welcome.

CHAIR CHAPMAN: Any other questions for Harold?

(No audible response.)

CHAIR CHAPMAN: All right, seeing none. Harold, thank you for your time.

MR. AUSTIN: Thank you.

CHAIR CHAPMAN: Up next is Peter Nell, followed by Casey Schoenberger. After Casey is Marie Burcham. Marie, we haven't identified your phone number, so if you're on the line, can you message in the phone number via the chat function.

Peter, are you on the line with us?

MR. NELL: Hello.

CHAIR CHAPMAN: Hi, Peter, if you could start with your name and affiliations.

MR. NELL: Sure. Hello, my name is

Peter Nell and I'm the Policy Assistant at CCOF, California Certified Organic Farmers. Today, I will be commenting on the Compliance, Accreditation, and Certification Subcommittee's proposal regarding inspector qualifications.

CCOF contracts 70 inspectors across North America to perform about 5,000 inspections annually. Newly contracted CCOF inspectors complete several (telephonic interference) inspections with experienced inspectors.

CCOF also regularly evaluates inspectors on a tiered schedule, and CCOF requires all contracted inspectors to complete 16 hours of continuing education every two years.

Overall, the existing inspector training and certifier hiring practices are sufficient to ensure skilled and qualified inspectors. The criteria laid out in the EPA's best practices for inspector qualifications are sufficient in establishing a baseline for inspector competency.

However, NOSB should not recommend

overly prescriptive inspector qualification requirements, such as minimum education requirements. Overly prescriptive qualifications may disqualify a range of talented inspectors who may have sufficient work experience or other relevant backgrounds.

Certifiers need flexibility to make their own hiring and contracting decisions as well as to design appropriate training programs for their businesses.

CCOF does not support the creation of an organic inspector licensing system. Licensing creates a complicated cumbersome process for inspectors and certifiers, likely requiring fees for inspectors and increasing certification fees for all scales of producers.

CCOF could support a basic inspector registration system maintained by each certifier. Lastly, the organic sector should not emulate the inspector requirements for pre-safety certification systems. Pre-safety certifications set prescriptive qualifications for inspectors

because of health and public safety risks. CCOF provides free safety certifications to the GLOBALG.A.P. standards. In our experience, hiring and training inspectors to GLOBALG.A.P. standards is challenging due to the qualification requirements.

In closing, overly-prescriptive inspector -- organic inspector requirements could lead to organic producers losing access to local affordable inspectors. NOSB must carefully consider recommending prescriptive inspector qualifications. Thank you.

CHAIR CHAPMAN: Thank you, Peter. Any questions for Peter?

VICE CHAIR BEHAR: This is Harriet.

CHAIR CHAPMAN: Go ahead, Harriet.

VICE CHAIR BEHAR: Hi, Peter. As the organic industry has grown and matured, our operations have gotten more and more complex, how do you suggest we deal with having inspectors at the right level of training?

I think we would all agree that

especially a newer inspector, with less experience, should probably not go to the most complex operation that you have for their first inspection.

So we're, we're struggling with how do we categorize those inspectors and, and provide both the incentive for continuous improvement and the knowledge so certifiers know that the people that they're sending to various operations will be capable to do the work?

MR. NELL: Sure. So CCOF evaluates each inspector and determines, you know, their skills and what their background is and then makes a determination on whether or not that inspector may be qualified to inspect a very complex or advanced operation.

We provide trainings via webinar and, and, you know, general resources to our inspectors so that they are able to grow into learning more advanced organic systems. That's a gradual process that is inspector-specific and, obviously, certifier-specific.

CHAIR CHAPMAN: Okay, any other question for Peter?

(No audible response.)

CHAIR CHAPMAN: All right. Thank you, Peter. Up next is Casey Schoenberger, followed by Marie Burcham and then Domenico Tassone. Domenico, if you're on the line, please message us because we also haven't identified your phone number.

Casey, are you here?

MR. SCHOENBERGER: Yes.

CHAIR CHAPMAN: And you --

MR. SCHOENBERGER: Good morning, this is Casey Schoenberger, I'm the Director of Sales for Dramm's Fertilizer Division. Dramm produces Drammatic brand liquid fish hydrolysates. So thank you for this opportunity.

I wanted to make a few points regarding the reactive nature of fish hydrolysates. Hydrolysate liquid fish fertilizers typically remove no components from the fish scraps or mid-process slurry, and this

creates a more active living solution that requires the addition of allowed acids for stability. As a result, an upward drift in the pH level occurs, as part of this normal production process.

Dramm Corporation has conducted trials that show that significantly more acid is needed if the pH level is required to remain above 3.5 throughout the production process.

We're able to use up to 90 percent less acid when the pH is allowed to drop below that level at earlier production stages, before rising above 3.5 pH prior to shipment. Beginning with a higher initial dose of acid also results in a more stable solution throughout the process.

And touching on crop and food safety considerations, independent lab studies have shown that harmful bacteria will survive longer in liquid fish solutions with higher pH levels.

At a pH level of 3.5, studies concluded that a minimum of 72 hours hold time was required to eliminate the survival of these

harmful bacteria.

But at the much higher pH level of 4.9, it took significantly longer for the bacteria kill stage to be effective, concluding that an eight-day hold time was required to eliminate the survival of the bacteria.

These results strongly suggest that as pH rises, the risk of the presence of harmful bacteria increases exponentially. It suggests that lower pH levels are necessary to ensure that contamination of harmful bacteria will not occur.

Dramm Corporation is committed to maintaining the pH level of 3.5 or higher in its final, in its product's final form prior to their sale and shipment from our facilities.

And, finally, regarding the source and the fish inputs used to make fish hydrolysate fertilizer, Dramm accepts no inputs from farm-raised fish. Dramm obtains 100 percent of its scraps from wild-harvested fish.

Dramm receives zero percent whole fish caught solely for fertilizer production purposes.

Dramm only obtains scraps for -- from human consumption fish processors and we conduct no direct harvesting of our inputs.

Bycatch percentages are difficult to assess. Our best guess is that it falls within the five to ten percent range. Dramm will accept whole fish from states' regulatory bodies, such as Wisconsin DNR, which harvest them for culling or similar purposes, and similar inputs are received from sporting events sanctioned by state or municipal regulators. These sources account for a small percent of our inputs.

Dramm supports the addition of an annotation which would exclude the use of wild-caught fish harvested exclusively for non-food purposes. Thank you, again, for this opportunity.

CHAIR CHAPMAN: Thank you, Casey. Any questions for Casey?

VICE CHAIR BEHAR: This is Harriet.

CHAIR CHAPMAN: Yes, Harriet.

VICE CHAIR BEHAR: I'm wondering if

you have done any testing or could provide us with some written documentation of the presence of salmonella, listeria, or E. coli?

You did mention the food safety and the, the Food Safety Modernization Act does address, considers fish emulsion to be a soil amendment of animal origin, and I am just wondering about the pH of 3.5, or at what level, if there had been E. coli, Salmonella, or listeria present, would the 3.5 pH mean that it was no longer present in the product?

MR. SCHOENBERGER: Yes. What I was alluding to, so we, we've had an independent consultant come in and work with us on it because it's clearly a, you know, of great importance to us that, that everything that comes out of our place is, you know, we're, we're double checking on safety part of that.

So as it -- what, what his study showed was a pH level of 3.5, as long as there's a 72-hour hold time, all harmful bacteria would be eliminated.

Now what we get is if, if the pH starts drifting up past, you know, over four, what, what we saw was this, this eight-day hold time, if you get up to 4.9.

It's very unlikely that we would ever be shipping fertilizer out at that -- in fact, we would never ship fertilizer out at a pH of 4.9, but that's kind of what we're getting at is the -- that lower -- the lower pH levels, especially considering there is drift that happens, you know, so there's, so the higher you are the more risky.

That said, you know, as long as we have the hold time, there's no salmonella or E. coli present. And so we've worked with a couple of different independent consultants, but I'd be really happy to pass on, you know, what we learned with, with our last consultant.

VICE CHAIR BEHAR: Thank you.

MR. SCHOENBERGER: Thank you.

CHAIR CHAPMAN: Thank you. Any other questions for Casey?

(No audible response.)

CHAIR CHAPMAN: Thank you, Casey. Up next we have Marie Burcham, followed by Domenico Tassone, and then Shelly Connor. Again, Domenico, we don't see you on the line. Please message us if you're on the line.

Marie, are you here?

MS. BURCHAM: Yes, can you hear me?

CHAIR CHAPMAN: Yes we can. Please start --

MS. BURCHAM: Excellent.

CHAIR CHAPMAN: -- with your name and affiliation.

MS. BURCHAM: Yes. My name is Marie Burcham, and I am a Policy Analyst with the Cornucopia Institute. I'm also an attorney, and I have a background in environmental and natural resource law, as well as animal law.

Members of the Board and public, thank you for this opportunity to speak on the proposal concerning the elimination of the incentive to convert native ecosystems to organic production.

Cornucopia is very happy to see the NOP's proposal to add both a definition of native ecosystems and a rural addition that will get rid of the perverse incentive to destroy unique and valuable ecosystems.

Until these additions are added to the organic regulations, the organic label promotes the destruction of sensitive ecosystems. This is contrary to the basic tenets of organic production.

As NOP states in its guide for organic crop -- sustainability can be defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs. The destruction of our -- organic agriculture should not promote this destruction. As such, we feel this rulemaking will cure the problem and hope the NOSB recommends its passage.

In addition, Cornucopia supports Wild Farm Alliance's comments on this issue and hopes the NOSB will consider the information and expertise Wild Farm Alliance brings to this issue

when developing future guidance.

I also want to briefly touch on two other smaller matters. Most of the NOSB Members, who voted against limiting liquid feed to container crops said they were in favor of labeling hydroponic produce. Why hasn't the NOSB moved forward with that issue, and why isn't it on the agenda for this meeting?

We would also ask the NOSB to add the issue of oil and gas infrastructure and the use of oil and gas waste water to the work agenda. These issues pose serious problems for the organic label now and especially in the future as water resources grow scarcer.

Waste water from the current industry poses a threat to human and environmental health, and it's currently being used in agriculture, and it's possibly being used in organic agriculture as well, especially in areas that are drought-ridden, like California.

I hope you will consider these comments moving forward. Thank you for this

opportunity to speak and have a great meeting.

CHAIR CHAPMAN: Thank you, Marie. Any questions for Marie?

(No audible response.)

CHAIR CHAPMAN: Seeing none. Thank you for your time. Again, up next is Domenico Tassone. Domenico, are you here?

(No audible response.)

CHAIR CHAPMAN: Okay. We have not been able to identify your number, so we'll move on up the list. Up next is Shelly Connor, followed by Amber Pool, and then Rhodes Yepsen. Shelly, are you here with us?

MS. CONNOR: Yep, I'm here. Can you hear me?

CHAIR CHAPMAN: Yes we can, Shelly. If you could start with your name and affiliation.

MS. CONNOR: Great, thanks. My name is Shelly Connor, and I am with Wild Farm Alliance. Wild Farm Alliance supports the motion to approve the two-part proposal to eliminate the

incentive to convert native ecosystems to organic production.

With this new regulation, the USDA organic label will provide critical protections for native ecosystems and the integrity of the National Organic Program will be preserved.

We want to see organic agriculture grow, but in a way that represents the integrity of the label and not at the cost of our wild lands and wildlife. This new regulation will incentivize the transition of non-organic farms while minimizing the loss of lands with important habitats.

We've already cultivated the most fertile and productive land. The focus of increasing organic acreage should not be on places that embody important native habitats, instead we need to look to the millions of acres of conventionally managed land for transition.

Taking action today is very important in light of climate change and the devastating effects it is imposing on biodiversity worldwide.

A number of species, including wild pollinators, which organic agriculture relies upon, need wild places. And even with a high number of well-managed wild farms, the space is not enough. We need to protect habitat.

The fundamentals and future of our agricultural systems are dependent upon the services that these native ecosystems and biodiversity provides. Critical services include clean and abundant water, healthy soil, pollination, pest control, and carbon storage, just to name a few.

The native ecosystems we protect today will be necessary to support declining and rare species 50 to 100 years from now, when there will be much less habitat available due to an increase in population and climate change effects.

The organic label cannot be implicit in eradicating habitat for species like the orangutan and forest destruction for organic palm oil.

Your job is to ensure the public trust

in the organic label. Please support this motion. Thank you for your time and your work.

CHAIR CHAPMAN: Thank you, Shelly. Any questions for Shelly? I see two, Ashley and then Emily. Ashley.

MEMBER SWAFFAR: Thanks. My question is would you consider grazing or pasturing of, like, poultry, on native, native ecosystems, a form of conversion, even if the livestock or poultry don't diminish the land's bio-diversity?

MS. CONNOR: Thanks, Ashley. Yes, so I think, in answer to that question, as long as the inherent value of the, and the labels, or the, the indication is that there's still a native ecosystem present, that the, and the definition stands on the land, grazing can be done and native ecosystems -- and it can still be considered a native ecosystem.

CHAIR CHAPMAN: Emily.

MEMBER OAKLEY: Yes, thank you. I have two questions. When you mentioned climate change, I was wondering if you could elaborate on

that, and then, two, I'm not sure if this is information that you guys have, but do you have information about consumer expectations that you could share with us with respect to the organic label and conversion of native ecosystems. Thank you.

MS. CONNOR: Sure. So in response to the climate change question, soil carbon losses in the U.S. occur on an average of 20 to 30 percent when land is converted from natural ecosystems to crop land. And conversion of forest land causes larger losses of carbon from forests and, and, especially if the land is burned before being cropped.

So this new regulation would help to mitigate that soil carbon loss and protect valuable habitat for species that are being drastically affected by climate change and -- which is really important now and even more important in 30 years from now, when estimates show that 30 to 50 percent of all land species could be facing the threat of extinction.

And in terms of the consumer question that you asked, this, you know, consumers believe that the organic label is the gold standard, and it is, and we believe that too, but in order to keep the public's trust in providing that the organic label is the top eco label, it needs to be transparent, and it needs to be transparent that this label is doing more than just being pesticide-free, but it's also protecting our wild places and our wild lands and our wild species.

CHAIR CHAPMAN: Great. Any other questions for Shelly? Hearing none, thank you for your comments. Up next is Amber Pool, followed by Rhodes Yepsen and then Sam Raser.

Sam, if you're on the line, please message us; I'm not finding your phone number. And I'm just going to go ahead and say, Stephen Walker, you're after Sam. We have several numbers from your area code, but we haven't identified yours, so if you could also message us with specifics on where you're calling from, that would be very helpful.

Amber, are you on the line with us?

MS. POOL: Hi.

CHAIR CHAPMAN: Hi, Amber. If you could start with your name and affiliation.

MS. POOL: Hi, I'm Amber Pool with CCOF. I work in the farm certification department. I'd like to thank the Board for continuing to offer this webinar for public comment. This is such an excellent opportunity for the farmer's voice to be heard when it can be difficult for them to travel.

Today I'll be commenting on the 2020 sunset review of crop substances, specifically on elemental sulfur. We have 1,224 CCOF members who use elemental sulfur as a tool they may use on their organic systems. Elemental sulfur is one of the most commonly-used materials in organic production. Producers use elemental sulfur on a wide variety of crops for pest and disease management, as well as for soil fertility.

We were able to reach out to all of our farmers via email regarding their use of

dusting sulfurs. CCOF members began responding to our emails within minutes, which demonstrates just how important of a tool this is to them.

Eighteen of our growers allowed us to share their responses with you. These raw and unedited responses are included in the appendix of our written comments regarding the crop sunset materials.

As the mom of a seven-year-old boy, reading the report on elemental sulfur use and associations with pediatric lung function and respiratory system in the agriculture community was concerning. I understand the study was based in Salinas valley and a wide variety of inputs are in use. I think it's important for the Board to continue to analyze more data on the public health impact of different forms of elemental sulfur and in different regions such as Napa Valley.

In grape growing regions, this is the most important fungicide. I want more information both on dusting sulfur and wettable

sulfur, or if wettable sulfurs could replace some of the dusting sulfur used without damaging crops or disrupting soil health.

Because of the importance of dusting sulfur to many organic farm operations, and because of the new safety concerns that have been raised, the Board should consider whether additional precautions or limitations should be required for its use.

Thank you, I'm complete; if you have any questions, I'm available for those.

CHAIR CHAPMAN: Thank you, Amber. Any questions for Amber?

MR. BRADMAN: Yes, I have a couple of questions. I just wanted to clarify; it sounds like your constituents don't feel that there's an alternative to dusting sulfur, or that you don't feel like there's good enough research on, say, the efficacy of a wettable versus a dusting application, and I guess I would raise that to another level too. Anecdotally, is there any question that dust offers an advantage over

wettable solution, or can the same goals to be achieved with the wettable solutions?

MS. POOL: That's our question too, and we received a wide variety of responses. Some are growers who say they would be fine just using wettable sulfurs, and other say that if dusting sulfur is taken away as a tool, that they will just lose their organic certification, because they're not going to stop using it. So we've received a mix of responses.

CHAIR CHAPMAN: Thank you; any other questions? All right, thank you, Amber. And I apologize; I forgot to mention this before, but I just want to confirm that A-Dae is on the line with us. She joined shortly after we did roll call. A-Dae, can you confirm you're on the line with us?

MS. ROMERO-BRIONES: I'm on the line.

CHAIR CHAPMAN: All right, thank you, A-Dae. Up next is Rhodes Yepsen, followed by Sam Raser. Sam, if you're on the line, we have not identified you. So again, please message us.

Then Stephen Walker -- Stephen, we believe we found you. And after Stephen, Nathan Brown, you're on deck as well. Rhodes, are you on the line with us?

MR. YEPSEN: Yes, I am.

CHAIR CHAPMAN: And we can hear you. Will you start with your name and affiliation?

MR. YEPSEN: Great, thanks. Rhodes Yepsen, I'm Executive Director of BPI. We're North America's leading certifier of compostable products and packaging.

I'd like to thank the Board for the opportunity to provide comments ahead of the spring meeting. We're re-affirming our members' desire for the NOSB to support the use of soil-biodegradable mulch film. As it stands now with the policy memo 50-1, requiring 100 percent bio-based content, this is not commercially available still.

Last year, there was one comment to the NOSB about a company in Canada that reported they had such a product. We've confirmed now

that this is not commercially available for purchase in the U.S. or Canada.

I submitted some written comments and just wanted to quickly go over them here and see if anyone has questions for me. The two things are, there is now an official European standard for soil-biodegradable mulch film that was adopted in March of this year, EN-17033, and I think this shows a real testament to what we have accomplished so far with the listing for soil-biodegradable mulch film with the NOSB, because the standard adopts the same exact biodegradation tests and time frames, minus this bio-base requirement.

It's no small feat for European standards to get through with all of the EU countries needing to approve that standard, and it will have to be ratified in each country.

The second part has to do with the comment around the sunset review for conventional plastic mulch film and the start of that review process. We continue to hear from farmers about

frustration because of the inability to use soil-biodegradable mulch film, and we think the questions being asked about conventional plastic mulch film are good ones.

Our response would be very simply that there is an alternative to that conventional plastic mulch film on the National List, which is the soil-biodegradable mulch film. The NOSB would just need to act to remove or modify that policy memo to allow farmers to use the soil-biodegradable mulch film.

So we hope that that's something you'll take on, and I welcome questions. Thank you.

CHAIR CHAPMAN: Thank you. Any questions for Rhodes?

MR. BRADMAN: I just have a quick question. This has come up during previous discussions on the proportion of bio-based versus petroleum-based sources for the degradable films. Has that changed at all, and do you have a sense of what those proportions are now?

MR. YEPSEN: Sure, good question. The OMRI review from a few years ago placed the numbers in the low 15 to 20 percent. I know the numbers are always being increased. I know some companies are claiming 50 percent or more. I think the best way of doing that would be another independent review.

That's not something we track directly; we focus on the biodegradability requirements, which are not linked to the source of the carbon.

So if that's something that you were looking for in an amendment where instead of removing the policy memo, but you want to set a new minimum number, then I think you would need -- you might want to update that OMRI review that we've done a few years ago.

MR. BRADMAN: Thank you.

CHAIR CHAPMAN: Any other questions for Rhodes? All right, hearing none, thank you for your comments. Up next we have Sam. Sam, are you on the line?

We were not able to identify your phone number. All right, so since Sam's not here, Stephen Walker, are you on the line?

MR. WALKER: I think so, if you can hear me.

CHAIR CHAPMAN: Yes, we found you. Hold on, Steve, one second. So after Stephen is Nathan Brown, followed by Dave Chapman. Stephen, if you could start off with your name and affiliation.

MR. WALKER: Okay, I'm Steve Walker, Operations Manager at MOSA. We certify over 2,000 organic operations, mostly in the Midwest.

My intent here was to talk about protecting genetic integrity of seed grown on organic land. I'll start with seeds, but those will sprout into some words about fairness, good process, and NOSB authority.

We like to continue genetic integrity discussion and submitted a six-page written comment about seed purity, regulatory pace frustration, enforcement dilemmas, test results,

and life from a certifier's perspective here in our Midwestern GMO hot zone. I encourage you to read it.

We also talked about co-existence of organic and conventional ag, and here's where I begin preaching to the choir, hoping the USDA will hear. The burden for avoidance of genetic trespass must be shared. This means deliberate USDA attention. It's extremely unfair to put so much burden for preserving genetic integrity on the organic community, and co-existence should not require our acquiescence towards genetic contamination.

We ask the USDA to ensure that unintended genetic trespass is controlled. We encourage stewardship plans, outreach, voluntary innovation and incentives, and -- hear this -- regulations directed at those who use GMO technology.

Now, I've been to a lot of NOSB meetings over the years, and I continue to promote that these meetings show democracy at its

best, and public input makes a difference. But I'm concerned that my optimism is giving way to cynicism. Unbalanced co-existence raises this a bit, and recent word that the USDA overturned the NOSB's carrageenan recommendation sure didn't help.

This week, MOSA sent a letter to Secretary Perdue, expressing our dismay at several decisions by this administration, which hurt our seal and sale process. The NOP is a voluntary program based on a democratic system and a clearly-defined process, integral to building and retaining consumer trust in the organic seal.

The disregard of the NOSB carrageenan decision and other recent USDA actions, including withdrawal of the livestock and poultry rule and failure to implement the origin of livestock rule, damage our confidence in the program and cause economic harm.

In our letter, we recommend three actions: Honor the role and democratic process

of the NOSB; recognize that the NOP is a voluntary program, dedicated to continual improvement and refinement; and last, keep politics and unfair influence out of the program. The objections of the few should not outweigh the desires of the many and the fair democratic process. Thank you.

CHAIR CHAPMAN: Thank you, Steve. Any questions for Steve?

MR. MORTENSEN: This is Dave Mortensen. Steve, thank you. I'm literally sitting in a service area on the way back from a meeting in Washington D.C. about (telephonic interference). So I have this very much on the top of my mind, genetic drift and chemical trespass, when we think about co-existence.

So thank you for your six-page report, and I think we need to keep broadening and deepening our thinking about how it is that we implement and really get on the ground functional co-existence, because genetic trespass and chemical trespass are huge issues that we're

confronting.

MR. WALKER: Yes, thanks.

CHAIR CHAPMAN: All right. Any other questions for Steve? Okay. All right, Steve, thank you for your time.

MR. WALKER: Thank you.

CHAIR CHAPMAN: Up next we have Nathan Brown, followed by Dave Chapman, and then Alan Schreiber. Nathan, are you on the line?

MR. BROWN: I am. Can you hear me?

CHAIR CHAPMAN: Yes, we can, Nathan. Could you start with your name and affiliation?

MR. BROWN: My name is Nathan Brown, I'm a small vegetable grower in Montana, on three acres. I'd like to talk about the NOP decision to prohibit Japanese paper pot chains, their introduction.

I'd like the NOSB to take up the case for Japanese paper pot chain for production. I purchased this system in August and went to my certifier. And the way they explained it to me was, and their approval was, the paper pot chains

have the same ingredients as cardboard. And since cardboard was an approved input that goes into the soil as well, that's how they came about agreeing to allow these Japanese paper pots in.

So for anybody not familiar, this is a planting system that allows me to plant 364 plant forms in about a minute with just one planting, which saves me a huge amount of time and labor in transplanting seedlings. And I use the (telephonic interference), and it's one and a half times the amount of transplants than the normal tray that I use.

I could plant a 30- by 90-foot (telephonic interference) by myself in a few hours, compared to what used to take four to six people all day long. I can use trays, use less potting soil, and it gives me a month on either side of my growing season that I can get into the field and transplant.

We're having a fairly wet and cold spring -- I guess that's across the country -- and I'm at least two months behind in this

growing season, and this system is going to allow me to catch up with the season much faster than I would be able to if I didn't have this system.

There are many growers in our state who use it; I think there's about eight in Montana. I've been talking with -- I used to be the chair of the Montana organic (telephonic interference) for LCA for two years, and they both agree that this is a good thing for small farmers. Thank you.

CHAIR CHAPMAN: Thank you. Any questions for Nathan?

VICE CHAIR BEHAR: This is Harriet. I'm wondering, is it the glue or ink? What was the problem with the paper?

MR. BROWN: Well, I contacted the NOP; in an email to certify what I got. They didn't really specifically say the glue, but that's what was explained to me. I should have called the Montana Department of Ag.

But it's the same glue that is in cardboard, and cardboard can be used as a mulch

or a composting medium, and both of those applications end up in the soil. So I'd really like the NOSB to keep a clear eye to the applications of the paper pot systems.

MS. OAKLEY: Tom, this is Emily. I have a question too.

CHAIR CHAPMAN: Go ahead, Emily.

MS. OAKLEY: Thank you. I have also heard this dialogue very loudly from the small farmer vegetable community recently, and I was wondering if Paul Lewis from the NOP could help answer the question about what it is in these products that is making them ineligible for use. Is Paul still on the line?

CHAIR CHAPMAN: We have a lot of 202 numbers muted. Paul, are you on the line?

MS. ARSENAULT: Hi, Tom, it's Michelle. I'm not sure if he's still on the line with us.

(Telephonic interference.)

CHAIR CHAPMAN: Sorry about the hold music from someone. It doesn't appear that Paul

is on the line with us, but that's a question that we can follow up on either at the other webinar or --

MR. PATTILLO: Yes, hi, Emily, this is Devon with the NOP. Yes, Paul is one of the muted members. I believe the reason was that it contained synthetic ingredients that weren't on the National List, and it didn't fall into the current categories of paper that's on the National List. It wasn't a mulch or a compost feed stock.

MS. OAKLEY: So what would be the step for addressing this concern that even though the application might be slightly different, the material ingredients are the same as a cardboard feed stock that someone might be using for a mulch application?

MR. PATTILLO: I don't know if I can speak to that. I think it's likely that there might be similar ingredients in the cardboard, but I guess the proper process here would be for a petition.

MS. OAKLEY: Right. Okay. So that's actually something that we can bring up on the next crop subcommittee call, or when we have time. We could put that on our agenda to discuss, that would be great.

CHAIR CHAPMAN: But that would require a petition from the public, though, to start working on this.

MS. OAKLEY: Sure, but we could communicate that back to the stakeholders that are interested in using it.

CHAIR CHAPMAN: Yes. So, Nathan, that's an avenue for you to consider, the petitioning process, or to recommend that to the manufacturer of the paper product.

MR. BROWN: I think one of the important things is to get something moving for the fall NOSB meeting. I just wanted to comment because I didn't know if it would help me.

CHAIR CHAPMAN: Okay. Thank you. Any other questions? Up next we have Dave Chapman, followed by Alan Schreiber, and then Jesse Buie.

Dave, are you on the line with us?

MR. CHAPMAN: Yes, Tom, can you hear me?

CHAIR CHAPMAN: I can, Dave. Go ahead, name and affiliation.

MR. CHAPMAN: I'm Dave Chapman, I'm an organic farmer from Vermont, and I'm also a board member of the Real Organic Project.

As you all know, the Real Organic Project is working to make an add-on label to the USDA organic program. We are a group of farmers and advocates drafting a new label that will embrace the traditional meaning of organic.

We want to create some way for people to identify such food in the store. As such, we are in perfect alignment with the stated goals of the NOP. We want a label that is transparent and that doesn't mislead customers.

The new label will reject hydroponic production and adhere to the original intent of OFPA. The label will still require USDA certification as a base. This is a commitment to

improve the damaged NOP label. We're not trying to destroy the USDA seal, but rather to save it.

We all know that the organic label is being twisted and transformed by the powerful economic forces behind kepos (phonetic) and hydro production. Already the NOP standards enforced no longer resemble the standards of the EU in several critical areas. At the same time that the new EU standards have become even stronger in rejecting hydro and kepos, the NOP standards are becoming weaker.

This has gone so far that the EU is now proposing to revoke the trade agreement with the U.S. that gave reciprocity to the two standards, and I think that they are in the final stages of finalizing that.

We urge the NOSB to step up and fight for strong standards that reflect the intent of OFPA. The organic label will only be saved if we fight for it. It will only be saved through the brave actions of people such as yourselves.

We have not given up on this process,

and we urge you not to give up either. Serving on the NOSB has always been difficult, and now it is even more difficult as your influence and makeup are being challenged by Congress. But we thank those of you who have worked so hard to protect organic.

The fight might seem hopeless; we urge you to continue working to prohibit hydroponics in support of the still-standing 2010 recommendation, and we urge you to continue to advocate for strong animal welfare standards despite the recent rejection of the OLPP by the USDA.

These are not easy times for the organic movement, and we must pull together. You have each been given a large microphone as a result of serving on the NOSB. Please use that microphone to serve the many millions of people who trust you to represent them, and thank you all for your service.

CHAIR CHAPMAN: Thank you, Dave. Any questions for Dave? Not seeing any, Dave, thank

you for your comments.

MR. CHAPMAN: Thank you, Tom.

CHAIR CHAPMAN: I have Alan, followed by Jesse Bovay on deck, and then Jeff Dean. Alan, are you on the line with us?

MR. SCHREIBER: Yes, can you hear me?

CHAIR CHAPMAN: Yes, I can, Alan. You can start with your name and affiliation for the record.

MR. SCHREIBER: My name is Alan Schreiber, and I'm Executive Director of the Washington Blueberry Commission, and as such, I represent 250 blueberry growers in our state.

Washington is the leading producer of organic blueberries; also, I'm a private independent agriculture researcher, and I conducted extensive efficacy trials on Polyoxin D on blueberries and raspberries for the past six years. I also operate a 75-acre organic fruit and vegetable farm in eastern Washington.

The current Washington berry disease management programs in organic and conventional

blueberries, raspberries, and blackberries are based, in part, on my research. Currently, organic blueberry growers do not have effective means of growing blueberries, particularly those in high disease-risk areas such as western Washington, where the majority of blueberries are grown.

Western Washington organic blueberry growers routinely lose half of their crops to mummy berry and other diseases, using what are the most effective currently available fungicides and non-chemical control alternatives.

Washington organic blueberry growers in locations facing high disease pressure are in desperate need of a more effective tools for controlling mummy berry and other diseases.

The reason that Washington raspberry industries are more than 99 percent conventional is that there are no effective organic controls of botrytis in cane berries. In the case of blueberries and raspberries in Washington, research has shown in repeated trials that

Polyoxin D is, when compared to current alternatives, statistically significantly more effective. There are some other alternatives that have efficacy, such as lime sulfur, but has use restrictions that prevent their widespread use.

In the case of lime sulfur, for example, it cannot be used when bloom is initiated due to higher toxicity. The Washington berry industry needs organic access to Polyoxin D; access to this product will improve grower yields and will allow other conventional growers to transition to organic production.

I'm speaking today as the head of the Washington Blueberry Commission, representing Washington berry growers. I also know that NBG supports its position for their organic growers across eight states, as does the California Blueberry Commission, the North American Blueberry Council, the Berry Research and Extension specialists from Oregon State University, the largest organic blueberry grower

in Oregon, and Michigan State University berry research specialists.

Thank you for your time and consideration. I just want to put a plug in that this webinar is a very good deal for getting input for those of us who will not be able to make it to your meeting.

MR. BUIE: Tom, this is Jesse.

CHAIR CHAPMAN: Jesse, go ahead.

MR. BUIE: Alan, in reviewing the comments, what I'm seeing support for Polyoxin D and Polyoxin D zinc salt. There seems to be some confusion out there. Are you clear on exactly what's being petitioned?

MR. SCHREIBER: No, I would let people who are more -- I'm pretty sure it's the zinc salt formulation. I think saying Polyoxin D is easier than saying Polyoxin D zinc salt. But there are people out there who are more up on the exact formulations than I am.

MR. BUIE: Okay. But it's a major difference for us, is what I'm saying. That's

all.

CHAIR CHAPMAN: Okay. Any other questions for Alan?

VICE CHAIR BEHAR: Yes, this is Harriet. So you were saying that 50 percent of the berries are lost in your region. Is there any written documentation of that that you can provide to us?

MR. SCHREIBER: Okay. I want to clarify something. I was very careful to say in western Washington. Most organic blueberry production in Washington is in eastern Washington, where they currently don't have mummy berry.

In western Washington, where most of the growers are, they routinely will lose half or more of their production. I wrote an emergency exemption, asking for some help for this.

I don't know if there is a scientific study to back that up; I can certainly get all the grower testimony that you want. I think it's beyond question, if you know much about what

mummy berry does in western Washington, Michigan; there's a reason why almost all the organic blueberry production is on the West Coast; it's located in pockets of very dry conditions where there's no mummy berry.

Where mummy berry exists, there's very little organic production. Probably less than 5 percent of organic blueberries are produced in areas that are not in the desert, and it's because of mummy berry. I can get you information on this if that would be helpful.

VICE CHAIR BEHAR: Yes, it would, thank you.

CHAIR CHAPMAN: Thank you. Any other questions for Alan? I'm not seeing any. Alan, if you do have information to share, you can send that through Michelle. She can get --

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

CHAIR CHAPMAN: Thank you. Next up we have Jesse Bovay, followed by Jeff Dean. After Jeff we have Sydney Rosario. Sydney, we have not

found you on the line, so if you are here, message us your phone number. And just in case Sydney's not here, up after Sydney will be Elijah Dean. Jesse, are you with us?

MS. BOVAY: Yes, I am.

CHAIR CHAPMAN: All right. If you could start with your name and affiliation for the record.

MS. BOVAY: My name is Jesse Bovay, and I'm the Director of Business Development for Mercaris. Mercaris is a market intelligence provider and online trading program for organic, non-GMO, and other certified agriculture commodities.

We really appreciate the opportunity to submit our comments to the NOSB Board today, and our comments are in direct response to the NOSB/CAC subcommittee request for public comment published on February 25th, 2018.

In regard to the role of documents in an organic supply chain, it should be a requirement for the organic status of a product

to be recorded consistently on all import documents. Requiring consistent organic status labeling will increase organic integrity through creating opportunities for tracking organic product movement through the supply chain.

Organic tariff codes should be required for all imported shipments, and failing to use an organic tariff code should negate the organic status of the imported product. Avoiding usage of an HTF code could contribute to underestimating true import levels and therefore supply and demand metrics.

With a limited number of organic-specific import codes, the industry need the U.S. Government to make a concerted effort to increase the number of organic-specific codes. These changes would encourage shippers to accurately label shipments, increasing transparency in the import market.

In regard to the role of uncertified operations in the supply chain, there are a number of organizations that do not take

ownership or handle organic products, but do provide a service in enabling the marketing of organic products, including bulk commodities and ingredients.

As an organization who enables buyers and sellers to connect directly and do business via online platforms, Mercaris hopes to increase transparency in the sector. However, our online platform is not currently certified under the USCA NOP. We think there are both up sides and down sides to requiring all operations in the supply chain to be certified. More certifications will lead to more knowledgeable people within the supply chain, but will also create barriers to entry within the space.

We think it is important to work with uncertified organizations across the supply chain to understand their particular role and what impact they play in the supply chain. If the NOSB decided to require certification, it is crucial to have input from the currently uncertified organizations to craft regulations

that allow for continued growth in the organic markets.

Last but not least, certification to precisely identify areas for compliance and specific certification targeted to e-commerce platforms to be crafted to address areas identified. That is, we would expect USDA certification for brokers to be different from that of certified handlers and certification for online platforms to vary from that of traditional brokers.

In regard to organic crop acreage information, including production acreage and yield information in the organic integrity database is crucial to understanding market dynamics in the organic agriculture industry. Acreage and yield information for other major commodity crops is compiled and published by the USDA organic crops should not be any different.

This information is used by every purchaser in the supply chain to inform decisions about their business and to communicate

sustainability metrics. It should be the same across all countries that are under equivalency agreements with the USDA organic standards label.

CHAIR CHAPMAN: Thank you, Jesse. Questions for Jesse -- I actually have a few, so I will start. But if other folks have a question, please raise your hand.

Jesse, so do you -- it's been suggested in public comments that online platforms be included under organic certification. Does Mercaris support that position?

MS. BOVAY: Mercaris is in support of working with organizations such as ourselves, online auction platforms, to determine if there truly is a need for us to become certified.

And if it is decided that we are, we think it's also important to work with organizations such as ourselves to make sure that the regulations don't completely curtail the ability for us to conduct business.

CHAIR CHAPMAN: And then you said that

some uncertified operations have a role, and each one may operate differently, so some may or may not require certification. Do you have examples of ones that either should or should not be certified in your opinion?

MS. BOVAY: We think that traditional brokers should be certified in a manner that includes education and organic standards and organic transparency in the supply chain. That would be an example of a player that would need to be certified. A player that would not need to be certified -- I'm not quite sure on that one.

CHAIR CHAPMAN: Okay, thank you. And I have question from Emily as well.

MS. OAKLEY: Yes, you mentioned in your answer to Tom and also in your comments that certification for brokers would look different. Could you elaborate on your thoughts on that a bit more? Thank you.

MS. BOVAY: Sure, of course. Mercaris is different from a traditional broker in that we never take ownership of the commodity. Our

online marketplace acts as a meeting place for buyers and sellers. Transfer of title is done between the buyer and the seller, so for us to be required to be certified wouldn't necessarily be a bad thing. It would be good because, as I mentioned, more people in the chain to understand and be knowledgeable about organic certification is good for the industry.

A traditional broker may or may not take possession of a commodity, and taking possession of a commodity could change the ability for the certification to become null and void for multiple different reasons.

CHAIR CHAPMAN: Okay. I just have another follow-up question for you. So would you say a threshold is taking ownership? Anyone who takes ownership should be certified?

MS. BOVAY: Yes. I would definitely use that as a threshold.

CHAIR CHAPMAN: And similarly with possession, anyone who takes possession is someone who should be certified?

MS. BOVAY: Not necessarily. That could create onerous complications. For example, transportation companies take possession of the commodities, but may or may not necessarily be certified.

CHAIR CHAPMAN: Okay. And then people who are parties to the transaction but may not take title, may not take possession, such as online auctions or maybe sales agents -- those, you're saying you -- I already asked you about the online auctions -- but about sales agents or other folks? Do you have an opinion on that?

MS. BOVAY: We do not.

CHAIR CHAPMAN: Okay, and Emily has her hand raised again.

MS. OAKLEY: I do, I have a follow up.

CHAIR CHAPMAN: Okay.

MS. OAKLEY: So in terms of, for example, your situation. You said that it wouldn't necessarily be a bad thing to be certified or to require certification; it seems like you were exacting that certification process

might look different. Do I understand that correctly? And if so, could you elaborate on that further?

MS. BOVAY: Sure. We do not take possession of a commodity; we never see it as being part of Mercaris. An organic, an OSP for us would look different than an OSP for maybe a grain elevator or a grower.

CHAIR CHAPMAN: Okay. Harriet?

VICE CHAIR BEHAR: Hi, I'm here. I'm wondering, what do you do to verify perhaps beyond just an organic certificate, especially when something is being imported, that actually has a verified organic status in the environment where we currently are, where we've had quite a bit of fraudulent imports entering our market?

MS. BOVAY: Yes. Mercaris' auction platform only deals with commodities that are grown in the United States or Canada. And similar to what you said, we ask for the certification of organic status from the grower or the -- whoever is in the auction.

VICE CHAIR BEHAR: And just a quick follow up: Are you aware that some of the fraudulent imports came in through Canada, although the country of origin would not have been Canada? Do you know if you've handled any of those?

MS. BOVAY: No, we did not.

VICE CHAIR BEHAR: Thank you.

CHAIR CHAPMAN: Okay. Seeing there are no more questions, Jesse, thank you for answering all of our questions.

MS. BOVAY: You're welcome, and we're available if you have any more questions.

CHAIR CHAPMAN: Thank you, Jesse. Up next we have Jeff Dean, followed by Sydney. Sydney, we still have not found you on the line. So if you are here, please message us. After Sydney is Elijah Dean. Jeff, are you on with us?

MR. DEAN: Yes. Can you hear me?

CHAIR CHAPMAN: Yes, I can, Jeff. You can start with your name and affiliation.

MR. DEAN: Hello, my name is Jeff

Dean. I'm the owner for Timberlane Farms in north central Ohio. I'm a producer of organic corn, soybeans, wheat, sunflowers, and clover seed.

I've been certified organic for over 25 years, and I've seen the industry grow and change in many ways. We're growing at a pace that induces many growing pains. I'm speaking today because I'm concerned about the integrity of organics being tarnished by fraudulent imports, and the financial impact these imports are having on current and future organic producers.

Integrity is the most important thing in organic production and sales. It's what differentiates us and our products from conventional commodity products. It's what holds us together, it's what makes it all possible. It's what consumers expect; they expect integrity.

Lack of integrity will destroy our market and end our industry, and that's what is

happening when you allow fraudulent grain imports and grain product imports to enter our organic food chain.

As a producer, I go through a lot to verify our production and our handling. We are held to high standards by certifiers and third-party inspections. Importers and brokers need to be held to the same standards.

If they are co-mingling grain, they are mixing their products from different sources, they need to be certified. If they're going to make a mixed lot of different products, they need to be certified just like a processor or handler, and they should be required to have a paper trail just like our producers are.

If they are certified, they'll get some education about organic processes that I think a lot of them don't really know -- the whole organic process and how things are supposed to happen

Transactions will be traceable; fees could be assessed to them, and those fees could

be used for policing them at the ports. There could be consequences for non-compliance, such as loss of certification, which would deter non-compliance. We need that action now. These fraudulent imports have been going on for a number of years. I traveled to Denver last year to speak to you with the same concerns.

Consumers and producers, both organic and non-organic, have told me they have seen little to no action taken to deter the fraud and uphold organic integrity. I appreciate you looking into this matter, and I hope you can take action soon to deter this. Thank you; if you have any questions, please let me know.

CHAIR CHAPMAN: Thank you, Jeff. I have a couple of questions, and if any other Board members have questions, please raise your hand.

Jeff, we've had some questions from the public, and there's -- I'm not quite sure if I got to your comments. I got that you definitely feel strongly that importers should be

certified. I have a question: Do you yourself -- and feel free not to answer if you don't want to answer this -- but do you sell to uncertified brokers, and do you feel that uncertified brokers should be certified? I'll start with that question.

MR. DEAN: I have sold to uncertified brokers, and I feel that if a broker is both taking possession of the product and co-mingling it, if they're mixing lots and taking my products and putting it on a truck and putting another producer's product in the same thing or mixing or co-mingling it, they need to be certified.

If they're just going to handle it, just the paperwork, and they're taking my lot and ship it to somebody else and sell it, they don't need to be certified. We don't want to have to have everybody who takes possession of a product be certified, because we can't expect all grocery stores to be certified organic.

We also can't expect all truckers to be certified, because that would just destroy the

industry; we can't do that. But if they're going to co-mingle a product -- if they're going to mix my product, my corn, and mix it with somebody else's corn, it's just like a handler or a processor. They need to be certified, they need to go through the same education and process that any handler or processor would.

CHAIR CHAPMAN: So I hear your comment on the co-mingling. If they were not going to co-mingle, but they were going to take title -- is that an operation that you would think needs to be certified?

MR. DEAN: I think it would help to have some sort of certification, maybe not as much as what a normal processor or producer would go through, but some kind of certification process would help.

But I want to make sure we don't cut into grocery stores that are just handling products. We can't expect them to be certified.

CHAIR CHAPMAN: Okay. And then we also have questions around reporting acreage and

yield, and I was wondering if you had an opinion on whether or not certified operations, regardless of their location, should have to report acreage yields, and whether or not there were concerns or other confidential business concerns around having that published in manner that was connected back to the operation.

MR. DEAN: I think when you get certified organic, you give up a lot of privacy, and that's just part of it. As an organic producer, I have to project my yields and project my --

(Telephonic interference.)

MR. DEAN: I'm sorry, what was that?

CHAIR CHAPMAN: Sounds like someone put us on hold, and we had some hold music there. Sorry, Jeff. You'll have to go over that answer again.

MR. DEAN: As an organic producer, we give up a lot of privacy. We do put a lot of information out in our applications. We have to provide our acres, of course, and we have to

provide projected yields. A third-party inspector comes to look at our production and our yields to see if things match up.

It's something that needs to -- I guess I agree that having those figures and that information is a good thing and not a problem with privacy.

CHAIR CHAPMAN: Thank you, Jeff. Harriet, do you have a question?

VICE CHAIR BEHAR: Yes, I just wondered if you have any economic impact that you feel the lack of tracking on these imports has had on your own farm?

MR. DEAN: Yes. I can tell you on just corn alone, I produce about 20,000 bushels a year, and it's affecting me right now about three dollars a bushel. From what I've seen, and I've been a farmer for a long time, all organic. I've been a farmer for about 35 years, and over 25 years organic.

I've seen, over the last five or six years, what the market has done, and when we

started getting the fraudulent imports in, it hit our corn market $3 to $4 a bushel. A little bit more last year than this year, so about $3 a bushel, $60,000 just on corn. That's not counting the other commodities. It's put us in a real bind.

VICE CHAIR BEHAR: So just as a follow-up, has that caused you to change what you're planning to do this year, as far as what you're planting or how many acres? Maybe going to split production instead?

MR. DEAN: Well, it has affected us. We're not able to grow our operation; we're not seeing new farmers come on, growing organic. We've been talking to a lot of neighbors and other people, trying to encourage them to also be organic producers. But when they see the reports in the Washington Post, and they see the price isn't as good as what it was, it really gives them pause to join us and to take the leap to become certified organic.

VICE CHAIR BEHAR: Thank you.

CHAIR CHAPMAN: Jeff, this one last question on my part. How did you go about tackling the economic harm? How did you differentiate the harm caused be imports versus just market shifts?

MR. DEAN: I'm not sure I understand the question.

CHAIR CHAPMAN: I mean, the price for a commodity will vary over time, based on a lot of factors, supply and demand, for example.

MR. DEAN: Sure.

CHAIR CHAPMAN: How do you isolate it to the impact that you're seeing?

MR. DEAN: Our corn price was hovering around $13 to $14 a bushel for a number of years for our cash price, and when we started getting the imports, our price dropped immediately, and we started looking into why.

Then we saw how much corn was imported from Turkey. I believe they were importing a million bushels a month. Our price dropped immediately to their price, what it cost them to

bring it in. It was about $4 a bushel. We're up about a dollar a bushel from then, to about $3 a bushel right now.

CHAIR CHAPMAN: Great, thank you, Jeff. Any other questions from the Board? I'm not seeing any, so thank you very much again for answering all of our questions.

MR. DEAN: All right. Thank you very much for taking the time to listen. And one other thing I might add: If you could have these meetings not in the spring and not in the fall, but maybe in January and in August, times when farmers can attend meetings. That would be greatly appreciated, so that we could get to the meetings. It's very hard for us to attend a meeting in mid-April or in the fall during harvest.

CHAIR CHAPMAN: Thank you for the feedback; we will consider that.

MR. DEAN: All right, thank you.

CHAIR CHAPMAN: Up next we have Sydney Rosario. Sydney, I don't think we've identified

your phone number. So if you're here, Sydney, let me know.

All right, so I'll skip past Sydney. Up next, then, will be Elijah Dean. Following Elijah Dean is Dean McIlvaine, followed by Jim Gerritsen. Elijah, are you on the line with us?

MR. DEAN: Yes, can you hear me?

CHAIR CHAPMAN: Yes, I can. Elijah, if you could start off with your name and affiliation.

MR. DEAN: Okay. Hello, I'm Elijah Dean. I am a young, third-generation farmer and consumer of organic grain products. Our family farm grows corn, wheat, beans, sunflowers, clover, and a few other grains here and there. We have about 550 acres.

I am calling today to address the issue of imports and mainly the effects that imports are having in the integrity of organic, and how I feel that that could very negatively impact the future of organic.

As you've just heard, I don't want to

parrot too much, but integrity is what sets organic apart, and I am afraid that that is in danger right now. I feel that the public does not see anything really happening from the legislative or executive side in deterring fraudulent imports.

We keep seeing stories, say, from the Washington Post of fraudulent imports coming in, but we haven't really seen very many stories of things that are being done against that.

I feel that one of the most important steps that could be taken is strengthening the paper trail that is needed for imports.

I think that it needs to be the same standard as what domestic production is. Every load of grain or commodity coming into this country should be traceable back to every field like it is for us.

They should have the same level of transparency that U.S. producers must give. For example, every single truckload that leaves our farm has to leave with a bill of lading and copy

of our organic certification. But it is my understanding, and I believe it's the public perception, that organic imports do not need this level of paperwork.

This is in place, as I'm sure you all know, to protect the consumers, but also to protect the processors so that if a problem occurs, it can be traced back to the specific producer and the specific field in which the problem occurred. I feel that this level of protection and safeguard should be in place for both domestic and imported supply.

Also, I think it would be very beneficial for there to be an official way to flag either specific importers or specific countries as being high risk. When such an importer was flagged as high risk, they would need to be subject to additional scrutiny in everything, every import they brought in after that. For example, maybe every 1,000 bushels, they would need a test for GM contamination or chemical contamination, which is, I believe, more

than they are required to do now.

Additionally, it could be beneficial to make sure that they are doing some sort of testing or very thoroughly-vetted paperwork before they are even permitted to off-load into the U.S.

These are just two examples of safeguards that could be enacted with a high-risk label for specific countries or importers. I think that decisive action would be very, very beneficial now and quickly, before the integrity of organic is harmed any further than it already has been. So thank you very much, and let me know if you have any questions.

CHAIR CHAPMAN: Thank you, Elijah. Any questions for Elijah?

MR. MORTENSEN: Tom, I have a question.

CHAIR CHAPMAN: Yes, go ahead, Dave.

MR. MORTENSEN: I would just say that we hear what you're saying. The Board is spending a lot of time on this right now, and we

have a panel discussion that will be part of the Tucson meeting.

We feel your pain; several of the Board members were at a -- from about 50 or so grain crop producers at the MOSA conference at a special meeting about the same subject, so we are trying to do what we can to move things along. But we hear your message loud and clear.

MR. DEAN: Thank you.

CHAIR CHAPMAN: So, Elijah, you spoke a little bit about putting additional controls on regions or importers who are deemed risky. Do you have any suggestions on what metrics are used to determine whether or not they are seen as being risky? How we come to that conclusion?

MR. DEAN: Yes. I believe that if a region or an importer has already been caught once, they need to be put on sort of a probationary, high-risk flag for a set amount of time, which could be maybe six months, maybe a year.

Then if they are caught again, maybe

you would strengthen the restrictions. And if they were caught a third time, revoke their certification or their ability to import organic grain. I believe that other countries in the EU are doing similar things already.

CHAIR CHAPMAN: All right. Thank you, Elijah. Any other questions for Elijah? I'm not seeing any at this time. Thank you for your time today.

MR. DEAN: Thank you.

CHAIR CHAPMAN: Up next we have Dean, followed by Jim Gerritsen, and then Kenneth Parker. Kenneth, if you're on the line, we haven't found your phone number, so if you could message that to us, that would be appreciated. Dean, are you there?

MR. McILVAINE: Yes, my name is Dean McIlvaine, I'm an organic grain farmer. I'm calling from West Salem, Ohio at Twin Parks Organic Farm, affiliated with the Ohio Ecological Food and Farm Associations, certified since 1988.

Over the years we've seen continued

growth in the organic market; prices growing at the same time because of the ever-increasing demand. A couple of years ago, beginning in 2016, we saw that prices no longer grew, and they started to fall. That marked the point where imports seemed to have exploded.

Farmers recorded an estimated $400-million loss to organic grain growers since 2015, much of this attributed to fraudulent imports. I would hope that we could broaden and strengthen the enforcement of the existing rules, expand electronic tracking of shipments from overseas, create a regular system for testing of all shipments, and verify the yield potentials through the certification process of the shipper.

These things should do a lot to cut down on the fraudulent imports. I'm also in favor of adoption and enforcement of the animal welfare and livestock access to viable pasture. Even in northern Ohio we know that the animals enjoy the out of doors in the worst of weather.

Organic success has been our own

demise, I believe, with the temptation for people to cheat at all levels; therefore, we need to assist transitioning farmers, continue the cost-share incentives. And the best place to do this is by converting existing chemical farms, not to take out native land into cultivation.

I'm also concerned that upstream violation in the supply chain should not fall as a burden on the farmer to verify when he buys seeds that are labeled organic with the USDA seal. If that's not truly labeled, the farmer who inadvertently planted those seeds should not be the one suffering the cost.

Just as farmers who experience drifts should not bear the cost of that drift on their farms. The burden and the expense should be put back on the propagator of the crime.

CHAIR CHAPMAN: Thank you, Dean. Any questions for Dean? Harriet, I see your hand raised.

VICE CHAIR BEHAR: Hi, Dean. Thank you for integrating all of the different items

that we have for -- well, not all, but many. I just think that it's interesting from a National Organic Standards Board member view that we do see that it's one big system, and what happens in one place affects the other. So thank you for your thoughtful comments.

MR. McILVAINE: Much appreciated.

CHAIR CHAPMAN: Thank you. Any other questions for Dean? Okay. Thank you, Dean, for your time. Up next we have Jim Gerritsen, followed by Kenneth Parker. Again, Kenneth, if you are on the line, let us know, because we haven't identified your phone number. After Kenneth will be Kim Dietz. Jim, are you with us? Jim, if you're talking, you're on mute. I see your headset.

MS. ARSENAULT: I see Jim's name on my list twice, but I think both lines may be muted.

MR. GERRITSEN: Okay, can you hear me?

CHAIR CHAPMAN: Yes, we can, Jim, go ahead and start with your name and affiliation.

MR. GERRITSEN: Okay. Yes, Jim

Gerritsen, I'm a farmer. My family owns and operates Wood Prairie Family Farm in the state of Maine, a two-generation organic seed farm.

I'm also president of OSGTA, Organic Seed Growers and Trade Association, but today I'll be speaking on behalf of our farm. I'm also a member of the Real Organic Project Standards Board, and just reiterate what Dave Chapman spoke of. He reflects the sentiments of myself and other members on the Standards Board.

We've been farming organically for 43 years; we've been certified by MOFGA for 36 years, and that should have been 39 years. In 1979, a month after we submitted our first organic farm plan to get certification, we were accidentally sprayed by the State of Maine in a four-million-acre spruce budworm suppression project. We were sprayed and our land became unqualified for organic certification for 36 months. So we began the process anew in 1982, so we've been certified for 36 years.

But I wanted to reiterate and support

the comments of Steve Walker about the concern of organic farmers being held wholly responsible, not only for transgenic contamination, but also for chemical trespass.

The fact is, with OSGTA, we have members who are certified organic seed farmers who are now facing annihilation from contamination by Dicamba and 2, 4-D. Whether these farms are going to be able to continue farming or not is there, because the federal government is falling down in its responsibility for protecting all farmers, not just larger corporate farmers.

So one of the things that I want to speak to is the native habitat issue. It brings into play on our farm. We farm 56 acres, and over the last 40 years, we've cleared the bushes and trees off 37 of those acres. Through the liquidation of family farmers, it began in the years around World War II, a lot of land in northern New England that was once farmed has gone out of production and has reverted back to

trees.

So we cleared those trees off because we needed a greater land base to farm. So I'm concerned that we need to be smart about our definitions of what a valuable ecosystem is and make sure that we're not taking former farmland that has simply grown up.

That is not what I would consider high-value native ecosystems, and I think it's important, especially the land tenure crisis faced by especially young farmers now. There may be, on a macro basis, plenty of land out there that ought to be converted to organic, but that is not land owned by family farmers. Family farmers should have the right to take land that is not high-value ecological land and convert that back to farm productions if it was originally farm production.

I'd be happy to take any questions if there are any.

CHAIR CHAPMAN: Thank you, Jim. Any questions from the Board? Harriet?

VICE CHAIR BEHAR: Yes, hi, Jim. How many years would you say that the shrubs and trees that you took out -- how many years had it been since it had been formerly farmland?

MR. GERRITSEN: Well, for the most part you can track it by when our neighbors went bankrupt. One was in the mid-1960s, and the bushes and trees started growing in after that.

We did clear one four-acre field 10 years ago, and we counted the rings on one of the bigger trees, and there were 75 rings. So that indicated they went bankrupt in the 1930's Depression.

CHAIR CHAPMAN: Ashley?

MS. SWAFFAR: Hi, Jim. I actually share and think in terms that you do, and I was just wondering if you had any suggestions on what you would like to see in the subcommittee proposal that could address your concerns?

MR. GERRITSEN: Well, I've read the National Organic Coalition's comments, and I think they're doing a good job of getting there.

But it's going to come down to definition, and I think you're going to have to differentiate high-value native ecosystems from something that is not high value, which would be medium or low value.

And I would argue that a lot of the overgrown lands here -- for example, the trees that we cleared off were primarily poplar. These are pioneer species; it was very thick poplar, probably 10 stems per square yard. And this in no way could have been characterized as high-value ecosystem.

I'm just afraid that if you don't have a good definition, you're going to unnecessarily tie the hands of organic family farmers that are trying to make a go in a very difficult economic environment. Many of us in New England are limited in the land we have that we own. If we can convert high, dry ground in to farmland, especially that used to be farmland, I don't think there should be restrictions on us doing that.

CHAIR CHAPMAN: All right. Ashley, did you raise your hand again?

MS. SWAFFAR: Yes, I have a follow up. So, Jim, it makes me wonder, do you think we need this proposal at all, or are you saying we need it, but we need to define the high value, low value?

MR. GERRITSEN: I think it's generally a good proposal and does reflect the values we have within the organic community. But I hear the arguments offered on a macro level; I'm talking about taking millions of acres -- and frankly, family farmers don't farm on millions of acres. We farm on 50 acres, 100 acres, on that kind of a scale. And land that we have -- nowadays in many areas, the cost of farmland is becoming far in excess of what family farmers earning their living from farming can pay for the land.

So if we've got land that we currently own that could be used at a higher value, producing organic crops, I feel that we should be

allowed to do that. Talking about turning native prairie -- high ecological value land -- that, I think, ought to be what the focus should be on.

So I think that overall, it's a good concept, but I just want to be careful that you're using a scalpel in defining and limiting the rights of family farmers, and not a cleaver.

CHAIR CHAPMAN: Emily?

MS. OAKLEY: Can you hear me, Tom?

CHAIR CHAPMAN: Yes.

MS. OAKLEY: So, Jim, I have read some comments similar to yours from other producers, and I wanted to clarify that I think, in many instances, especially the land that you're describing, I don't think the native ecosystems that we have proposed. I don't think our intention is to limit producers' access to land that might still be very marginal in terms of its restoration.

So I just wanted to try to alleviate those concerns and to further elaborate. I think what we're talking about is fully-recovered

native ecosystems, and what you're describing to me does not seem to meet that definition.

MR. GERRITSEN: Yes, we're up in northern Maine, and the land that we farm here was first cleared right before World War I. So of the 100 years that the land here has been cleared and farmed, we've been farming it organically for over 40 years.

As you head further south in Maine and in New England, you get a longer period of time. So I'm just worried; I know of one farmer --- I know of one farmer in southern Maine that is --

MS. ARSENAULT: Jim, this is Michelle. Can I interrupt you for one second? If you're not speaking, can you make sure your speaker is on mute, so we can minimize background noise? Thanks.

MR. GERRITSEN: Okay. I know of one farmer, for example, in southern Maine, a MOFGA-certified organic farmer who is trying to turn some of their woodlot, which was formerly farmed, into farmland to expand their livestock

operation. And knowing the history down there, I'm sure that it's longer than the 75 years that we're facing of regrowth here.

I guess what I feel the right thing to do is to respect the private property rights of family farmers and give them the latitude to make that decision. The fact is, all of us that came into organic farming 40 years ago were highly motivated by a land ethic, and that land ethic remains.

I think you can place trust in authentic family farmers to do a good job managing their farms, and I am just concerned that we not take a broad definition that could restrain the viability of family farms that are doing a good job. They know their farms better than anyone else. So let's give them that ability to make viable farms for their communities.

CHAIR CHAPMAN: Thank you, Jim. I am not seeing any other questions at this time; thank you for your testimony.

MR. GERRITSEN: Thank you.

CHAIR CHAPMAN: So up next we have Kim Dietz. Kim is the last person in the row. After Kim, we'll go back through the list and call on anyone that we missed. If they're on the line now, we'll give them a chance to speak. There are five of them, so I'll go through that after Kim speaks. Kim, are you here with us?

MS. DIETZ: I am, Tom. Can you hear me okay?

CHAIR CHAPMAN: We can, Kim. You can start with your name and affiliation.

MS. DIETZ: Okay. Good afternoon, my name is Kim Dietz, and I'm a Senior Manager for Organic Policy for the JM Smucker Company. Our company produces organic products under a variety of different brands.

I first served on the NOSB from 2000 to 2005 as a handler representative, chair of the materials committee and board secretary, so I appreciate all of your hard work and have been in your shoes, so again, thank you for everything

you do.

Today I also serve as president of the Organic Trade Association and co-chair alongside Gwendolyn Wyard for the Global Organic Textile Standard Liberty Task Force Committee. That's a mouthful. My comments today emphasis the support for the (telephonic interference) and the importance of establishing import oversight with an emphasis that fraud cannot be tolerated in the organic system.

Smuckers supports a risk-based approach that should be followed, and we ask that the NOSB also take that into consideration. Our company imports many organic ingredients, and we believe that a good organic system plan and a quality supplier program based on risk should definitely address the supply chain and fraud concerns.

I appreciate you taking up this issue and look forward to discussing this with you next week in Arizona.

Materials, I'm just going to comment

on a few materials. We support the continued use of the handling subset materials, and I have submitted the majority of my comments alongside fellow OTA members.

But specifically, I just want to emphasize the gums. We currently use gums in some of our beverages, and there are different gums that are needed based on the formula variations, so I just want to make sure you understand that one gum is not going to serve the function for all products. It depends on the viscosity of the product, and the heating and cooling and a number of different factors. So commercial availability and the ability to use a variety of gums is very important.

Also, I just want to make a comment about the proposed docket that is out there, specifically around flavors, and my comments are in support of the NOSB recommendation to change the annotation for flavors.

I can tell you that as a fellow board member from when I started on the Board in 2000,

I've always been an advocate to use organic flavors. In fact, our company developed the first certified organic flavor in the 1990s. We've always been dedicated to using organic flavors and have always used them in all of our products, never conventional flavors. Today we purchase hundreds of certified-organic flavors, and we have never had a problem sourcing any of those.

So while I've been a personal advocate, I feel strongly that the annotation's change is critical for the advancement of organics, specifically I want to make sure that we have that commercial availability, so we can continue to grow the industry. But I do feel that it's important that we have to have this annotation change.

So that's really all I have to say. Thank you.

CHAIR CHAPMAN: Thank you, Kim. Any questions for Kim? Kim, I have a question for you. So the OTA and the GOTS task force came out

with some pretty good recommendations related to industry practices to reduce the risk of fraud in the supply chain, and I didn't know if you had any feedback for what role the NOSB has in encouraging, facilitating, pushing the adoption of those practices. What role do you see the NOSB having in relation to that?

MS. DIETZ: Yes. We've been asked that question, so if we have this best practice guide or we have guidelines, how do we make sure that folks do it? While it's going to take peer pressure from all of us to say that this is the right thing to do, I also think the NOSB could endorse it. Perhaps we could have some type of best practices guide as well, through the NOSB. I think that would be very helpful.

I don't know how we could actually force people to do it, although, as mentioned earlier, somewhere during the inspection process or on the certifier end, that they review something like a best practice guide or risk-based approach, if that makes sense to you.

CHAIR CHAPMAN: Thank you. Yes, I'm just looking for suggestions of ways we could implement it. It sounds like training, maybe guidance is what you're saying.

MS. DIETZ: Yes.

CHAIR CHAPMAN: Any other questions for Kim? Seeing none, Kim, thank you for your time.

MS. DIETZ: You're welcome.

CHAIR CHAPMAN: So right now we'll run through the public commenters who we moved over. I'll call them one by one. If they're here, we'll take their testimony; otherwise we'll move on.

So up first was Robert Landers; Robert, are you here with us now? I'm not hearing anything, so we'll move on to Domenico Tassone. Domenico, are you here with us? Not hearing anything. Up next is Sam Raser. Sam, are you with us?

MR. RASER: I am, and thank you for coming back to me.

CHAIR CHAPMAN: All right, Sam. Could you start with your name and affiliation?

MR. RASER: Yes, you bet; Sam Raser, I am with Grain Millers, Inc. in Eden Prairie, Minnesota. I have been an organic grain buyer for 10 years now, and currently I manage all of our organic grain procurement for all of our mills in North America. So we are one of North America's largest organic grain processors. We have been in the market since the '80s, and we have over 700 employees working with organic grain on a daily basis. We are committed to the industry and constantly working to help improve it.

I've been fortunate to work on the fraud task force, so I'm just going to list off a couple of their recommendations that we support, and feel will be nice steps in the right direction.

One of them would be adopt and implement the GOS CI best practice guide. I've read through it, and even a company like

ourselves, who we feel is ahead of the curve, I do feel like they have done an excellent job of making even a company like ours think outside the box and look at programs differently.

One would be to require ACAs report aggregate production areas certified by crop and land location on an annual basis. I understand the risk involved with giving that data out if you are a farmer; it's a slippery slope, but as a grain buyer, having that data available really puts things into perspective as far as if farmers are over-shipping us.

It could really throw out -- if we only have this much organic acreage, we shouldn't be able to buy more than a certain percentage of that. Again, I know that is not as clear as 1,2,3, but I think that would be something that would help.

Improve the timing and communication around the NOSB complaint system. Generally speaking, a solid complaint system is going to be very good in helping our industry self-police

itself. It could be very efficient if done properly. It's one thing for us to sit and complain about it, but we need to be able to give the proper people the right information and in a safe manner, and in a manner that they can distinguish what's good information and what's bad information.

Increase licensed certifiers and inspectors. Inspectors should be licensed for the scope and scale of operations they are inspecting, and licenses should be issued by organizations that have obtained an appropriate ISO accreditation. Inspectors should be trained and capable of carrying out mass balances in order to verify that quantities shipped sold are justified by ingredient products received and produced.

The mass balances part of that is really important. It needs to be moving forward; we get into some really big, long, complex trade, especially when you start looking at imports, and we need to be prepared and trained to go through

that information to make this a quick -- let's say audit -- on our systems.

That kind goes back to the second item I mentioned on ACA reporting aggregate production. I think if all the data is there, it will be a lot easier for us to go through it. But I do feel like certifiers need that training and that authority to go through mass balances.

Increase use of testing for imports and other high-risk products. I think that adds a lot of cost, or could add a lot of cost to what we do in our system, but so do bad press reports that devalue our brand. So if everybody is held to the same standard, costs might go up, but costs might go up for everybody, and I think that's fair. That's it.

CHAIR CHAPMAN: All right. Thank you for your testimony. Any questions for Sam? All right, so Sam, if I was interpreting your statements correctly, you are in full support of the OTA's recommendations. You think those are the best approaches to mitigate these --

MR. RASER: I think if it's a very well-thought-out document and it has a lot of input from industry, all aspects of the industry -- I came into it about halfway through the process, but I've seen both sides, the OTA side of things, and I can tell you the OTA has done an excellent job of putting all that data together.

CHAIR CHAPMAN: And then another question, I know you guys have worked with imports in the past. There were some specific questions we had around certification of ports, and whether ports who handle the loading and unloading of unpacked grain should be certified, or if certification is required. Do you have an opinion on that?

MR. RASER: Yes, we would never even think about bringing in, at least from a bulk grain standpoint -- which is where my experience lies -- we went through the process of certifying everybody who was involved as far as actually handling it outside of freight. So the actual ports that we've used in bulk grain were

certified. I don't see any reason why that shouldn't be a mandatory thing. To be honest, I didn't even know that people were doing it in uncertified ports.

That might be a little bit trickier once you start at the container levels, so I'd have to look into that further.

CHAIR CHAPMAN: Okay. Another question is about documenting their organic status on documents. One specific one we asked about was phytosanitary certificates. Do you foresee there being an issue with us requiring organic status to be on something like a phytosanitary certificate?

MR. RASER: I think that's an easy thing for us to accomplish. Well, I shouldn't say that. Maybe it isn't as easy as what I think it is, but the more we can put it on paperwork, the better. But in the back of my head, I don't think that the paperwork is the problem. I think it is a much bigger issue than just the paperwork. I think that's a small step, but I

don't think that's going to have an overwhelming warm, fuzzy feeling that we're all looking for.

CHAIR CHAPMAN: Okay. Any other questions for Sam? Not seeing any, Sam, thank you for your time today.

MR. RASER: Thank you.

CHAIR CHAPMAN: We'll just keep going through the list. I understand we have Sydney Rosario. Sydney, are you here? And hearing no Sydney, up next Kenneth Parker. Kenneth, are you here?

MR. PARKER: Yes, good afternoon. I am here.

CHAIR CHAPMAN: Oh, Kenneth you are here. You're our last speaker; you've got three minutes, and you can start with your name and affiliation.

MR. PARKER: Sure, thank you. Good afternoon, I'm Kenneth Parker. I'm the Executive Director of the Florida Strawberry Growers Association, and thank you for allowing me to address this National Organic Standards Board,

specifically concerning Polyoxin D zinc salt for organic use.

The FSGA constitutes all of the organic acreage and nearly 100 percent of the conventional acreage in Florida. As you might know, Florida's climate is not the most ideal environment for producing organic strawberries; however, the organic fruit that is marketable is remarkable.

The Florida growers would benefit greatly from an additional tool to manage pathogens. Polyoxin D zinc salt is proven to have some activity in suppressing botrytis in strawberries. Botrytis is a major fungal pathogen that causes the most significant reduction in marketable yields here.

The FSGA respectfully asks for your acceptance of Polyoxin D zinc salt as a tool to help combat fungal pathogens in the organic production of specialty crops and strawberries in Florida. And with that, I want to thank you for your consideration.

CHAIR CHAPMAN: Thank you, Kenneth. Any questions for Kenneth?

MR. BUIE: Yes, this is Jesse. Kenneth, can you provide us with some documentation of the efficacy of this Polyoxin D? That's one of the concerns that we're seeing, is how do we know that this works?

MR. PARKER: Well, I'm glad you asked that. In fact today we just had our first day of a two-day event we call AgriTech, where we have all of the researchers from all the disciplines that concern strawberries from the University of Florida present research data from this season that just ended.

I had the opportunity to talk to our lead pathologist, Dr. Natalia Perez, and she does have some work. Every year she conducts studies on efficacy of products, and she included Polyoxin D zinc salt in the study from last year. She has that information; I don't have it in my possession, but I can get it for you. That's not a problem whatsoever.

MR. BUIE: Okay. Can you get that to Michelle?

MR. PARKER: I certainly can. Now, is Michelle the person who sent the emails to us, or is that someone else?

MS. ARSENAULT: I am, yes. I am the one who sent you the schedule and all of that, so you should have my email address.

MR. PARKER: Okay, yes, Michelle, I'd be happy to do that. It's not the best tool that we have for conventional, but it's certainly in the toolbox for rotation. So if it qualifies for organics -- we virtually have nothing for organics, so anything that has some activity would greatly benefit the organic producers here.

CHAIR CHAPMAN: All right. Thank you, Kenneth. Any other questions? I'm not seeing any at this time, so again I thank you for your testimony today.

MR. PARKER: Thank you.

CHAIR CHAPMAN: With that, that concludes our public commenters for today,

Tuesday. We'll start again same time on Thursday, and then our meeting will be the following week starting on Wednesday in Tucson.

Thank you everyone for your time today and your public comments. Thank you to the Board members for your attention and questions, and I hope everyone has a great day.

(Whereupon, the above-entitled matter was concluded at 3:41 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: Spring 2018 Public Comment Webinar

Before: USDA/NOSB

Date: 04-17-18

Place: webinar

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

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NATIONAL ORGANIC STANDARDS BOARD

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SPRING 2018 PUBLIC COMMENT WEBINAR

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THURSDAY,
APRIL 19, 2018

The webinar was held via telephone at 1:00 p.m., Tom Chapman, NOSB Chair, presiding.

BOARD MEMBERS PRESENT
TOM CHAPMAN, Chair
HARRIET BEHAR, Vice Chair
SCOTT RICE, Secretary
JESSE BUIE
ASA BRADMAN
A-DAE ROMERO-BRIONES
LISA DE LIMA
STEVE ELA
DAVE MORTENSEN
EMILY OAKLEY
ASHLEY SWAFFAR
SUE BAIRD

STAFF PRESENT
DR. PAUL LEWIS, Ph.D., Director, Standards Division, National Organic Program
MICHELLE ARSENAULT, Advisory Committee Specialist, National Organic Program
DEVON PATTILLO, Materials Specialist, Standards Division, National Organic Program
GERALDINE GONZALES, Intern, Standards Division, National Organic Program

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

(1:04 p.m.)

MR. LEWIS: Thank you, Michelle, and good afternoon, everyone. I want to welcome NOSB members and the public to today's National Organic Standards Board public comment webinar. And as Michelle mentioned, this is our second webinar for the week and looking forward to everyone joining us at our upcoming meeting in Tucson for a full face-to-face meeting.

I appreciate NOSB members' participation in this call and for all your work serving on the Board. And this webinar provides the opportunity for the public to provide comments to the NOSB as part of the Board's upcoming face-to-face meeting, as I mentioned, occurring April 25th to 27th.

Please consult the NOP website for further information about the face-to-face meeting. This webinar, like all meetings of the National Organic Standards Board, operates under the auspices of the Federal Advisory Committee

Act.

I look forward to hearing comments from the public to assist the NOSB in preparing the recommendation to USDA in response to NOSB work agenda items.

I also want to thank my NOP colleagues for their help, especially behind the scenes, to bring us to this teleconference today.

I'd like to close now by turning to Mr. Tom Chapman, Chair of the National Organic Standards Board. And Tom, thank you again for chairing this webinar.

CHAIR CHAPMAN: Thank you Paul, and thanks to the NOP staff for helping to accommodate this webinar. We hear again and again from the public how important these webinars are to provide access to members of the public to provide public comments to the NOSB.

On behalf of the Board, I'd like to welcome everyone to this public comment webinar prior to our spring meeting. And, Michelle, if you would be so kind if you would take a roll

call of the Board members present.

MS. ARSENAULT: Sure. And Tom, just so you know, we're getting a little bit of an echo of your voice just so you know that.

All right. I believe, Harriet, are you with us?

VICE CHAIR BEHAR: Yes, I am.

MS. ARSENAULT: Great. Asa, you're out there?

MR. BRADMAN: Yes.

MS. ARSENAULT: Great. Thank you. Jesse Buie.

MR. BUIE: I'm here.

MS. ARSENAULT: Great. Thank you, sir. Tom Chapman?

CHAIR CHAPMAN: Here.

MS. ARSENAULT: Great. Thank you. Lisa de Lima?

MS. DE LIMA: Here.

MS. ARSENAULT: Excellent. Thank you. Steve Ela?

MR. ELA: I'm here.

MS. ARSENAULT: Hello, Steve. Dave Mortensen?

MR. MORTENSEN: Good afternoon, all.

MS. ARSENAULT: Good afternoon. Emily Oakley?

MS. OAKLEY: I'm here.

MS. ARSENAULT: Hi. Scott Rice?

MR. RICE: Here.

MS. ARSENAULT: Hi, Scott. A-Dae Briones?

MS. ROMERO-BRIONES: Here.

MS. ARSENAULT: Hi, A-Dae. And Ashley Swaffar.

MS. SWAFFAR: I'm here.

MS. ARSENAULT: Great. Thank you so much. And Tom, we'll probably note we had two members who were not able to make the call today. They're both traveling. And we have a total of 13 Board members currently, as we have two unfilled vacancies as of today -- or, at the moment.

All right. Thanks. And I'm going to

turn it back over to Tom.

CHAIR CHAPMAN: Thank you, Michelle. So if my count was correct, we have 11 of 13 Board members present and that is a quorum.

MS. ARSENAULT: Correct.

CHAIR CHAPMAN: And we will proceed on with the -- I'll have to do some quick logistical comments and then we'll proceed into the public comment period. Just so the first person is ready, Edward Field, you'll be the first one up. But again, I've got a couple minutes of comments here.

So, just again, another reminder, please keep yourself on mute. We had a little bit of a background noise there from an echo of probably a speaker phone. So star 6 is mute. Star 7 to unmute or use the mute button on your handheld.

So we'll start public comment in the list order that Michelle has provided to commenters. We'll start with the first person and proceed down the list in order.

If someone is not present at the time they're called and there's time remaining at the end of the comment period, then we'll run through the list again for those who were missed.

If you're a commenter on the line, I ask that you message in to the chairperson your phone number and where you're calling from so that we can ID you and so that we can know that you're present.

I will call on the speakers and read out the name of the next speaker as well as the next two people on deck. When called upon to speak, commenters are asked to give their name and affiliation for the record. We ask that you disclose all relevant affiliations for business matter pertaining -- all relevant affiliations pertaining to matters of business before the Board.

And if members of the NOSB want further clarification, I encourage you to ask questions after the public commenter has finished their comments.

Comment time will be three minutes per commenter. As we said before and again out of respect for the Board and other commenters, I ask that you finish as close to that three minute mark as possible. I will facilitate questions at that point from the Board if there are any and then we'll move on to the next commenter.

We don't take any questions from the public for other public commenters, only questions from Board members. And just as a note, all public commenters are only allotted one time slot, either in person or at the webinars.

There will be transcripts of these calls available after the entire meeting bundled together with the meeting transcripts. Michelle, did I miss anything?

MS. ARSENAULT: No, I think you covered everything. Great. Thank you.

CHAIR CHAPMAN: All right. So up first -- we will proceed on with the public comment now. Up first is Edward Field followed by Andreas Kuenkel and then Angela Anandappa.

And apologies. I'll try not to butcher your names.

So I'll read the names out like that and then just confirm that we're hearing you. So, Edward, are you on the line with us? He might be on mute. Just hold on. Edward, are you on the line with us?

MS. ARSENAULT: He is on the line. And I don't see that he's muted. Using a headset so maybe give him a second to unmute.

MR. FIELD: Can you hear me?

CHAIR CHAPMAN: We can hear you now, Edward. You're a little light. So you may want to speak up a little bit.

MR. FIELD: Okay.

CHAIR CHAPMAN: All right. Edward, if you can start with your name and affiliation and then proceed with your comments.

MR. FIELD: Sure. My name is Edward Field, and my company is Natural Merchants Incorporated. Thank you for the opportunity to speak.

Dear NOSB members, the elimination of the use of sulfur dioxide in the made with organic wine production category would be detrimental for our business as well, we feel, for the entire industry of organic wine producers.

Since our company's inception in 2004, we have worked closely with our winery partners in Europe and South America to produce quality, organically grown and produced wines.

In Europe, all of our wines would be considered organic as the use of sulfites in wines has under 100 parts per million.

Since the passage of the original NOSB ruling on sulfites in wine production in 2012, we have followed the guidelines to the letter, offering wines both as a made with organic ---

(Telephonic interference.)

MR. FIELD: -- the organic categories.

Organic wine sales, as tracked by Organic Trade Association in both categories, continue to grow in the U.S., growing between 10

to 20 percent per year in volume with imported organic wines leading the charge.

Sulfites are a key element to the production of most organically grown wines. In wine production, they're used to reduce or eliminate the risk of unwanted yeast and lactic acid bacteria, which can cause off odors that are considered to be wine faults.

Sulfites also reduce problems from oxidation, which causes browning, and extend the life of organically grown wine.

These two main wine faults, both the off odors and the browning make wines commercially unacceptable to most consumers.

The NOP 2011 technical evaluation report concluded on Page 10 that presently no organic agricultural products have been identified that act as a satisfactorily effective agent for preventing microbial storage and oxidation in wine.

Although we do have several wines that are produced with no sulfites added, the majority

of our portfolio must continue to include the addition of a minimal amount of sulfites in production in order to be imported and sold in the U.S. market.

Wines without sulfites are extremely delicate and perishable and difficult to produce. There are currently no viable alternatives to control the microbial issues and oxidation that is common, particularly in white wines.

The use of sulfites up to 100 parts per million in the made with organic grapes category does not threaten the integrity of the USDA organic label.

For these reasons, we request that the Handling Subcommittee call for retaining sulfur dioxide on the National List for wine labeled made with organically grown grapes.

Thank you for the opportunity to comment.

CHAIR CHAPMAN: Thank you, Ed. Any questions for Edward? I'm not seeing any questions or hearing any, Ed, so thank you for

your comments. We will move on to our next commenter.

Up next, we have Andreas, followed by Angela Anandapa and then Mary Agnes Rawlings. Andreas, are you with us?

MR. KUENKEL: Yes. I am here.

CHAIR CHAPMAN: Okay. We can hear you. You can start with your name and affiliation for the record.

MR. KUENKEL: My name is Andreas Kuenkel. I am head of bioculinary research for BASF. Thank you very much for the opportunity to speak today. And I will speak about the biodegradability in soil and the comparison of standard and requirements.

Next slide, please. So Europe first, and a new standard was created for the biodegradable marsh film, the EN 17033. And this standard has been created to ensure that there are no negative effects on the soil health.

And on the left side you can see that this banner contains four elements. The first

element is the biodegradation, and it describes the conversion of more than 90 percent to C02 in two years. And please note that one of the methods is the ISO 17556.

And in the last meeting, I have shown that the additional bio mass goes into the microbes. The second element is the ecotoxicology. And this is intended that there are no negative effects on different organisms.

The third element of the standards are reflected to the chemical composition and also here in the focus is that there are no dangerous substances in the mulch film.

And the fourth element is to ensure the mechanical requirements so that the farmer can use the biodegradable mulch film. So that's European standard.

And the next slide shows the current requirements for the biodegradable mulch film in organics. And as you can see, that's with respect to ecotoxicology and chemical composition.

This is already included in the composting standard, like different ASTM standards for biodegradation. As you can see, this includes also a method like the aforementioned ISO 17033 describing the same level of biodegradation.

It means that already three elements of the European standard are included to ensure the soil health.

In addition, in the U.S. organic regulation, the bio-based content is required. And here I would like to make the comment that this is not part of the European standard because for biodegradation ecotoxicology as well as for the mechanical performance, this does not play a role as we have explained in the previous submitted documents by BASF and the BTI.

Thank you very much for your attention.

CHAIR CHAPMAN: Thank you. Any questions for Andreas? I have one. Sorry, I didn't --

VICE CHAIR BEHAR: Harriet.

CHAIR CHAPMAN: Is it Harriet? Sorry. I can't see the name. I can see the hand raised. Harriet, go ahead.

VICE CHAIR BEHAR: Hi. Can you tell me if there was any part in this study that tracks if continual use in the same area resulted in any spike in nutrients or differences in soil biologies from extended use?

MR. KUENKEL: So this is not included in the standard. So the standard assumes that there is no assimilation based on the biodegradation requirement, which is more than 90 percent conversion in the two years.

VICE CHAIR BEHAR: Thank you.

MR. KUENKEL: Yes.

CHAIR CHAPMAN: Any other questions?

MR. BRADMAN: Yes, this is Asa. I have a question. Is there any update on the proportion of the material that is petroleum-derived versus bio-based?

MR. KUENKEL: In Europe?

MR. BRADMAN: In perhaps the materials that you produce or across the industry?

MR. KUENKEL: There is no change since the November meeting.

MR. BRADMAN: Thank you.

CHAIR CHAPMAN: Any other questions from the Board? All right. Thank you, Andreas.

MR. KUENKEL: Thank you very much and have a nice day.

CHAIR CHAPMAN: Thank you. Up next we have Angela Anandappa followed by Mary Agnes Rawlings. Mary, we're not finding you on the phone or the internet. So if you are online with us, please message in so we can find your phone number.

After Mary, just so you know you're on deck coming up is Angela Wartes-Kahl. Angela Anandappa, are you with us?

MS. ANANDAPPA: I'm here.

CHAIR CHAPMAN: Could you start with your name and affiliation for the record?

MS. ANANDAPPA: I'm Angela Ananadappa

with the Alliance for Advanced Sanitation. Thank you for letting me join this meeting and the opportunity to provide some comments.

I just want to give you a little bit of a background. The Alliance for Advanced Sanitation is a public/private partnership between the industry and the University of Nebraska in Lincoln.

We are a member-driven organization supported by member dues. And the mission of the Alliance is to provide more research that is focused in improving sanitation practices, developing or improving methods for detection or cleaning, and in providing the function of sanitization for food equipment and environment.

We also recognize the need for other products and surfaces that are resistant to harboring bacterial biofilm and are both impervious to water and provide a means for reducing the need to use cleaning agents and sanitizers more than necessary to maintain a safe food supply.

I want to add that cleaning products and sanitizers are our focus area in our research in the work that we do. And we're able to maintain our food safety by the proper use of cleaning products and sanitization in the food industry.

In our work with food processors and retailers, we know that there is a need for recommendations with respect to specific products and their applications in specific environments such as on farm controls, cleaning protocols within the processing facility, retail operations and for product contact with microbials. We recognize that there is a need for greater awareness regarding the suitability of products for their specific purpose.

And I suggest to the committee to put together an effort to evaluate the current usage of the allowed antimicrobials and to evaluate the use of antimicrobials not on the approved list and their applications, using general scientific data and applying them to organic processes and

research in the proper use of antimicrobials and their suitability for specific cropping systems and handling operations.

With respect to one of the topics of discussion which is the SDBS proposal to be added to the list as an allowed synthetic antimicrobial, I do support the consideration of that ingredient of that product so that they are given an option, an additional option which allows handlers to be able to switch out sanitizers. Thank you.

CHAIR CHAPMAN: Thank you, Angela. Any questions from the Board? Angela, I'm not seeing any questions from the Board. Thank you for your comments.

Up next we have Mary Agnes followed by Angela Wartes-Kahl and then Britt Lundgren. Mary, are you on the line with us? We haven't been able to find your number. Mary, are you with us? Okay. So we're not hearing Mary so we'll move on.

Angela, are you here? Angela Wartes-

Kahl? Do they have you muted? We have you muted. Hold on. Angela, are you with us?

MS. WARTES-KAHL: Hello. I am. Thank you.

CHAIR CHAPMAN: Okay. I can hear you. Hold on one second, Angela. So after Angela, it's Britt Lundgren followed by Katherine DiMatteo. Angela, start with your name and affiliation.

MS. WARTES-KAHL: Yes. My name is Angela Wartes-Kahl and I'm an organic inspector working with Independent Organic Services.

CHAIR CHAPMAN: Great. Please proceed with your comments.

MS. WARTES-KAHL: I'm speaking today as an organic inspector on the topic of uncertified operations in the supply chain. Thank you to the National Organic Standards Board members for all your diligent work on these important issues.

I'd like to specifically comment on uncertified handlers. It is apparent in my

processing inspections that certified entities are buying ingredients from uncertified handlers on a regular basis.

This is a threat to organic integrity. There is no way to secure the organic status of a product entering an uncertified warehouse, packing house or distribution center if the handler is not certified.

There is no inspector observing the receipt and shipment of organic ingredients, the breakdown of these products into smaller lots, repacking into smaller quantities and relabeling as organic goods.

Certifiers instruct their clients to collect certificates and invoices showing the original product was, in fact, certified. Because we inspectors are not physically present at the facility of an uncertified handler requesting this information as we do during inspection, reviewing the product labels and supplier invoices, there is plenty of room for fraud when enforcement doesn't happen in the supply chain.

These operations must be certified or no longer broker of organic goods. If product is broken down and handled in any fashion, the operation should be certified.

If they only broker complete lots from port to customer or otherwise handle sealed containers, I see the risk to organic integrity to be negligible.

Where the problem lies is in the small distribution companies selling hundreds of non-organic and organic ingredients to medium-sized processors, and that's dried fruits, spices, vanilla extract, chocolate, et cetera. These are expensive ingredients which are being repacked and relabeled without the guidance of organic practices.

Certification of handlers will have a positive impact on the organic industry in the reduction of fraud. The burden of certification fees is shared by all those participating in the NOP program except this special class of operations.

It is imperative the NOP close this loophole and require that all steps from the supply chain obtain certification. I support the written comments of Oregon Tilth and the OTA on these issues. And thank you for your time today.

CHAIRMAN CHAPMAN: Thank you, Angela. Any questions for Angela? Not seeing any questions from the Board members. Angela, thank you for your comments today.

MS. WARTES-KAHL: Thanks so much.

CHAIRMAN CHAPMAN: Up next we have Britt Lundgren followed by Katherine DiMatteo and then Francis Thicke. Britt, are you on the line with us?

MS. LUNDGREN: I am. Hello.

CHAIRMAN CHAPMAN: Great, Britt. We can hear you. You can start with your name and affiliation.

MS. LUNDGREN: Hi. I'm Britt Lundgren. And I am with Stonyfield. So thanks for this opportunity to comment today and many thanks to all the members of the Board for all

that you do to advance the organic standard.

I'd like to focus today on the proposal on eliminating the incentive to convert native ecosystems to organic production.

Stonyfield is sympathetic to the goals of this proposal, but we are opposed to its adoption in its current form.

The definition of native ecosystems includes areas that were altered 50 to 100 years ago but have recovered expected plant species composition and structures.

This easily describes most of the forest land in New England. In this region, the decision on an organic dairy about where to expand pasture land is dictated primarily by the proximity and accessibility of that land to the milking parlor. If a farm needs to expand their pasture to meet the nutritional needs of their cows, they need land that is reasonable walking distance from the parlor.

If the only land that is currently available is forested, the farmer will log that

land and convert it to pasture. These farmers are not choosing to log land because the conversion period is faster than if they selected another field that is currently in conventional management. They are choosing to log that land because it's the only land that is available for them to expand onto.

In most of these cases, the logging does not have major negative ecological consequences. The primary threat to the health of native ecosystems in the northeast is not agriculture. It's development.

If organic agriculture is going to remain a viable business in the northeast in the face of immense development pressure, organic farms need to be able to expand in the most efficient way.

If we restrict this, we increase the likelihood that they may not be in business that much longer, making all of that land, both pastures and forests, extremely vulnerable to development.

This problem could be avoided if the proposal were instead focused on eliminating the incentive to convert high conservation value ecosystems instead of native ecosystems.

High conservation value ecosystems were first defined by the Forest Stewardship Council, but the concept has been adopted and used by others looking to prevent conversion of important ecosystems.

I provide more detail in my written comments about how these ecosystems are defined. If NOP adopts this proposal, it will effectively eliminate the option for many northeastern organic dairies to expand their operations and would also restrict the ability of conventional dairies to convert to organic.

The ability to expand an operation is especially critical for facilitating generational transfer of a farm, so this prohibition would be most damaging to the upcoming generation of organic dairy farmers in the northeast.

Stonyfield urges the subcommittee to

revise its proposal to focus on removing the incentive for conversion of high conservation value ecosystems instead of native ecosystems. Thank you.

CHAIRMAN CHAPMAN: Thank you, Britt. And I see I have a question from Emily. Emily, we've unmuted you.

MS. OAKLEY: Pardon?

CHAIRMAN CHAPMAN: We've unmuted you.

MS. OAKLEY: Oh, great. Thank you, guys. I unmuted myself, too. Thank you.

So, Britt, thank you for your comments. And I also wanted to make a couple comments and then ask a question.

I noted in your written comments that you were concerned that you didn't see a reflection in the current proposal the CACS considering your previous comments.

And I did just want to assure you that we actually did discuss very specifically the examples that you provided us both on our subcommittee calls and during the proposal

process. So I just want you to know that you definitely, you know, have been heard.

And I wanted to repeat kind of what I said with one of the commenters on the last webinar that I think some of the land that farmers may be looking to convert, if it was previously farm land, let's say, within the last 40 or 50 years, it would not fall under the definition of native ecosystem and could be converted back to farm land from woodland if it's still in its sort of beginning phases of regeneration.

So I think that concern could be at least partly addressed in that regard. And I did see in the Wildwood and Woodlands report that you submitted that it seems like a good amount of land in New England has been very recently converted out of farmland back into forest. So hopefully some of that land is around the farmers that are Stonyfield growers.

But all that being said, I just also wanted to express that in this proposal we're

trying to achieve consumer expectation about what their values for organic integrity mean. So there's sort of this bigger picture that we're also trying to grapple with.

And I know that you mentioned the high conservation value ecosystems. And I can, you know, talk with you later if you'd like about why we went with the native ecosystem definition as opposed to high conservation value ecosystems. One is simplicity, for example, that I can go into more depth with you if you would like.

My question is, do you have a sense right now of what percentage of Stonyfield farmers are converting forest that really would meet this native ecosystem definition in the current proposal?

MS. LUNDGREN: We did an informal survey just, you know, basically me calling up the folks who manage the relationships with our farms to ask them offhand if they knew of farms that had recently done any logging in order to expand their pasture.

And just without any effort, without any formal surveying of our farms, we were able to identify nearly 10 farms out of a little over 30 farms that are in our direct milk supply in this region who had recently cleared some land to convert it to pasture.

So I think this is, you know, it's a very common practice in this region. It's not just limited to dairy farms. I focused my comments on dairy farms, but I think it's routine for any kind of operation in this region when they want to expand they're often doing it via cutting down some trees.

And I think there's a lot open to interpretation in terms of how someone is going to evaluate whether or not land fits this definition of native ecosystems. And I'm very concerned that farms are going to be told that they can't expand their pasture land because of this new requirement.

And I think, you know, you talk about consumer expectations and meeting those consumer

expectations. We are very sensitive to that as a business and really advocate strongly for the integrity of the organic standard because we want to meet the expectations of our consumers. But we've also spent a lot of time in this industry and at NOSB over the years talking about consumer expectations around pasture use on organic dairies.

And if we want organic dairy farms to really be meeting the pasture requirements of the standard or exceeding the pasture requirements of the standard, which is what we urge our farms to do, they need to be able to have the pasture to do that.

And they don't have the same flexibility that other farms might have of saying, oh, I'm just going to choose this field a mile down the road instead. They have to expand near their barn. And so it really limits their options.

MS. OAKLEY: Tom, can I have one quick follow-up?

CHAIRMAN CHAPMAN: Yes.

MS. OAKLEY: So I wanted to just point out that it's not an outright ---

(Telephonic interference.)

MS. OAKLEY: -- native ecosystems. It is, like, a 10 year disincentive. But there is certainly the possibility, still not that I would want to encourage it, but that farmers, you know, could work like in that 10 year time frame.

And then I did want to just ask if you had a sense of the 10 out of 30 farms that you got that data from, if you had a sense of the number of acres that farmers have had to convert from woodlands to pasture? And that's my last question. Thank you.

MS. LUNDGREN: Well, like I said, it was an informal survey. So we weren't tallying acreage. I would not characterize it as a large amount of acreage. But I don't have a number for you.

MS. OAKLEY: Okay. Thank you.

CHAIRMAN CHAPMAN: Thank you. I also

have a question from Ashley then Harriet. Ashley, go ahead.

MS. SWAFFAR: Thanks for your comments, Britt. I have a question, so on the definition of native ecosystem, if we took out the last sentence there that altered 50 to 100 years ago land, would that alleviate your concerns?

MS. LUNDGREN: I think it would help. But some -- it depends on who is doing the evaluating. And some people would define native ecosystems solely based on plant species composition and structure and not look at historic use.

And so there might be some evaluators that would still arrive at this conclusion that, oh, if it's, you know, a classic mix of trees for a New England forest, it's native, whether or not that land was previously disturbed.

CHAIRMAN CHAPMAN: Harriet.

VICE CHAIR BEHAR: Hi. So I know that this is probably going to need some extra

guidance to help the certifiers not overstep our intent, which our intent was to really protect those highly functioning ecosystems.

And a lot of times second growth takes really a couple of centuries, I think even in the forest, to really bring back all of the understory and the great diversities that you would find.

So I think that we could maybe deal with some of your issues in guidance just to make sure that certifiers will not overstep. Thank you.

CHAIRMAN CHAPMAN: Okay. I don't see any other questions for Britt. Britt, thank you for answering our questions and thank you for your comments.

MS. LUNDGREN: Thank you.

CHAIRMAN CHAPMAN: Up next, I have Katherine DiMatteo followed by Francis Thicke and then Stephanie Rose.

Let me see here. Stephanie Rose, we haven't identified your phone number. So if

you're on the line or if you're on the computer, please message us your phone number so we can identify it.

Katherine, are you on the line with us?

MS. DIMATTEO: I am. Can you hear me?

CHAIRMAN CHAPMAN: We can. You can start with your name and affiliation for the record.

MS. DIMATTEO: Certainly. Katherine DiMatteo. I'm a partner in a consulting firm Wolf Dimatteo & Associates.

Thank you for the opportunity to comment and for your dedicated work as volunteers to maintain the integrity of the organic sector and encourage its growth and continuous improvement.

My comments today are issues of continuing concerns that we repeatedly have commented on.

First was for inerts. When is this going to be resolved? The continued use of an

out-of-date list does not serve to ensure compliance to the requirements of the Organic Foods Production Act and the NOP rules or provide continued safety and effectiveness of organic pest control materials.

Although we do not -- and secondly, I would like to speak about plastic mulch. Although we do not oppose the continued listing of plastic mulch, if fully petroleum-based plastic mulch were petitioned for the first time now and compares to the alternative biodegradable bio-plastic bio and petroleum based mulch film that is available, it would be obvious that the biodegradable, bio-plastic mulch is a significantly better choice for organic production when the manufacturer content and impact on the environment are compared.

Third, natural sodium nitrate. According to the recommendation of the NOSB the annotation for the use of sodium nitrate was to sunset in October of 2012. But there has not been rulemaking to this effect.

If the Secretary has not taken action in six years, then shouldn't sodium nitrate and its annotation be considered during another sunset review?

We owe it to the NOSB to request that a proposed and final rule that reflects the decision of 2011 be published.

Lastly, the National List in general. It's part of the toolbox for organic production and handling. Limiting the list or making it shorter or smaller is not automatically the goal or likely to be helpful to the organic community in the long run.

The decision about whether something should be on this very small list of synthetic or non-organic materials that may be used in organic production and handling must be based upon review against the criteria that has been set up to evaluate materials.

During sunset reviews, please ask yourself if the material could be of use in the future, especially to beginning operators in the

organic system.

It is very difficult to put something back on the List and also adding a material to the National List is a very long and arduous process. So removing something is not be taken lightly.

Please don't limit the toolbox unnecessarily. We need to do everything we can to encourage more organic acreage in the United States. Thank you.

CHAIRMAN CHAPMAN: Thank you, Katherine. Any questions for Katherine? I'm not seeing any at this time. Thank you for your comments.

MS. DIMATTEO: You're very welcome.

CHAIRMAN CHAPMAN: So up we have Francis Thicke, followed by Stephanie Rose. Stephanie we have not sent your phone number. So if you're on the line, please message in.

After Stephanie is Aviva Glaser. Aviva, we haven't found your phone number. So if you're on the line, please message in.

And then following, just so you know you're on deck if those other two people don't show up, is Thomas Braun. So, Francis, are you there?

MR. THICKE: Hi. This is Francis Thicke. And you thought you had gotten rid of me.

CHAIRMAN CHAPMAN: I can hear you. If you could start with your name and affiliation, Francis.

MR. THICKE: Francis Thicke, and I'm speaking on behalf of the Organic Farmers Association. OFA is a national membership organization of certified organic farmers and their supporters.

Our mission is to provide a strong and unified voice for U.S. certified organic producers. The Organic Farmers Association has learned of some very recent developments in the European Union that have major ramifications for U.S. hydroponic production that is certified organic.

Just this morning, actually, the European Union voted on and passed a regulation that does three things.

First, it confirms an existing EU ban on hydronponic production. Second, it introduces a stricter definition of soil bound production that is connected to subsoil and bedrock.

And third it will prohibit the importation of hydroponically produced organic food from non-EU nations, including the United States.

This new regulation as approved today that will take you past January 1, 2021.

So already the EU does not allow organic certification of hydroponic production. While there are currently three Nordic countries that do allow organic production in demarcated beds which accounts for just a tiny fraction of total EU organic production, the new EU regulation will phase out demarcated beds for existing facilities in those three Nordic countries over 10 years and will prohibit the

development of new facilities with demarcated beds.

So by 2031, production in demarcated beds will no longer be allowed to be certified organic for all 28 members of the EU, including the Nordic countries.

The new EU regulation prohibiting organic production also prohibits all container production to be certified organic since regulation specifically requires all organic production to be in soil that is connected to subsoil and bedrock.

Currently, the U.S. and EU have an equivalency agreement that allows certified organic products in the U.S. to be sold as certified organic in the EU and vice versa.

The new EU regulation will modify that equivalency agreement with a conformity principle that will require U.S. imports to comply with the new EU standards that prohibit organic certification of hydroponic production.

In short, U.S. growers and handlers

will no longer be able to ship U.S.-certified organic food that has been grown hydroponically to the EU and selling it as organic. That will be considered fraudulent by the EU, and they will take steps to prevent it and will penalize those who do not comply.

The Organic Farmers Association urges USDA to reconsider its decision to allow hydroponically produced products to be certified organic and to follow the lead of the European Union regarding hydroponic production.

For starters, I'd like to urge the NOP to allow the Crops Subcommittee to put the discussion document on container growing and field growing back on the work agenda for the fall 2018 NOSB meeting.

In conclusion, OFA strongly believes that the letter and spirit of the Organic Foods Production Act and the regulatory text of the National Organic Program prohibit the organic certification of hydroponic production. Allowing hydroponic production to be certified as organic

damages the integrity and credibility of the organic field, both at home and abroad. Thank you.

CHAIRMAN CHAPMAN: Thank you. I have a question, Francis, and it looks like we have two other questions right now -- three other questions right now.

So, Francis, as you're aware, probably as a dairy farmer, that there's a lot of differences between the European standards and the U.S. standards that were addressed in the current standing equivalency agreement. There's a particular difference around the use of antibiotics in livestock.

Why do you view this difference with the hydroponics differently from the other ones?

MR. THICKE: Well, actually, it's not my view. It's a regulation passed by the European Parliament that will actually modify that equivalency agreement.

And it's not clear to me if that will go -- you know, what that will mean across the

board. We'll have to find that out. My impression is that it may have ramifications more broadly than hydroponics. But that is unknown to me at this time.

CHAIRMAN CHAPMAN: Yes, yes. So I guess what I'm saying is there's a lot of differences between the European standards and the American standards. This is just one more of those.

What would make this any different than the previous ones? Some of those other differences have led to differences in allowances under the equivalency agreement.

MR. THICKE: Right. But what I'm saying is that --

(Simultaneous speaking.)

MR. THICKE: What I'm saying is that our information from the EU is that this new regulation will actually modify that equivalency agreement, and it may no longer hold for hydroponics. So that's what's different, is that the European Union is going to prohibit the

importation on U.S. hydroponically-grown organic certified produce.

CHAIRMAN CHAPMAN: Yes. So I understand that. I guess, the question I'm getting at is why, given that there's other similar prohibitions between our two countries related to the equivalencies on other products, why would that change the way we regulate products in the U.S.?

MR. THICKE: Well, it would only -- it would mean that people importing -- the main point of what I'm making here is that people trying to import or export from U.S. to EU, hydroponically-produced certified products will not be able to do so.

That's very tricky when you think about the process. And they're not certain yet how they're going to, as I understand it, enforce that.

But one idea that they're talking about is that if something came into the EU that was hydroponic and it was discovered to be

hydroponic, that the certifier that certified that would lose its license to have anything imported under that certification agency's approval, which is quite different from what has been done in the past.

CHAIRMAN CHAPMAN: And then this style of derogation already exists between the U.S. and the Canadian equivalency. Do you see it being much different than that?

MR. THICKE: Pardon me. Say that again.

CHAIRMAN CHAPMAN: The U.S. and Canadian equivalency already has a derogation related to the hydroponic and aeroponic production. Do you see any differences between that and what's happening here in the European Union?

MR. THICKE: I can't see --- the only one issue I can see is that the Canadians would also have to conform to that new regulation. I don't see it necessarily changing something between the U.S. and Canada.

CHAIRMAN CHAPMAN: All right. So I'm going to go in order of hands raised as best as I can tell. And we'll start with Emily.

MS. OAKLEY: Thanks, Tom. So, Francis, you mentioned suggesting that the NOP allow the container item to be added back to the work agenda. And I was wondering if you could describe the areas of greatest concern or attention that you think the Crops Subcommittee should look at under such a work agenda item or a potential proposal.

MR. THICKE: Good question. I haven't looked at the document recently. But, basically, we don't have any greenhouse standards. The 2010 recommendation of NOSB did suggest some standards for greenhouse production, we do not have them.

And so --- and of course we do not have standards for hydroponic production. So I think that whole area needs to be addressed. If we're going to be certifying hydroponic production organically then we need to have standards for it.

I mean, there are some other precedents where, like beekeeping, we do not allow it because we don't have standards. And so I think that scope of the organic needs to have standards if we're going to continue certifying hydroponic as organic.

But specifically, some of the areas have to do with the use of containers. We have to dispose of the container, disposal of the media that's used in the container and the use of light. And even, let's see, energy. Energy is something that I think that would be an issue in the future that we should be looking at as well. Energy use in greenhouses.

MS. OAKLEY: Thank you.

CHAIRMAN CHAPMAN: Harriet.

VICE CHAIR BEHAR: Hello, Francis. So my understanding is someone, let's say, I'll just pick on the Netherlands, could do hydroponic using organically approved inputs under the National Organic Program and import them then into the United States even though they could not

sell them as organic in their country of origin. Do you understand that to be true?

And do you know if there are any other organic products that would be in the same category where in their country of origin, they couldn't sell it, but they could bring it into our country and label it as organic.

MR. THICKE: I do not know of any other product. And I think, my understanding is that it is correct that hydroponically-produced organically certified products from the U.S. can be -- I mean, from Europe can be imported into the U.S. But they cannot be sold in the European Union.

CHAIRMAN CHAPMAN: I have a follow-up question to that. So, I mean, it seems like there's other products that meet that. There's several differences between our regulations.

So, for example, a few of the commenters have talked about sodium dioxide and wine making and that's allowed in the European Union. So if a U.S. producer of organic wine was

making a wine with sodium dioxide and labeling it as organic and they wanted to export that to Europe or -- is the inference being made here is that product could not be sold in Europe as organic even though it could not be sold as organic in the U.S.?

MR. THICKE: Yes. I don't know if I can answer that question. That's a good question. I think we'll have to see what shakes out of this.

CHAIRMAN CHAPMAN: Yes. I mean, it just seems to me that there's a lot of differences between these standards overall and there's a lot of these kind of situations when there's differences where a product can be made domestically in one market and then potentially not sold in that market but exported to other ones where it complies with the standards.

MR. THICKE: But there have been cases where it's been -- the exception has been made to the conforming principle. For example, antibiotics in apple production.

My understanding is that when we visited those regions is that they could not ship in the European Union unless they did not use antibiotics. They could sell it in the U.S. with antibiotics. But they could not ship it to the EU. So there have been those kind of exceptions to the conforming principle in the past.

CHAIRMAN CHAPMAN: Okay. Harriet. I don't know if you were holding up your hand or you had a follow-up question. Did you have a follow-up question?

VICE CHAIR BEHAR: Yes. I just had a follow-up to your follow-up. And that is so wine here in the United States is still a certified organic product. It's just a different labeling requirement between the two whereas the hydroponic growing in Europe would not be able to be a certified product under the EU standard could be imported as a certified organic product in the United States. That's all.

CHAIRMAN CHAPMAN: And then next up I have Steve.

MR. ELA: Actually, the point I was going to make has already been asked. So thanks, Tom.

CHAIRMAN CHAPMAN: All right. Thank you, Steve. Any other questions from the Board? I'm not seeing any. Francis, thank you for your time. Thank you for answering our questions.

MR. THICKE: Thank you.

CHAIRMAN CHAPMAN: All right. So after Francis, I have Stephanie Rose. Have we found Stephanie Rose? Stephanie, are you here with us? I'm not hearing Stephanie.

We also have Aviva Glaser. Aviva, are you with us? All right. I'm not hearing those two. So after that is Thomas Braun. Thomas, I saw you on the line. I think we have you muted. Thomas, are you with us?

MR. BRAUN: Yes, I am.

CHAIRMAN CHAPMAN: All right, Tom. Hold on one second. After Thomas it will be Megan DeBates followed by Elise George. Let me try and check to see if we've found those. I do

see, Megan. Okay. So, Thomas, if you could start with your name and affiliation for the record.

MR. BRAUN: My name is Thomas Braun. And I'm a pharmacist and health advocate.

My professional life has been focused on helping people stay healthy. I founded a community health education website called N2E+ for LIFE. That means all of us need a nutrient-rich diet void of trace toxins.

If we are nutrient-deficient, we need to supplement. We need to exercise to maintain body symmetry and the plus means we need to have a stress free life for mental and physical health.

If our regulations allow trace toxins to be put in under the name of natural flavor, we as consumers are being denied the right to know what we are consuming.

When we allow the definition of the word organic to be used to deliver foods laced with trace toxins, we again deny the American

public the right to know what we are consuming.

The majority of disease states are inflammatory in origin and can be avoided by not consuming trace amounts of multiple trace toxins on a chronic basis.

That reprocessing with or without GMO origin contain too many chemicals. The right to know if we are consuming a GMO has already been denied.

Over 60 countries around the world have given their citizens the right to know and their products are labeled.

It is mandatory the labeling laws clearly separate clearly organically grown food crops from foods that carry trace toxins.

What the food producers and the FDA are not recognizing is that our bodies' ability to manage the bio-degradation of trace toxins is overwhelming our bodies' defenses, resulting in disease states.

As an example, setting an FDA limit of 5 milligram per kilo body weight as a maximum for

sucrolose, which causes GI inflammation, has no legitimate meaning when it is found in over 10,000 food products and the consumer has no knowledge they are being overdosed.

The basic issue that the food industry must address is how do we reduce the impact of chemicals consumed by the American consumer which is the root cause of our skyrocketing disease states in the United States.

We also need a clear definition of organic, meaning it is without manmade chemicals. In addition, we need a commitment by the food growers and our food processers to reduce the number of chemicals added to our food supply.

Thank you for the opportunity to express my view. We need a healthier America. Thank you.

CHAIRMAN CHAPMAN: Thank you, Thomas. Any questions for Thomas. Thomas, I'm not seeing any questions from the Board. Thank you for your comments here today.

Up next we have Megan followed by

Elise George. Elise, we are not finding your phone number on the panel. If you are here, please message in with us so we know you are here. And after Elise is Carol Goland. Megan, are you here with us?

MS. DEBATES: I am. Can you hear me?

CHAIRMAN CHAPMAN: Yes, we can. Megan, state your name and affiliation for the record.

MS. DEBATES: Yes. Megan DeBates from the Organic Trade Association.

CHAIRMAN CHAPMAN: Great. And just go forward with your comments.

MS. DEBATES: I want to comment on the NOSB's work on increasing oversight of the organic supply chain globally and addressing the issue of import fraud as well as provide a brief update on issues relevant to NOSB and the farm bill.

OTA has been pursuing legislative changes for the next farm bill to give NOP the tools it needs to prevent fraud.

As a result, Congressman John Faso introduced the Organic Farmer and Consumer Protection Act last fall.

The legislation provides support and necessary funding for NOP to keep pace with industry growth and to carry out compliance and enforcement actions in the U.S. and abroad.

It strengthens the emphasis on NOP's authority and capacity to conduct investigations and provides $5 million for NOP to invest in technology and access to data to improve tracking of international organic trade.

I am pleased to report that the entire bill was included in the House Farm Bill that was marked up and passed out of the Agriculture Committee yesterday. This was an important step forward.

Most relevant to the NOSB is a provision in the bill that requires the USDA to complete rulemaking and issue regulations on limiting the types of operations excluded from certification.

This has to occur within a year of the Farm Bill being signed into law. Although it's unclear how soon the Farm Bill will be signed into law, the statutory deadline will require fast action by USDA in issuing a final rule.

So it would be helpful for the NOSB to be preparing thorough recommendations in this area sooner rather than later.

I would also like to provide a critical update on language that was contained in the House draft Farm Bill that was released last week that created an alternative mechanism for materials to be added to the national list without approval from the NOSB.

The OTA worked quickly to reverse this damaging language in the House bill. Congressman Rodney Davis, who is the Republican Chairman of the Subcommittee on Horticulture, offered to pass an amendment in committee markup yesterday that would preserve NOSB's role in materials review.

I want to thank the National Organic Coalition and others in the industry for working

with us on a tight timeline to get this corrected.

I'm going to read a direct quote from Congressman Davis from the amendment debate. Quote, consumer trust in the USDA organic seal is one of the main reasons we continue to see the growth in organic agriculture. My amendment protects the roles in the National Organic Standards Board in reviewing and establishing the national list of approved and prohibited substances for use in organic production and handling. By protecting the role of the NOSB, we give our consumers continued trust in the USDA organics seal, end quote.

I just wanted to let the Board members know that Congress supports you in your important role. Thank you for the opportunity to provide comments.

CHAIRMAN CHAPMAN: Thank you, Megan. Any questions for Megan? Megan, I'm not seeing any questions. Thank you for your comments here today. Up next after Megan we have Elise George.

Elise are you on the line with us?

MS. GEORGE: Yes, I am.

CHAIRMAN CHAPMAN: All right. And if you can hold one second, Elise. After Elise, we have Carol Goland and then Noelle Weber-Strauss. Elise, if you could start with your name and affiliation for the record.

MS. GEORGE: Hi. This is Elise George with Ohio Ecological Food and Farm Association, OEFFA certification.

And I just want to thank the NOSB and the NOP for their attention to improvements in the oversight of imports.

Requiring importers and brokers to certify would reduce risk in a number of ways. It would reduce the amount of fraudulent imports. There would be less trading of fumigated or irradiated products as organic and fewer products rated that are not in accordance with international trade requirements.

OEFFA believes that importers and brokers should be required to certify. With an

adequate timeline, this could be achieved with minimal impact on the industry.

Until then NOP import certificates can be very useful. When uncertified entities are involved in the supply chain, import certificates can sometimes provide a link to the last certified entity.

This link would be even stronger if lot numbers were required to be included on import certificates. Currently import certificates are only required for countries with which we have an equivalency arrangement. Import certificates are incredibly helpful and should be required for all imports.

These are issued by certifiers and can help inform when operations deviate from the NOP and support the certifier's risk analysis. A risk based system of cross-checks lead by the NOP and communication with certifiers would also be an excellent tool to detect and deter fraud. And that's my comments.

CHAIRMAN CHAPMAN: Thank you. Any

questions for Elise? Elise, can you talk a little bit more about cross-checks and how this would work in the business environment?

MS. GEORGE: I foresee the NOP using a risk-based tool to select a certain number of their accredited certifiers to initiate a cross-check list and most likely at the more processed end of the supply chain. And then linking back through different certified entities, uncertified entities potentially, all the way back to the farm that the products were grown on, and looking at different tools along the way to improve recordkeeping and detect fraud.

I'm not sure if I answered that question. I'm not quite sure I answered it.

CHAIRMAN CHAPMAN: Thank you. Yes, you did. Any other questions from the Board? All right. Thank you, Elise. Up next we have Carol Goland followed by Noelle Weber-Strauss, followed by David Shively. Carol, are you on the line with us?

MS. GOLAND: I am.

CHAIRMAN CHAPMAN: We can hear you, Carol. If you can start with your name and affiliation.

MS. GOLAND: Great. Good afternoon, everyone. My name is Carol Goland. I am the Executive Director of the Ohio Ecological Food and Farm Association, OEFFA, and OEFFA certification.

OEFFA has operated an organic certification program since 1981, and we've been USDA accredited since 2002. And last year we certified over 1250 organic operations.

To start I'd like to thank the Board for their service and also for hosting this webinar, which makes it possible for more people, including me, to participate.

It's especially valuable in allowing more farmers to be involved. And I'm really pleased that you're able to hear from several OEFFA-certified growers these last two days.

In the written comments that OEFFA submitted, we described OEFFA and the standards

as the backbone of the organic sector. And here, I'm going to extend the anatomical analogy and describe the NOSB as the connective tissue between the organic community and the NOP.

It's hard to overstate how important the NOSB is in connecting the federal program to organic farmers, consumers and businesses who are the lifeblood of the industry.

Additionally, the NOSB is essential in giving voice to these organic stakeholders and in bringing issues that are important to them forward.

So given this, we think that the NOSB should have the authority to set its own work plan to make sure that the needs of the organic industry will be addressed.

We appreciate that you published an updated work agenda, and we do hope you will return to publishing subcommittee notes online since that information and transparency is so useful in our work.

We are deeply concerned by the USDA's

disregard of the Board's recommendations and of public input, especially in withdrawing the organic livestock and poultry practice rule.

These are the sorts of actions that we value stakeholder participation and leave them to question why they are participating in the process if NOSB recommendations and public input will be ignored.

Without consistent application of clear standards and strong enforcement, the integrity of the organic field is degraded, the market for organic products is diminished and that leads to economic harm.

On Tuesday, we heard evidence that this is happening. So on behalf of OEFFA and especially our certified producers, we urge the NOSB to continue to support and to lead our organic community by insisting on enforcement.

We ask the same from the NOP and we ask that you prohibit certifications in more applicable standards of risk. We also ask that you uphold the recommendations made by NOSB and

heed public input.

Finally, just as with any system in the body, structure and function are closely related. We need to structure, set off and put into place the administration of the NOP and recommendations of the NOSB, the accreditation of certifiers, the input of stakeholders to support our function as an industry. Thanks very much.

MS. ARSENAULT: Tom, I'm not sure if I muted you.

CHAIRMAN CHAPMAN: No, I muted myself. I apologize.

MS. ARSENAULT: Okay. Thank you.

CHAIRMAN CHAPMAN: Talking the entire time, asking if there were questions from the Board. I don't see any questions from the Board. So, Carol, thank you for your testimony.

MS. GOLAND: Thank you.

CHAIRMAN CHAPMAN: Thank you. Next we have Noelle Weber-Strauss, followed by David Shively and then David Marchant. Noelle, are you on the line with us?

MS. WEBER-STRAUSS: Yes. Can you hear me?

CHAIRMAN CHAPMAN: We can. So, Noelle, you can start with your name and affiliation.

MS. WEBER-STRAUSS: Yes. My name is Noelle from Wisconsin. I'm a mother of two-year-old Wilhemina and three-year-old Weber. I use the USDA organic label as a guide for what's not only safe, but what's able to nourish my family.

In fact, if you give my three-year-old something to eat, he'll likely ask you in the sweetest little voice, is that organic? Sometimes embarrassing. But I wish he didn't even know the word organic and the only food allowed in this country was real food, like the only food that our great grandparents ever knew.

But that's not the case. I'm not one to speak up and speak out. In fact I almost didn't unmute myself because I'm so nervous. But it was recently brought to my attention that the USDA organic label is no longer the gold standard

it once was.

I'm grossed out by meat I once wanted to eat, and I cannot sit quietly. My background is in social work with a graduate degree in education. And in my previous work at a D1 university, I was appalled at all the mental and physical health issues I saw behind the scenes and know that food plays a large role in our health crisis.

Although I may not have fancy degrees, I do have common sense. And I'm asking you to use common sense when it comes to safety and quality of our foods and the health and well-being of our people, especially our children.

We cannot allow synthetic natural flavors for any reason into our organic food. And we must remove -- I can't even pronounce it. It cannot be in our food. Strict regulation for organic standards is crucial to protect organic integrity and the health of our people.

We know better, and we need to start doing better. I believe in you, NOSB. I believe

you have our best interest in mind and are not being swayed by in-house studies or paid third-party studies.

I imagine you're parents and you, too, want to use the USDA organic label as a guide for nourishing your children. Please do not let our kids down. They may be the sickest generation yet and the first generation not expected to outlive their parents. And they deserve better.

Food is their medicine if the food is real and not made from things we cannot even pronounce. Eating healthy, real food is already difficult enough. And without the integrity of the USDA organic label, I, along with millions of other moms and dads will be lost in this food roadmap.

I feel tricked into believing that food with the USDA organic label that I've been giving my kids is safe and even healthy. But I'm finding out that even this food, with your label, has allowed the use of disease-causing ingredients made in labs.

I know you have a tough job. But, please, please, please do your best to protect our foods and to protect us. Thank you.

CHAIRMAN CHAPMAN: Thank you, Noelle. Any questions from the Board for Noelle? Noelle, I'm not seeing any questions. But thank you for unmuting yourself and sharing your perspective with us today.

MS. WEBER-STRAUSS: Thanks for having me.

CHAIRMAN CHAPMAN: Up next we have Dave Shively followed by David Marchant. David Marchant, I'm not seeing you on the phone list so if you are on the line, please message in. After David Marchant is Suzanne McMillan. Dave Shively, are you here with us?

MR. SHIVELY: Can you hear me?

CHAIRMAN CHAPMAN: I can. Dave, if you could start with your name and affiliation.

MR. SHIVELY: Okay. My name is David Shively of Shively Farms. I'm an organic grain farmer in Northwest Ohio for the last 14 years

and I grow corn, soybeans, wheat, oats, rye and use some cover crops.

I'm the current president of the OEFFA grain growers chapter in the state to OEFFA. I appreciate the opportunity to address issues of fraudulent imports since it has greatly impacted the members of our chapter and others across the U.S.

As you probably have heard from just about a year ago, the Washington Post exposed fraudulent imports going into a port in Stockton, California from the Black Sea area and containing pesticide-related products in their corn and soybeans.

The fraudulent imports started to just tarnish the integrity of the organics. The organic name really has a level of stringent rules and as U.S. growers, we all abide by those. And everything that we sell can be traced totally back to our farm, grain bin, what was applied and how it was treated.

And just yesterday it came to my

attention that I'll have to give the USDA lots of credit. They are holding another ship in Stockton at the same port, holding about a million bushels of, supposedly, corn from Turkey.

And through further investigation they found is it from the Black Sea area, Russia, Kahzakhstan, Moldova, which we do not accept grain from them.

What troubles me is these companies that are importing it and buying it and bringing it into the states under these conditions, as far as I'm concerned, their certificates should be stripped.

I look at these foreign certifiers, brokers, exporters, buyers are playing a shell game to lose the -- paperwork can get lost and say it's gone and it never had.

Millions can be made by this. I call it the organic grain mafia from that area. And so by a tip, the USDA they have said it leaves the ship in Stockton at the moment and it needs to be destroyed or deported back to its origin.

I urge the USDA to continue to take hold on this and be diligent about keeping our integrity and just -- I guess that's what I have to say on that part.

CHAIRMAN CHAPMAN: Okay. Thank you, Dave, for your comments. Any questions for Dave? I see I have a hand raised. Harriett?

VICE CHAIR BEHAR: Hi, Dave.

MR. SHIVELY: Hi.

VICE CHAIR BEHAR: I wonder if -- we don't have enough domestic production to supply the organic livestock industry. Is that out of date? And I'm just wondering if you've seen the publicity and the problem that we've had with lower prices caused by the fraudulent imports. How is that affecting the farmers in the region?

MR. SHIVELY: Well, a little over a year ago our markets started dropping, and we could feel the effects of that for every one of our guys. And so instead of getting $10, $12 corn, we were getting $9 maybe, if we could get to that.

That has a tremendous impact on us. And I feel like the playing field is not level if they're importing fraudulent grains. We feel like if we can compete with playing on the same level playing field, but that's what we're not playing by.

When they're bringing fraudulent grains in and claiming its organic, you can make millions. I mean, a shipload of a million bushels and you've got a spread of $5 or more, $5, $6, $7, that's a -- I mean, these imports from Turkey and those supposedly have increased. How can they increase their production three times from one year? Red flags, I guess, should be coming up. I don't know if that answered your question.

Every meeting we have new guys. I've got a couple more guys wanting to, are interested in transitioning to organics. So this is exploding in the U.S. And I feel that we will eventually probably meet the needs or come close to it.

CHAIRMAN CHAPMAN: Thank you, Dave. I don't see any other questions from the Board. So thank you for your comments and your time here today.

MR. SHIVELY: Thanks for letting me talk.

CHAIRMAN CHAPMAN: Yes. David Marchant, are you on the line with us? I am not seeing you on the line. So we'll move on to the next person. Suzanne McMillan, are you on the line with us?

MS. MCMILLAN: Yes. Can you hear me?

CHAIRMAN CHAPMAN: Yes, I can. Hold on one second, please, Suzanne. So after Suzanne is Michael Jones followed by Michael Stein. Michael Stein, I haven't found you on the line yet. So please message us if you're here. And Suzanne, if you could start with your name and affiliation.

MS. MCMILLAN: Sure. Suzanne McMillan, ASPCA. Thank you for the opportunity to comment on behalf of the American Society for

the Prevention of Cruelty to Animals, or the ASPCA, and our over 2-1/2 million supporters nationwide.

We, and a majority of the consumer public, continue to wait for and expect high standards for animal welfare in the National Organic Program.

This expectation has not been met. We thank the NOSB for its leadership on this issue while condemning the USDA's withdrawal of the organic livestock and poultry practices rule.

We continue to point to the ongoing critical need for clear, detailed and robust animal welfare standards for organic livestock and poultry during rearing, transport and slaughter.

Anything short of that fails to uphold NOP's charge and the spirit of organic as well as misleads consumers, undermines farmers and harms animals.

We also feel compelled to mention the NOSB's critical role, as required by law, in the

development of meaningful and transparent standards.

Through a process that is laudably transparent and participatory, the NOSB serves a unique and essential function, which the ASPCA and our supporters heavily rely on as we advocate for meaningful, organic animal welfare standards. Thank you for your time and consideration today.

CHAIRMAN CHAPMAN: Thank you. Any questions from the Board? I'm not seeing any questions. Suzanne, thank you for your comments here today. Michael Jones, are you here with us?

MR. JONES: Yes, I am. Can you hear me?

CHAIRMAN CHAPMAN: All right, Michael. I can. Hold on one second. So Michael Stein, you're up next. We haven't found you on the list. So if you've dialed in, please message us your phone number.

And the same goes for the next one with John Schumacher. John, if you can message us. We haven't found you. If John's not here,

then we'll go down to Lois Christie. So just know you're on deck.

Michael, if you could start with your name and affiliation for the record.

MR. JONES: Yes. My name is Michael Jones. The farm's name is Sanctuary Farms. We're located in North Central Ohio. We're part of OEFFA's grain growers.

And the crops that I raise are both food as well as for animals, food-grade soybeans, popcorn, field corn, hay, wheat and whatever that can be used to generate income or cash sale on the farm.

I started in 1981 and I was first certified, I think, it was '83 with OEFFA. And we were out for a few years, but I belong to OEFFA. The farm is a family farm. I'm second generation.

And today I want to thank the Board members because I know being on the Board is sometimes it's extremely difficult, and I appreciate your time and energy.

I want to speak today on the fraudulent imports of both soybeans as well as field corn. The cost to my small farm, which is about 140 acres, was roughly $21,000 last year that I lost in income because of the depressed prices of the imports.

I estimate about a 30 percent loss for the overall makeup of my farm. As Dave Shively just spoke a few minutes ago, I have no problem with anybody that will compete as long as it's the same playing field.

But I continue to see these imports coming in with different standards. And as a recent Washington Post article spoke about how the USDA's own Office of Inspector General, he was finding that they were unable to provide reasonable assurance and that they were required to review at the U.S. ports of entry to verify that imported agriculture products labeled as organic, were they from certified organic farms or not.

My biggest concern with the imports is

the destruction of the integrity of organics, of people trusting that what they buy will be what they get. And not only are the prices devastating, but they also undermine that.

My hope is that the EU has several things that they do that need not do and that is have a watch list of countries, Russia, Turkey, all of the Soviet bloc countries, they put them on watch lists because of the discrepancies that I'm hearing about other people as of this date.

And by that, we need to take extra --

CHAIRMAN CHAPMAN: Hi, Michael. The pocket buzzer is going, if you can wrap up.

MR. JONES: Okay. I do wish to thank the Board for this time. And if there's any questions, I'd gladly try to answer them.

CHAIRMAN CHAPMAN: Thank you. Any questions from the Board for Michael? I see we have one. Dave. Dave, are you on mute? Dave, are you --

MR. MORTENSEN: Are you hearing me now, Tom?

CHAIRMAN CHAPMAN: Yes. I can hear you.

MR. MORTENSEN: Great. Yes, I just wanted to, you know, say that the Board is really thankful to hearing from folks about this issue. And it's particularly helpful for us to hear from growers and how the problem is impacting your production systems and your sustainability. So I just wanted to say thank you for calling in and sharing that case study of a real world problem on your place. So thanks.

MR. JONES: Well, I appreciate that. Just if I could say one more thing that we need to be profitable because not only for our generation, but I've got a grandson that is hoping to eventually take the farm over.

And the economic aspect of it is a very important thing in the organics. And I'm sure I can speak for almost all farmers that they wish to pass their farm on to the next generation and the only way we're going to do that is if we're economically viable. So thank you.

MR. MORTENSEN: Thanks.

CHAIRMAN CHAPMAN: Thank you. Thank you, Michael. I'm not seeing any other questions from the Board. So thank you for your comments here today.

Up next, we have Michael Stein. Michael, are you on the line with us?

MR. STEIN: Yes. I joined.

CHAIRMAN CHAPMAN: All right. Nice to hear you, Michael. Hold on one second. All right. We have John Schumacher. John, I haven't found you so if you're on the line, please message us so we can identify your phone number. And after John is Lois Christie. So Michael Stein, if you can start with your name and affiliation for the record.

MR. STEIN: Sure. My name is Michael Stein. I'm the policy associate for the Organic Farming Research Foundation.

CHAIRMAN CHAPMAN: We're getting some background noise so if folks could go on mute, that would be appreciated. And, Michael, go

ahead with your comments.

MR. STEIN: Okay, great. Thank you very much for giving me the opportunity to comment.

OFRF, the Organic Farming Research Foundation, has been engaged for over 30 years in organic research, funding organic research and also interacting with farmers and researchers around the country to identify research needs.

A couple of years ago, we published our National Organic Research Agenda that, I think, was shared with all members of the Board about a year ago, and it outlines the top organic research needs across the country. And these are big generalities looking at the challenges primarily with weed, pest and disease pressures that are being faced by organic farmers.

And so we've done a little bit more research recently trying to drill down to figure out what are the links that are facing organic farmers? What are the challenges and how can research best overcome them?

So fairly recently, we just finished up a series of seven guides on soil health and organic farming. So that's really the biggest challenge that our organization has identified that links in the weed, pest and disease pressures that organic farmers are facing around the country.

So I have several recommendations based on our soil health guides and the information that we've got. But it is looking at soil health in a variety of specific areas, so looking at soil health and conservation tillage, soil health and water quality and water management, soil health and cover crops, and then overall building healthy soils and soil organic matter.

So I know that the NOSB puts out research recommendations. And as a researcher and a research organization, I want to thank you very much for putting those out and would encourage you to continue putting those out because they're very helpful not only for us but

for all of the researchers that we're interacting with.

So my purpose to call in today was to put in a recommendation for the research needs to look at soil health.

And specifically, there's been a lot of research on soil organic matter, soil organic materials, biomass activity, but there really is a little bit more that needs to be done in terms of soil health.

Really looking at reliable and practical measurements and protocols for farmers to be able to utilize and implement looking at active and total soil organic matter, predictable guidelines regarding what is optimal soil organic matter or target levels that folks are looking for.

And then practical, reliable and affordable field or lab testing methods to look at soil health, soil fertility and then soil food web function, recognizing that this is all very regional or even varies state to state not just

the region soil quality and soil type varies.

So that's really the big picture of what our organization has identified as increased needs in research on soil health. And there's a lot more detail that I can get into, but I know that we're short on time on this.

And so I'll turn it over to anyone on the Board if you have any questions on specific soil health issues.

CHAIR CHAPMAN: Thank you, Michael. Any questions? I have one from Harriet.

MR. STEIN: Hi, Harriet.

VICE CHAIR BEHAR: Hi, Michael. I was just wondering, I know soil health has been getting a lot of attention just across the board and U.S. agriculture. And I'm wondering if there's any specific areas that focus on organic.

I know, you know, cover crops are used, you know, even in non-organic, the foundational principle in organic. But would it be useful to not only see the positive things that we do but to help people understand organic

systems by some of what the conventional side does?

So if someone is terminating cover crops with an herbicide, for instance, how does that affect soil health? Would that of any use to the organic community to know that information as well?

MR. STEIN: Yes. I mean, definitely something that there's been some research on but there definitely could be more research on is the role of soil and living root biomass, maintaining that soil health and soil organic matter, and so looking at the different practices and what happens in organic systems.

And, of course, there's variety within organic systems. But looking at soil health and how organic systems not only can promote soil health, but showcase a difference for organic farming practices, whether they're adopted by conventional farmers or not because it's really helpful to have that material from our perspective to be able to showcase not only

practical tools and techniques that farmers can use, but also the benefits that organic farming practices can bring to soil health across the board.

That's what we're trying to do with these guides that we put out. But there just is increased research needs just because even measurements of soil organic matter and soil health overall are so relatively undefined both academically and then on the farms and on the fields.

CHAIR CHAPMAN: Thank you, Michael. I'm not seeing any other questions at this time. Thank you for your comments here.

MR. STEIN: Thank you. And thanks, Harriet, for the question.

CHAIR CHAPMAN: So up next, we have Lois Christie. Lois, are you on the line with us?

MS. CHRISTIE: Hello?

CHAIR CHAPMAN: Yes, there we go. Lois, can you hear me?

MS. CHRISTIE: Can you hear me?

CHAIR CHAPMAN: Yes. And hold on one second. After Lois we have David Bell and following David Bell, we have Andrew Tomes. Andrew, we haven't found you on the line so please message us if you are here. Lois, if you could start with your name and affiliation for the record.

MS. CHRISTIE: Hi, yes, this is Lois Christie of Christie Organic Consultants. I really appreciate the commitment the Board members give to this process. And I want to comment on sulfurous acid today.

I help manage the organic certification programs for several large growers who have many sulfur burners installed for the use on thousands of acres.

There's a method sulfurous acid is used only on degraded lands caused by overfarming. All of our growers utilize sulfurous acid because they are located in arid regions and problems high alkalinity and

bicarbonates.

They have a high degree of soil improvement methods in place, such as preapplications of compost and covered class agents.

The advantage using sulfurous acid, it eliminates most of the bicarbonate that's going in the water, a problem in arid landscapes. When the bicarbonates have been decreased, the pH also decreases in greater efficiency and application of organic products is achieved.

It assists in the total control of algae, which have been pathogens in the reservoirs and irrigation equipment. The soils are low in sulfur, which is needed for various functions of the plant as well as control of certain diseases.

The small contribution is very important to the plant fill. There are less problems in irrigation pipes and hoses such as it assists in the elimination of bacteria that proliferates inside the irrigation pipes and

there is less internal bacterial sludge buildup.

Organic fertilizer applications often cause blockage of irrigation pipes. The reaction resulting from burning elemental sulfur, the formation of sulfurous acid is better at controlling pH than large direct soil applications of sulfur, which would be required without the use of sulfurous acid.

By controlling the pH to the ideal level of 6.5 it assists in dissolving mineral elements in the water and making the elements and minerals found in the compost and composting that would make more available to the plant.

It controls and keeps irrigation pipes clean around irrigation materials to be reused and thereby reducing plastic consumption and waste production.

When sulfur burners are not being used, there's a large formation of algae that causes diseases in plants, creates higher sulfur deficiency in the soil. Large amounts of sulfur would be needed to be directly applied to the

soil in order to do what very small amounts of sulfurous acid does.

Large applications of citric acid will be necessary for removal of algae. The high cost of labor would be needed to be dedicated for the removal of algae in alkaline water. It is difficult for plants to have nutrient availability when there is high alkaline water.

Irrigation tanks must be changed every six months because of blockages caused by bacteria and bicarbonates. The impact of not being able to use sulfurous acid will be great. There is not just a matter of no longer using the material. The infrastructure that is already in place is significant. The cost of each sulfur burner is approximately $25,000 to $30,000, and it is interconnected in the water pipes pumping the filtration systems.

So the loss of sulfurous acid will be great to those who farm in arid climates that typically have high alkaline water. Thank you so much for your time.

CHAIR CHAPMAN: Thank you, Lois. Any questions for Lois? Lois, I'm not seeing any questions. Thank you for your testimony today.

MR. CHRISTIE: Thank you so much.

CHAIR CHAPMAN: So up after Lois we have David Bell. David are you on the line with us?

MR. BELL: Yes. Can you hear me?

CHAIR CHAPMAN: Yes, I can, David. And hold on one second. After David, we have Andrew Tomes. Andrew, I haven't found you on the line so please message us if you're here.

And after Andrew is Jeff Bogusz. Jeff, I see you're on the web portion, but we haven't found your number yet. If you could message us your number, that would be appreciated.

David, if you could start with your name and affiliation?

MR. BELL: Okay. David Bell. I'm a member of the OEFFA Grain Growers Chapter. I'm a past president of that group, and I served on the

certification committee for five or six years, three or four of those of which I was the chairman of.

My brother and I have 450 acres of organic production. We raise corn, beans, wheat, spelt, hay and organic beef in West Central Ohio. We've been organic for 40 years.

I'm here to address the issue of the imports. The issue of fraudulent grain imported into the country had a significant impact on our operation. In the last three years alone, we have lost approximately $189,000 in price reductions.

Of course, the integrity of organic is extremely important. If the public can't be sure that the product that they are buying is true organic, they lose confidence and may not be willing to spend extra money on our products.

We already have rules and procedures in place to guard against this abuse. But evidently no one is verifying the integrity of all the foreign imports.

Foreign certifiers need to be performing audits on their producers and someone needs to verify that these foreign certifiers are being audited, too.

Paperwork needs to be verified before the products are shipped from foreign countries, I would think, and at least when they get to our ports.

Maybe testing needs to be done for GMOs and chemical contamination before this grain is allowed to be introduced into our country. I don't know what all the answers are, but the rules of organic production must be enforced or we will lose consumer confidence and thus our market and our way of life.

I would like to thank you all for your service to the NOSB and the time that you have given me to give my comments. Thank you.

CHAIR CHAPMAN: Thank you, David. It looks like I have a question from Harriet.

VICE CHAIR BEHAR: Hi. It's not exactly a question. But I understand so much of

what's going on with the fraudulent imports, but I don't hear anybody mentioning that all of the livestock they're now not being fed actual organic grains.

And having been an organic inspector for over 20 years, when I would ask producers what they noticed about a change on their farm after going organic, almost always the first thing they said if they had livestock was the health of their livestock being fed organic grains.

And so I feel that, yes, there's an integrity question, but there's also -- the customers are not getting what they expect. And the animals are not being fed the nutritious organic food that we are expecting them to be fed as well.

So this is a complete supply chain problem. And thank you for what you do there out on the farm.

MR. BELL: Okay. Thank you.

CHAIR CHAPMAN: I see a question from

Emily.

MS. OAKLEY: Yes. Thank you. It's not a question. I just wanted to echo what Dave said earlier to you and to all the farmers who are calling in to comment because it's just extremely helpful and uplifting to hear the farmers' voices even though I know it's not information you want to be sharing, it's extremely valuable to hear from farmers. So thank you very much for taking the time to speak with us.

CHAIR CHAPMAN: Dave. You're muted. Sorry, Dave Mortensen, has a question as well. Dave, can you hear me?

MR. MORTENSEN: Yes. Pardon. Am I coming across?

CHAIR CHAPMAN: Yes.

MR. MORTENSEN: Yes. Okay. I guess I would also say that -- and, you know, obviously we have to follow it through. You can't just say things are happening and then, you know, nothing changes on the ground. We know that must be

enormously frustrating.

But my sense is that something is going to happen here. I think that the stars are aligned for this issue to not only be addressed by the NOSB but also to, you know, the kind of things we're looking into, including the panel at the meeting in Tucson, it will be, you know, received, I think, well, outside of NOSB, which turns out to be a lot more important than I realized as a new member of the NOSB.

So the climate generally is right for something to, you know, happen on the ground here quickly, hopefully. But as Emily said, these testimonials of how it plays out on the ground help make the compelling argument that it has to change quickly.

CHAIR CHAPMAN: All right. And I'm not seeing any other questions. So, David, thank you for your time.

MR. BELL: All right. Thank you.

CHAIR CHAPMAN: Up next, we have Andrew Tomes whom we haven't found online.

Andrew, if you're with us, please speak up now. I'm not hearing you, Andrew.

So after Andrew, we have Jeff. Jeff, I think we found --

MR. BOGUSZ: Bogusz.

CHAIR CHAPMAN: Jeff, are you with us? Yes. Hi, Jeff. Then after -- Jeff, hold on one sec. We have Robert Rankin. Robert, similarly, we see you on the web portion, but we haven't identified the phone number. If you can message your phone number to us so we can unmute you, that would be appreciated.

And then after Robert is Ray -- I'm going to butcher this -- DeVirgillis. And then Michelle Smolarski. Similarly, we haven't identified your phone number. So if you could message us your phone number, that would be appreciated.

Jeff, if you could start with your name and affiliation.

MR. BOGUSZ: Jeff Bogusz with the Ferrara Candy Company. And one of the comments

on some of the items up for Sunset review.

The first two, I'll go with calcium carbonate and potassium chloride. We actually use in an organically nutritional supplement. And there are organic equivalent is available.

Next I want to talk about flavors. So our feeling is that it's necessary for flavors to remain on the list, but definitely support the annotation that requires use of organic when available.

And we are actually are working under the assumption that is the requirement and are actively trying to change over as many of our non-organic flavors to organic if possible. Right now, about 10 percent of our flavors are organic and are actively trying to make that number higher.

Next, gellan gum. We'd like it to stay on the list. We have been trying to develop a product that utilizes some of the unique properties of gellan gum. We're not quite there yet. But we'd love it to remain on the list as

an option.

The next one, we'll say about calcium hydroxide and sulfur dioxide. We don't use those ourselves. But some of the ingredients that we do use utilize them in their process. So we'd like them to stay on the list.

And then in terms of gums, we are a relatively large user of gum arabic and at least for this year, for the last year, we have been able to acquire what we need in organic form.

But historically, the supply of gum arabic is very variable and we'd like that to stay that on the list for one more Sunset review period because it has had some supply issues in the past and we are not really confident in the organic supply of that product.

And we do use lecithin but not in the oil form and have no trouble getting it in the organic form. And it's my understanding that lecithin in the de-oiled form is available as well in an organic form.

And then beyond that, I just want to

thank everybody on the Board for all the work that you do. I think this process, while perhaps a little bit slower than I would like at times, it lets lots of voices be heard. And I appreciate all the work you put into this. Thank you.

CHAIR CHAPMAN: Thank you, Jeff. Any questions for Jeff? Jeff, if you're able to speak to it, can you speak to what has made the gum arabic supply chain unstable in the recent past?

MR. BOGUSZ: Most of it comes from Middle Eastern countries. And literally it's been almost security of the farmers in terms of able to get it out of the locations where it actually comes from.

CHAIR CHAPMAN: Okay.

MR. BOGUSZ: So there have not been -- the alternatives that are available are, I would say, less organic than the other in other parts itself, in it itself.

CHAIR CHAPMAN: And then, did I

understand your comments right that you're thing, you're finding lecithin oils and de-oils readily available?

MR. BOGUSZ: We have not had a problem getting oiled lecithin. We don't use de-oiled lecithin, but understand it is readily available.

CHAIR CHAPMAN: And then is that true in multiple forms other than soy, like sunflower or other types?

MR. BOGUSZ: We are definitely using sunflower lecithin in organic form.

CHAIR CHAPMAN: Okay.

MR. BOGUSZ: In the applications that -- yes.

CHAIR CHAPMAN: Yes. The reason why I asked that is there were some concerns in the past when we last reviewed this item was the availability of lecithin in the format that was not solely for formulations available. It was solely for allergy reasons. So I was just checking in on that.

I also see there is a question from

Steve.

MR. ELA: Yes. I just may have -- I didn't quite catch what you were talking when you said sulfur dioxide and you don't use that personally. You use products that would use sulfur dioxide in the formulations. Could you speak a little more to that?

MR. BOGUSZ: So we don't use it in our products directly. But some of the ingredients that we purchase have it added as a preservative. So most noticeably Certs have it added as an extra antimicrobial. And most of it would be cooked off in our production process. It would not be any -- so it would still not measurable in the finished product.

MR. ELA: Great. Thank you. I just, yes, I wanted to make sure I heard correctly.

CHAIR CHAPMAN: Any other questions? All right. Thank you, Jeff.

MR. BOGUSZ: Thank you.

CHAIR CHAPMAN: Up next we have -- thank you for your time and for answering our

questions. So up next we have Robert Rankin.

MR. RANKIN: Hi. Can you hear me?

CHAIR CHAPMAN: Yes, we can hear you. And then after Robert is Ray and Michelle. Robert, if you can start with your name and affiliation for the record.

MR. RANKIN: Sure. Robert Rankin, International Food Additives Council. IFAC is an association representing many factions of food ingredients, including the number of substances permitted in organic food production.

We submitted written comments supporting the listing of several Sunset review substances, and we thank the Board for the opportunity to provide comments outside the NOSB meeting.

IFAC supports the re-listing of gellan gum at 205625A. Gellan gum is a highly functional ingredient and has unique properties which allow formulators to meet consumer demand and continue to grow the organic market. And I was pleased to hear the comments made by the

previous commenter about the desire to use it in the future.

Gellan gum is used to stabilize and thicken foods and is used in a variety of organic products, including bakery fillings, gelatins, jams and jellies, dairy drinks, soy milks, yogurts, nutritional beverages and others.

As a stabilizer, gellan gum helps fortify beverages by suspending nutrients and other ingredients within the product, which prevents the need for vigorous shaking and prevents components from settling and calcifying at the bottom of the container.

This is especially the case with calcium fortified beverages such as soy, rice and almond milks, which are of great importance to the organic market both in the U.S. and abroad.

Gellan gum also contributes to a consistent mouth feel in products, which is a characteristic consumers expect and desire.

And finally, gellan gum serves as a non-animal gel source in products like jams and

jellies, which not only serves the broader organic community, but also vegetarians and products marketed as kosher and halal.

IFAC also supports the re-listing of magnesium stearate at 205605B. Magnesium stearate is highly functional in applications such as capsule formulation for organic supplements as well as sugar adhesion and in the production of hard candy. We are not aware of any comparable organic alternatives nor are we aware of any concerns with the re-listing of this important substance.

Finally, we support the re-listing of lecithin de-oiled at 205606. As noted in our written comments, de-oiled lecithin has unique functionality and is commonly used in oil and water emulsions.

De-oiled lecithin has higher functionality than powdered lecithin, which does not undergo a de-oiling process. It also has a muted flavor compared to standard lecithin so it's more appropriate in food with more delicate

flavors.

The de-oiled lecithin provided by our members is produced from non-genetically modified sources, including soy, canola and sunflower. As a result, that will not contain modified proteins and is fully compliant with the prohibited use of any ingredients derived from genetic engineering and organic foods.

Finally, we're not aware of any certified organic emulsifiers or other substance that's currently on the national list that provide the same functionality as the oiled lecithin, and I would question the abilities to supply the entire industry with the amount of organic de-oiled lecithins that may be able to be obtained. So for these reasons, we support the re-listing of de-oiled lecithin at this time.

So in closing, we support the re-listing of gellan gum, magnesium stearate and lecithin de-oils on the national list. Thank you.

CHAIR CHAPMAN: Thank you, Robert.

Any questions for Robert? Robert, so the previous commenter just spoke to the availability of organic -- or that it's available in some form, organic de-oiled lecithin. You just raised questions around whether or not it could -- what's available is sufficient to supply the entire demand.

How do you suggest that we go about quantifying or coming to a determination of whether or not a substance is available in sufficient supply?

MR. RANKIN: That's a tough one because you have to poll the entire organic industry. But, like with other cases where the NOSB has had to consider, I guess, maybe a similar consideration of essentiality of a substance. If a substance is essential in one application, then I think we would support that means it's essential to organic production.

Similarly, I think if there is an example of a formulator who can't get access to or obtain sufficient supplies of organic de-oiled

lecithin otherwise then I would consider the need for non-organic de-oiled lecithin in the organic community.

Obtaining that information and finding out if that's the case would be challenging. And perhaps once if and when -- well, when there is an NOSB recommendation around how to handle this substance in the fall, it might generate more examples from suppliers and formulators as to the ability and availability of that organic product.

So I don't think I have any other suggestions at this time.

CHAIR CHAPMAN: And if we don't hear from industry asking for this item to be re-listed, would that be an indicator to us that it is sufficiently available?

MR. RANKIN: So IFAC represents the manufacturers of the substances. And so I don't think I can adequately, fully speak to that question. I think to some extent we can based on the customers we have. And if we have that information, we can provide it and encourage our

customers to provide it.

There are, obviously you need to hear from the users in order to justify re-listing these substances. So in order to re-list the substance, I would think you would need to hear from the formulators, most importantly.

CHAIR CHAPMAN: Thank you, Robert. And it looks like I also have a question from Harriet.

VICE CHAIR BEHAR: Hi. I wonder if you could tell us what the barriers are to having more of these products in the marketplace?

MR. RANKIN: That is a great question. And I don't think I'm prepared to answer that on the call today. I believe it is a matter of having adequate supply of the initial material and having enough of it certified organic or produced organically to supply the entire market.

I think in the case, as I'm sure you all know very well, in this environment finding adequate supplies of certain crops that are not, you know, genetically engineered, especially when

you start talking about things like corn and soy are challenging.

And so without -- that is something I could certainly agree to try to identify and pull together in advance of the fall meeting where I expect there to be a vote by the NOSB on this, but off the top of my head, not being prepared for that sort of question, I don't have more than that at this time. But I would be happy to follow-up in writing or in advance of the fall meeting if that would be helpful.

VICE CHAIR BEHAR: Yes, it would. Thank you.

MR. RANKIN: Okay. Thank you.

CHAIR CHAPMAN: Yes. And you can either, if there's an open docket on the web, you can post to that or you can forward any information you find to Michelle, and she'll get it to the right people.

MR. RANKIN: Would it be of use to have that information before the spring meeting?

CHAIR CHAPMAN: Yes. I mean, as soon

as you can get it to us, it would be useful. Definitely more useful to get it earlier rather than the fall meeting. I don't know if it's critical to have it at the spring meeting, but the earlier we get it, the better it is.

MR. RANKIN: Understood. Thanks.

CHAIR CHAPMAN: Yes. So after Robert we have Ray and then Michelle. Ray, you can start with your name and affiliation for the record.

MR. DEVIRGILIIS: Hello. This is Ray DeVirgiliis. I am with the International Food Additives Council. I'll be commenting on xanthan gum, phosphoric acid and mono and diglycerides.

IFAC supports the continued listing of xanthan gum on the national list, but we would like to reiterate our previous request that the NOSB consider listing the substance as a non-synthetic under 205605A.

Because xanthan gum is a natural extra cellular polysaccharide, it may not be best placed under 205605B. Xanthan gum is used in

various food and beverage formulations, and it is also widely used in foods for populations with allergies and Celiac disease, including gluten free organic products.

Xanthan gum is produced from natural sources and functions as a thickener, a stabilizer and an emulsifier with texturizing attributes which allows for many more organic food and beverage products to be formulated.

Xanthan gum may at times be preferable to other gums because it often compromises less than 0.05 percent of the processed product.

The production of xanthan gum does not harm the environment, and it aligns with organic principles as it relies on a natural process with no harmful metabolized or byproducts.

The FDA has raised no objections with several notifications from the substance. Ethanol or isopropyl alcohol are used in the final stages of the fermentation process. The alcohol does not chemically alter the xanthan gum nor is it present in the final product above 500

parts per million per food additive regulations.

In light of the fact that xanthan gum is safe, it aligns with organic principles and lacks organic alternatives, IFAC urges the NOSB to leave xanthan gum on the national list.

In addition, because xanthan gum is produced through the natural process of bacterial growth, IFAC also urges NOSB to consider listing the substance as a non-synthetic at 205605A. IFAC also supports the re-listing of phosphoric acid as a synthetic at Section 205605B. Phosphoric acid provides superior performance, including formulations used for a large variety of surfaces and soils down in different segments of the food industry.

Phosphoric acid enhances food safety through its potency and removal of debris that can harbor either spoilage or pathogenic microorganisms. Most importantly, there are no organic alternatives which have the same functionality or versatility that would prove phosphoric acid unnecessary. Given this and that

the production of phosphoric acid does not seem to have negative impacts on the environment, IFAC strongly encourages the re-listing of phosphoric acid.

Finally, IFAC supports the continued listing of mono and diglycerides as a synthetic at 205605B. Mono and diglycerides are considered grass and are permitted for use in foods globally. In addition, glycerides are permitted in organic production in Canada. While mono and diglycerides are permitted for a variety of applications, they are only allowed in organic production in the drum drying of food. IFAC believes this narrow use in organic processing is appropriate. Thank you.

CHAIR CHAPMAN: Thank you, Ray. Any questions for Ray from the Board? Ray, I'm not seeing any questions. Thank you for your testimony. Up next we have Michelle. Michelle, are you on the line with us?

MS. SMOLARSKI: Yes, I'm here.

MR. RANKIN: Okay. And then just hold

on one second, Michelle. So after Michelle, that is the end of our list. At that point, we'll run through the folks that we skipped over in order. And if those folks have joined the call, we will hear their comments as well. Michelle, if you could start with your name and affiliation.

MS. SMOLARSKI: Sure. Michelle Smolarski, and I'm with the International Food Additives Council. I'm going to be speaking in support of re-listing alginates and gums. Specifically, arabics, carob bean, guar re-listing on the national list.

Alginates are derived from alginous acid, a component of certain algae and are used to stabilize certain foods. The seaweed used to produce alginates is harvested in a containable manner without the use of pesticides or other agricultural chemicals.

Further, available scientific literature has not revealed any data suggesting any negative impacts of alginates on human health in safe levels.

Alginates contribute to a more efficient manufacturing process as they can hydrate at cold temperatures and save resources typically needed for heat treatment.

In terms of functionality, alginates stabilize gels and fillings and are used to provide structure in many of the foods organic consumers come to expect in a way that is not provided by wholly non-synthetic food products.

Since the 2015 technical report was written recommending the Sunset review renewal of alginates, we are not aware of any organic alternatives that have become available for use that replicate the unique, safe and economically viable nature of alginates.

Based on this information, we strongly encourage the NOSB to re-list alginates on the national list at 205605B. In addition, IFAC supports the continued listing of gums, including gum arabic, carob bean gum, guar gum and locust bean gum on the national list at Section 205606. The need for these gums is currently very high in

many food products. For example, organic dressings and sauces, because they improve texture while also decreasing calories.

This is a known strategy in addressing prevalent consumer issues such as overweight and obesity. At the same time, organic forms of these gums remain unavailable in the appropriate qualities or quantities needed.

With that said, gums are naturally self-limiting. As usage (telephonic interference) not needed to achieve the intended technical effect in a food would render the product inedible or otherwise undesirable. Therefore, potential misuse or accepted use of this ingredient does not present a problem.

Specifically, guar gum is an extremely versatile ingredient extracted from guar plant seeds that hydrates rapidly at low temperatures compared with many other gums, allowing products to attain a uniform consistency and desired viscosity at low use levels, especially in frozen products.

Gum arabic comes from various African treatus of the genus acacia and is widely used as an emulsifier, thickener, flavoring encapsulator and thickening agent.

Locust bean gum, often known as carob bean gum, is a textural ingredient obtained from the kernals of the carob tree.

This gum is slows ice formation and is used as an ingredient in foods as a stabilizer, thickener, and has an adjunct strong use as a texturizer to other hydrocoloids.

Given the intended expansion of the organic market, IFAC cannot conclude that the current supplies of organic produced guar and locust gum are sufficient to address the demands and technical needs for organic producers.

In addition, we do not believe there is a technologically comparable ingredient which can replace the functionalities of gum arabic.

As such, we urge the NOSB to re-list these gums to ensure the uninterrupted supply of a variety of organic producers that could be

unavailable without them -- products that could be unavailable without them.

In closing, IFAC would like thank the Board for providing this opportunity to ensure all voices of those who are unable to physically attend the spring meeting are heard.

CHAIR CHAPMAN: Thank you, Michelle. So I have two questions from the Board it looks like. Emily?

MS. OAKLEY: Yes. Thank you. The Board might consider a proposal looking at requiring the organic certification of bringing material derived products of alginates for example. And I was wondering if you could comment on how that might affect the producers and manufacturers that you represent?

MS. SMOLARSKI: I'm sorry.

CHAIR CHAPMAN: I'm sorry. We're getting some feedback from folks.

MS. SMOLARSKI: I heard -- is there any way for you to expand on that more. I'm not sure I am clear.

MS. OAKLEY: Absolutely. So this is still very much in the development stage, but the NOSB is looking at materials used in both crop production but then also in the manufacture of process goods.

So my question is if we were to require that the seeds used in alginates were to be sourced under an organic certification, so the wild crop standard, how would that affect the manufacturers that you represent of those alginate products?

MS. SMOLARSKI: So I would have to defer to those experts within IFAC and get that information. I don't feel confident answering this one.

MS. OAKLEY: Okay. Thank you. And this is a very preliminary conversation that's going on right now. But maybe I can follow-up with you --

MS. SMOLARSKI: Yes.

MS. OAKLEY: -- after this call at some point over the summer?

MS. SMOLARSKI: That would be great.

MS. OAKLEY: Thank you.

CHAIR CHAPMAN: Steve?

MR. ELA: Yes. I'm just curious. I mean, on the alginates, where you refer to that they're harvested in a sustainable manner, an ecological manner, and it kind of goes with what Emily just asked you a little bit except at this point with no other "verification", how do we actually know, or how does somebody buying alginates actually know that those are harvested in a sustainable manner? What criteria are they meeting?

MS. SMOLARSKI: At this point, I couldn't confirm specific criteria or certifications. I would have to defer again to our members to confirm that information. So I would have to ask to follow-up with you if we could continue this dialogue after this meeting.

MR. ELA: That would be great. It's so easy to say those things and then the devil's in the details. So I'd just be curious a little

more, you know, what goes into that, you know, being able to say that. So, yes, I look forward to following up.

MS. SMOARLSKI: I'm happy to follow-up with you and appreciate the question, definitely.

MR. ELA: Thank you.

CHAIR CHAPMAN: And similar to what I said to Robert, if you do have that information available, you can use the open docket. If the open docket is not open, then you can always send it to Michelle.

And then I also see that there's a question from Dave. Dave, you might be on mute. So hold on a sec. No, Dave, you're not on mute.

MR. MORTENSEN: Okay, thanks, Tom. Michelle, being a newer member of the Board, I'm still very much on a steep learning curve.

And last night I was interested to understand better about your organization, International Food Additives Council.

I went to your website and found that it was password protected so there was really --

I was unable to read anything about the International Food Additives Council.

Could you direct us to a source of information where we could go on the web that we could get into that doesn't require a password?

MS. SMOLARSKI: Yes. It might have just been a lack of the correct link or URL. So our name is the International Food Additives Council, but we use a website titled foodingredientfacts.org. So I'm not sure, was that what you were trying to access or was it a different URL?

MR. MORTENSEN: www.ifac -- you know, International Food Additives Council, and when I click on it it requires a password to get in.

MS. SMOLARSKI: Yes. That's an incorrect address. If you want to go ahead and type in foodingredientfacts.org that should take you to a totally available website. No passwords required there.

MR. MORTENSEN: Okay. Thank you.

MS. SMOLARSKI: No problem.

CHAIR CHAPMAN: And I'm not seeing any other questions, Michelle. Thank you for your time today and for answering our questions.

MS. SMOLARSKI: Thank you.

CHAIR CHAPMAN: Okay. So we'll go back to the top of the list, and I'll read through the names of commenters that we skipped over. And if they have joined the call since then, we'll give them a chance to give their comments.

First up is Mary Rawlings, Mary Agnes Rawlings. Are you on the line with us? Mary, I'm not hearing you so we will move on. Up next is Stephanie Rose. Stephanie, are you with us?

MS. ROSE: Yes. I'm here. Can you hear me?

CHAIR CHAPMAN: Hi, Stephanie. Yes, we can hear you.

MS. ROSE: Hi.

CHAIR CHAPMAN: You can start with your name and affiliation for the record.

MS. ROSE: Okay. I am Stephanie Rose

and I am with PQ Corporation which is a manufacturer of Sil-MATRIX, an aqueous potassium silicate.

I want to thank you, the members of the NOSB Board for allowing me to speak today. PQ, of course, is in support of renewing aqueous potassium silicate on the NOP list. Potassium silicate is a tool that is growing in importance to organic growers.

Prior to being added to the NOP list, sales of the potassium silicate in this application were almost nil.

While we don't sell directly to growers, our sales to distribution channel partners grows each year. It now numbers more than 75 separate purchasing locations in 20 states, where we shipped potassium silicate for distribution and resale to growers. Ninety percent of that volume goes to organic growers of berries, grape tomatoes, almonds, cherries and other crops.

When used as part of an integrated

seasonal program, Sil-MATRIX can replace applications of alternative pesticides, including fungicides, insecticides and miticides.

Soluble silicates are environmentally friendly products that are not harmful to human health. The European Center of Study of Silicates has publicly published extensive ecological and toxilogical studies.

Some repeated dose studies with no observed adverse effect levels. There is no indication of reproductive effects and no biocumulation potential. This report demonstrates that exposure to potassium silicate is not hazardous to human health.

A study on soluble silicate emissions in surface water gave no indication of significant adverse effects on aquatic systems. I have provided Michelle with a link to the studies if you want to look through it further.

In regards to the digestibility of silicon in forage, while studies show that rice, straw and barley may have chemical compositional

differences due to the presence of silica, the studies show that no change in animal preference between the different types of straws with various silica content, no difference in digestion or degradation. That high silicate containing straw is still highly degradable and silicate content is not the content of low fermentability of rice straw in organic matter.

Silicates are used in many different applications around the world and exposure comes in many different ways. But that is basically all I wanted to cover today. Thank you very much.

CHAIR CHAPMAN: Thank you, Stephanie. Any questions from the Board?

MR. BRADMAN: This is Asa. I have a question.

CHAIR CHAPMAN: Go ahead, Asa.

MR. BRADMAN: So I'm trying to understand the mechanism here that this is being applied, I guess in a way of a systemic pacifier to change the structure of the form and make them

more resistant to either disease or test. Could you explain that a little more?

MS. ROSE: Well, it's my understanding that the -- well, and with this particular application, it is applied as a full year application with pesticide or insecticide use. So it is applied to the surface of the leaf.

There is some deposition in the cells of the site, too. I am academically not a plant scientist. So I guess I can't comment for certain on the systemic portion of it and how that works. But that is my understanding of what happens.

I'm not sure that the cells necessarily change. A plant will naturally take up SIO2 from the soil when it is available. And will deposit it into cells. So I'm not sure how different it is when it's applied as a full year application.

MR. BRADMAN: I'd be interested to get more information about kind of the mechanism and its different application methods -- and that

would be helpful.

MS. ROSE: I'll look to see what I can find and provide Michelle with some links to articles.

MR. BRADMAN: Okay. Thank you.

MS. ROSE: Yes.

CHAIR CHAPMAN: Thank you. I also see a question from Steve.

MR. ELA: Yes. And I think I -- and I may have missed this as you were going through things. But could you go back and just remind me again, I know it can be an effective alternative, but how much of it is actually being used at this point? Just in the toolbox as a possibility or is part of a regular program that growers are using?

MS. ROSE: It is part of regular programs. Because we don't sell directly to the growers, we have an ag distribution company that does this for us. I am not able to give you, say, exact numbers. What they provided with me is that we are selling it in 20 different states.

The way that we would recommend its use is that it would replace -- it would be a regular rotation with other fungicides such as sulfur or something like that. It would be in regular rotation with that, but it would replace one of those rotations. So that would reduce the number of applications in that sense.

Did I answer your question?

MR. ELA: Yes. It was unclear to us as we were reading some of the materials whether it was a material -- you know, it could potentially could be used a resistance rotation or whether it was actually being used. And I think that was one of our questions for the spring meeting was, you know, how we always maintain as soon as possible for use.

MS. ROSE: Right.

MR. ELA: You know, but for use. But if it has been sitting on the shelf and not being used, and, you know --

MS. ROSE: Yes.

MR. ELA: -- then it becomes a little

less important. But if it's actually part of a regular rotation, I think that's useful information for us.

MS. ROSE: And I would say it is newer tool. And it's growing and understanding and learning. And people are learning about it. I think the last time we had a Sunset review, we didn't get any comments from growers that time around.

And this time around we have several growers who commented themselves and a couple of the other organizations that indicated that they have 100 users or something like that. So it's a growing process.

MR. ELA: And have you -- I have not gotten through all of the public comments yet. But did you submit that data that we just mentioned, like, 100 growers using it. Is that in your written comments as well.

MS. ROSE: No, it's not in mine. That's the information I gathered from the written comments. I think there's three for sure

that are from growers themselves, that are saying that they're using it. And then there was, I forget which organization, but it was either Organic Trade Association or something like that, or maybe it was the Pennsylvania Organic Certifiers said that they have 123, I believe, sites using it.

MR. ELA: Sure, sure. That helps. Thank you.

MS. ROSE: Mm-hmm.

MR. BRADMAN: Tom, can I ask another question or comment?

CHAIR CHAPMAN: Yes.

MR. BRADMAN: Just to clarify, so I definitely am interested in learning more about, like, differences of full year application, you know, irrigation type applications.

Do you have that technical report on this material from January 2014? And it seems like the primary impact here is more of a systemic use. It looks like they have been using it for position water or a soil application than

for the plant to take up the material and kind of alter the structure of the plant itself and, you know, that creates resistance. It's not clear to me, at least if you review it quickly down here online how much is foliar versus how much is systemic.

MS. ROSE: Well, there are two different ways to use potassium silicate. However, the NOP only allows the foliar application being used as a pesticide to inorganic farming. So there is a lot of, say, information, technical information out there, on the benefits of applying it as, say, a fertilizer.

But the NOSB and the NOP does not allow that type of application in organic farming. So as far as I'm aware, they're only using it as a foliar application because that is how the EPA approved label is worded.

So if they're following the rules of how the label is listed, then it should be only foliar application.

MR. BRADMAN: Right. Okay.

CHAIR CHAPMAN: Okay. I think that's it for questions from the Board. Stephanie, thank you for your comments and your answering our questions here today.

MS. ROSE: Sure. Any time.

CHAIR CHAPMAN: Up next we have Aviva Glaser. Aviva, are you with us?

MS. GLASER: Yes, hi.

CHAIR CHAPMAN: Hi. We can hear you. You can start with your name and affiliation for the record.

MS. GLASER: Yes, hi. This is Aviva Glaser. I'm the Director of Agriculture Policy at the National Wildlife Federation based on Washington, D.C.

I want to thank you all for the opportunity to provide these comments. I wanted to focus my comments specifically on the NOSB discussion document on eliminating the -- I'm sorry, the proposal to eliminate the incentive to convert native ecosystems to organic production.

The National Wildlife Federation thanks you guys for continuing to move forward and to make progress on this important issue. We do have a few concerns in terms of implementation of the proposal. But we believe that those can be met through additional clarification or guidance.

You know, we would strongly urge the Board to approve this proposal given that the organic program places a clear value on bio-diversity and conservation. We believe that it's critical that organic certification does not incentivize either intentionally or unintentionally the conversion of natural ecosystems, such as native grasslands or other natural ecosystems into agricultural production.

The organic program, we believe should be helping to protect, not destroy our remaining native ecosystems.

That's why we would urge the NOSB to support this proposal and to move forward quickly with closing this loophole.

I did just want to point out a few concerns, specifically related to grazing of natural ecosystems that we think can be addressed and should be addressed through either guidance or other appropriate means.

These are specifically related to grazing. Grazing management is used as a very important tool by ranchers and other land use managers and resource practitioners.

When done right, grazing can be used to restore habitat, control for invasive, increase native vegetation and improve habitat for birds and other wildlife. That's why you often hear that term what's good for the bird is good for the herd when you're talking about sage grouse and ecosystems out west.

In organic grazing management, in particular, can help to significantly improve management and health over grazed or poorly managed land. It wouldn't involve selling upland or destroying vegetation, which is what we're trying to avoid by this whole proposal.

So I'd encourage you to clearly and explicitly state that organic grazing management is allowed and encouraged on native ecosystems when it's ecologically appropriate.

And then additionally, I'd request clarification that previous grazing in native ecosystems would not exclude them from the definition since most native grassland in this country in particular have been grazed at some point in the past.

That's all I wanted to cover. Thank you for the opportunity to provide these comments, and I respectfully urge the Board to act quickly to adopt the proposal and work toward clear guidance to ensure the integrity of the label and maximize the ecosystem benefits.

CHAIR CHAPMAN: Thank you, Aviva. Questions from the Board? It looks like Emily?

MS. OAKLEY: Thank you. I wanted to ask you, if I could, about the impact of -- I've seen many operations converting small amounts of needed ecosystems into production.

I think sometimes what happens is people think that their small action may not have a larger manifold impact. But even taken in isolation, I was wondering if you could speak to the impact of removing even 5 to 20 acres of native ecosystems on wild life. Is that question clear? Because I'm not sure if that came out.

MS. GLASER: Definitely. It is. Yes, thank you for that question. Yes. So there's impacts both in terms of the impact on wildlife. There's direct impact of the loss of habitat. Then there's also bigger impacts in terms of broad mutation of habitat. When you have little pieces here and there, you're losing contiguous native habitat and that can have a very detrimental effect.

There's also impact on climate when you're thinking about the conversion of all the acres. Even at the smaller scale, when you're accumulating all of these conversions together, the aggregate is a lot of carbon emissions because native ecosystems store carbon in the

soil. All those deep roots, if they get plowed up, that turns into carbon emissions and you lose the carbon sequestering in the soils.

So you can have impacts on climate as well and then impacts on waterways if you have increased erosion. But certainly wildlife, the loss of habitat and the fragmentation of habitat is a big concern, even when you're talking about conversion of small pieces.

CHAIR CHAPMAN: Thank you. Any other questions from the Board? I'm not seeing any questions at this time. Thank you, Aviva, for holding on the line and giving us your comments here today.

MS. GLASER: Thank you.

CHAIR CHAPMAN: Up next we have David Marchant. David are you on the line with us? David, are you with us now?

MS. ARSENAULT: He should be on the line, Tom. I was just chatting with him.

MR. MARCHANT: Oh, hello.

MS. ARSENAULT: We hear you, David.

CHAIR CHAPMAN: We hear you. All right, David. If you could start with your name and affiliation for the record. David, we're not hearing you anymore.

MR. MARCHANT: How about now?

CHAIR CHAPMAN: Yes. Now I can hear you again. Although now I don't hear anything. David, are you there? We're not hearing you.

MR. MARCHANT: Can you hear me now?

CHAIR CHAPMAN: I can hear you now.

MR. MARCHANT: Okay. I guess I'll hold the button. I apologize. It's the first time with this headset. And I wanted to address the potential of bio-based, biodegradable mulches. As the first slide shows, we've been farming for 27 years. We use approximately four to five acres of plasticulture.

Next slide, please. Okay. So we focus on using remulch. Plasticulture is a huge component of vegetable production. And done properly you can do a lot with reduction of soil erosion. It improves growth crop and whatnot.

But unfortunately, there's one major issue with plasticulture. Next slide, please. This is the amount of plastic trash we produced just in one year from four acres. Okay?

We are a tiny farm. Now, when you consider the amount of plasticultural acreage in the United States, it's staggering to think of the amount of trash that we produce.

Next slide, please. One hundred seventeen thousand tons of polyethylene mulch is landfilled or burned every year in the United States from agricultural mulch fills. This is what it ends up like and it just goes to the landfill to the dump. It gets burned or dumped in the ocean, unfortunately, in many places.

Next slide, please. All of this polyethylene mulch, which is used just everywhere anymore turns -- next slide, please.

It turns into this. Okay? Mountains and mountains of polyethylene waste.

Next slide, please. Unfortunately, I don't --

CHAIR CHAPMAN: David, we lost you again.

MR. MARCHANT: Oh, can you hear me no?

CHAIR CHAPMAN: Yes. We lost you again.

MR. MARCHANT: How about now?

CHAIR CHAPMAN: Yes. You're back.

MR. MARCHANT: Okay. Unfortunately, NOP policies encourages massive amounts of waste production. Next slide, please.

NOSB and NOP needs to encourage use in development of biodegradable mulch film as an alternative to the polyethylene acid that the NOP rule now encourages.

Next slide, please. Bio-based ingredients and biodegradable mulch films continues to increase and has reached the levels of 50 percent. As presently the rule has been written that you need 100 percent bio-base for it to be allowable.

I think instead of rejecting bio-based mulch films that are not 100 percent bio-based,

NOSB and NOP should set realistic levels of bio-based ingredients with the increased percentage of bio-based ingredients over time.

This is very similar to how the NOP rule is about organic seeds encouraging farms to increase their use over time. If there was discussion at the beginning of the NOP rule, they have 100 percent organic seeds that was argued against because it wouldn't encourage -- it was hard to do. And the idea of having a gradient has produced an increase in organic seed production. And I think it's a system that has worked very well.

Next slide, please. So plasticulture is a very good component and kind of a component of farms.

CHAIR CHAPMAN: David, we're coming to the end of your time, if you could wrap it up quickly. Given the technology issues, I'll give you a couple more seconds.

MR. MARCHANT: Next slide, please. So what --

CHAIR CHAPMAN: And, David, we lost you again. David, are you there?

MR. MARCHANT: We need to be looking at bio-based mulch. These are the recommended references I would suggest that talk about the degradation of biodegradable mulch film and as they had done in Europe with 15 years of study, they are showing that there are virtually no residues whatsoever. So that's it. And I would take any questions if there are any. Hello?

CHAIR CHAPMAN: Are you -- hi, David, this is Tom. Are you hearing me?

MR. MARCHANT: Hello?

CHAIR CHAPMAN: Hi, David. I hear you. Do you hear us?

MS. ARSENAULT: I can hear you, Tom.

CHAIR CHAPMAN: Yes.

MS. ARSENAULT: So you're not on mute.

CHAIR CHAPMAN: David, are you still there? We're not hearing you, David. All right. Looks like a little bit of a technology disconnect there.

MR. MARCHANT: Hello.

CHAIR CHAPMAN: There you are. You're back now. Are you still there, David? Yes, David, we're not hearing you unfortunately.

Okay. I think we'll have to move on at this time. David, thank you for your testimony though. It looks like we had some technology issues.

So after David on the list, we have John Schumacher. John, are you on the line with us? And, John, I'm not hearing you. So we'll move on to Andrew Tomes. Andrew, are you on the line with us?

MR. TOMES: Hello, can you hear me?

CHAIR CHAPMAN: Yes, I can. So, Andrew, if you could start with your name and affiliation for the record.

MR. TOMES: Yes. My name is Andrew Tomes. I work for a company based out of Redmond called WISerg. We are a manufacturer of organic fertilizer.

And I'm addressing my comments on the

Sunset review of acidulated liquid fish fertilizers. Acidulated fish requires careful consideration during the Sunset review since much has changed since the initial review in 1995.

These changes raise substantial questions regarding the apparent validity of the original rationale for including liquid fish as an approved synthetic substance. It has not been addressed in subsequent research and rulings issued by the NOSB.

The 1995 TAP reviewer Michael Mosert acknowledged the certification of sulfuric acid changed the class of materials to synthetic, yet he suggested that the preservative function would not qualify as fortification, setting a 2 for 2 analysis fertilizer and with supplementing sulfuric acid contributed 1.5 percentage points to the fertilizers guaranty.

This rationale was later reversed by the NOSB in 2006 when its sufficiency inclusion of acids stabilized the anaerobics under 7 CFR 205.601 was rejected in part because the Board

ruled that stabilization with sulfuric acid constituted an impermissible fortification of the product.

This ruling was not addressed. A technical review of the liquid fish in the same year and as far as I am aware, it has not been reconciled by the NOSB.

Liquid fish has not undergone technical review since 2006. And changes to the market have occurred in the intervening decade which would require re-evaluation of, for example, review questions 13 and 14. Are there other already allowed substances that could be substituted for the petitioned substance and are there alternative practices, which make use of the concessions unnecessary.

The answer to the first question is an unambiguous yes, but it's technical review does not identify many or any of the organic products that avoid the use of fish or which use natural acidulation methods and become not available.

The answer to the second question is

also yes. Synthetic identification is not necessary as identified in the 1995 technical report, citric acid and other natural acidulants are available.

Furthermore the review has the potential for direct environmental impacts arising from the use of liquid fish but not from the manufacturing process or source of ingredients. But these are the required considerations for synthetic ingredients. The Board should consider the environmental impacts of sulfuric and phosphoric acids. The former is a known carcinogen and the latter is non-destructive, leaving behind radioactive and acidic waste that leech into the groundwater.

In addition, the Board should consider the fish itself, which is often harvested unsustainable. The Board has not, to my knowledge, addressed a concern raised in 2015 by The Cornucopia Institute that utilization of fish for fertilizer may not so much be a waste utilization practice as an additional marketing

opportunity for an over harvested resource. So sustainability is one of the core NOP goals. In fact, it makes the possibility of overfishing a necessary consideration.

CHAIR CHAPMAN: I had myself on mute. Thank you, Andrew, yes. That was your time. Any questions from the Board?

MS. OAKLEY: Tom, I don't have my hand raised, but I do have a question if that's okay.

CHAIR CHAPMAN: That's okay, Emily. Go for it. Could you elaborate? Do you have any evidence that you could point to about fish being harvested specifically for fertilizer? Are you aware of any specific examples that you could share with us?

MR. TOMES: Yes. I can forward a paper to someone that was published last year, I think, that breaks down the use of forage fish. So these are the fish that are not harvested for human consumption. They're harvested for other applications. And fertilizer is one of the uses they are diverted to. And overharvest of forage

fish is having an impact on the fish applications.

MS. OAKLEY: Great. If you could send that to Michelle. That would be wonderful. Thank you.

MR. TOMES: Okay. I will forward that.

CHAIR CHAPMAN: Any other questions.

MR. BRADMAN: This is Asa. I think you talked a little bit about all your points. I just wanted to make sure I didn't miss anything. Did you also submit written comments or?

MR. TOMES: I did not submit written comments. I can provide a copy of what I was reading.

MR. BRADMAN: That would be great if you could send that to Michelle, that would be great.

MR. TOMES: Okay.

CHAIR CHAPMAN: Any other questions? Not seeing any, Andrew, thank you for your comments.

MR. TOMES: Thank you for the opportunity to comment.

CHAIR CHAPMAN: And I think that takes us to the end of the list. So that would be our last public comment for the day. Again, I want to thank all of our commenters for providing public testimony to us today. It's vital to our process.

I appreciate the Board's time and engagement and the NOP facilitating this. And I apologize for the technological issues that we have. It was bound to happen on some of these webinars. It happened this time.

But I think overall we got the bulk of what the public was trying to communicate to us. So I thank you again for your time. And I hope everyone has a great day. I look forward to seeing the Board members in Tucson next week. Everyone travel safe. Thank you very much.

(Whereupon, the above-entitled matter went off the record at 3:41 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: Spring 2018 Public Comment Webinar

Before: National Organic Standards Board

Date: 04-19-18

Place: webinar

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

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NATIONAL ORGANIC STANDARDS BOARD

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SPRING 2018 MEETING

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WEDNESDAY,
APRIL 25, 2018

The Board met in the Sabino and Pima Rooms of the Tucson University Park Hotel, 880 East 2nd Street, Tucson, Arizona at 8:30 a.m., Tom Chapman, Chairman, presiding.

PRESENT
TOM CHAPMAN, Chair
HARRIET BEHAR, Vice Chair
SCOTT RICE, Secretary
SUE BAIRD
ASA BRADMAN
JESSE BUIE
LISA DE LIMA
STEVE ELA
DAVE MORTENSEN
EMILY OAKLEY
A-DAE ROMERO-BRIONES
DAN SEITZ
ASHLEY SWAFFAR

STAFF PRESENT:
MICHELLE ARSENAULT, NOSB Advisory Board Specialist, National Organic Program
DEVON PATTILLO, Materials Specialist, National Organic Program
GREG IBACH, Under Secretary, Marketing and Regulatory Programs, USDA
BRUCE SUMMERS, Acting Administrator, Agricultural Marketing Service
DR. RUIHONG GUO, Acting Deputy Administrator, National Organic Program, Agricultural Marketing Service
DR. JENNIFER TUCKER, Associate Deputy Administrator, National Organic Program; Designated Federal Official
DR. PAUL LEWIS, Director, Standards Division, National Organic Program
DAVID GLASGOW, Public Affairs Director, Agricultural Marketing Service

ALSO PRESENT:
ISAURA ANDALUZ, Cuatro Puertas; OSGATA
CHRISTIE BADGER, National Organic Coalition
BRIAN BAKER, IFOAM North America
LAURA BATCHA, OTA
JO ANN BAUMGARTNER, Wild Farm Alliance
JENNIFER BERKEBILE, PCO
ALESIA BOCK, AgriSystems International
RICHARD CONN, Conn & Smith, Inc.
LYNN COODY, Organic Produce Wholesalers Coalition
RYAN COSTELLO, Oregon Tilth Certified Organic
THEOJARY CRISANTES, Wholesum Harvest
JENNY CRUSE, Accredited Certifiers Association
KELLY DAMEWOOD, CCOF
NICOLE DEHNE, Vermont Organic Farmers
JACKIE DeMINTER, MOSA
MIKE DILL, OPWC
LINLEY DIXON, The Cornucopia Institute
HANS DRAMM, Dramm Corporation
JAY FELDMAN, Beyond Pesticides
LEE FRANKEL, Coalition for Sustainable Organics

RUIHONG GUO, Acting Deputy Administrator, National Organic Program, Agricultural Marketing Service
JEAN HALLORAN, Consumers Union
THOMAS HARDING, Green Ag Supply
CAMERON HARSH, Center for Food Safety
SHANNON HELMS, CP Kelco
ZEN HONEYCUTT, Moms Across America
KIKI HUBBARD, Organic Seed Alliance
WANDA JURLINA, CP Kelco
GARTH KAHL, Independent Organic Services, Inc.
MADISON KEMPNER, NOFA-VT
DEBORAH KLEIN, Ecolab
JESSICA KNUTZON, CP Kelco
PHIL LaROCCA, LaRocca Vineyards; CCOF
SARAH LEIBOWITZ, DeLaval
JAKE LEWIN, CCOF
ALAN LEWIS, Natural Grocers
NATE LEWIS, OTA
AMALIE LIPSTREU, Ohio Ecological Food and Farm Association
EDWARD MALTBY, NODPA
DANIEL MARTENS, Novamont North America
RICHARD MATHEWS, WODPA
PATRICIA MAYER
MICHAEL MENES, True Organic Products
MELODY MEYER, UNFI
JOHANNA MIRENDA, OMRI
LUIS MONGE, Transastra
EMILY MUSGRAVE, Driscoll's
MARISOL OVIEDO, Northwest Horticultural Council
ALEXIS RANDOLPH, Quality Assurance International
GERALD ROBERTSON, Reiter Affiliated Companies
ANNE ROSS, The Cornucopia Institute
BETH ROTA, Quality Certification Services
MARGARET SCOLES, International Organic Inspectors Association
TERRY SHISTAR, Beyond Pesticides
MICHAEL SLIGH, RAFI
CYNTHIA SMITH, Conn & Smith, Inc.
ZEA SONNABEND, CCOF
ALBERT STRAUS, Straus Family Creamery
KENICHIRO TAKEI, Kaken Pharmaceutical Co., Ltd.

JERRY TYLER, Heart of Nature
JESSICA WALDEN, QAI
RICHARD WALLICK
RUTH WATTS, BASF Corporation
JULIE WEISMAN, Elan, Inc, and Flavorganics, LLC
SAM WELSCH, OneCert, Inc.
ZAK WIEGAND, Oregon Tilth Certified Organic
BILL WOLF, Wolf DiMatteo + Associates
DALE WOODS, California Department of Food and Agriculture
ABBY YOUNGBLOOD, National Organic Coalition

C-O-N-T-E-N-T-S

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

8:31 a.m.

MR. CHAPMAN: If people could take their seats, we're about to begin. Again, if people could take their seats or take their conversations outside, we're about to begin the meeting.

MS. GUO: Good morning, everyone, we're getting started now. Welcome, we are officially opening the Spring 2018 National Organic Standards Board meeting. My name is Ruihong Guo, I'm the Acting Deputy Administrator of the National Organic Program.

The NOP is part of USDA's marketing and regulatory program's Agricultural Marketing Service. First, I want to thank everyone for being here and making the trip to Tucson, Arizona. It is great to see you all.

I have been working with the National Organic Program for a few months now, and it has been wonderful to connect with many great people in the organic community. I'm

going to open by introducing USDA leaders and staff, because we brought a lot of people who wanted to meet you.

First, I'm pleased to introduce Mr. Greg Ibach, sitting right next to me, the USDA Under Secretary who oversees our agency and the program. Mr. Ibach will be speaking with you in a few moments.

I also want to introduce Bruce Summers, the Acting Administrator for the Agricultural Marketing Service. Bruce is sitting right there. This is Bruce's second NOSB meeting, so he's a pro by now.

Also from AMS we have David Glasgow; he's in the back, and you met him too, at the last meeting. He is our Director of Public Affairs.

From NOP we have Jenny Tucker, sitting right here, who is the NOP Associate Deputy Administrator. Jenny will serve as our designated federal officer for the meeting.

We also have Paul Lewis, our

Director of Standards Division, Devon Patillo, Specialist from the Standards Division, and Michelle Arsenault, our Advisory Board Specialist.

This meeting would not be possible without Michelle. She does amazing work to bring us all together like this. Let's have a round of applause for Michelle.

(Applause.)

MS. GUO: Here's a quick overview of our three-day agenda: This morning we will share some updates from the Board and USDA, and then we'll take a break. The rest of the day will be dedicated to public comments.

Tomorrow morning you will hear from some terrific panelists who will focus on organic imports. This is a topic of great interest in this room. In the afternoon we'll turn to the subcommittees. This will continue into Friday, and then we'll close Friday with administrative activities and a look ahead.

Next, I'd like to offer a special

thank you to Tom Chapman, the Chair of the Board and Chair of this meeting. Tom is a true leader in every sense of the word, and we're so grateful for his collaboration and commitment to the Board. Let's give him a round of applause in advance for a great meeting.

(Applause.)

MS. GUO: And now, Tom, I'll hand it over to you.

MR. CHAPMAN: Thank you, Ruihong; thank you for the very nice introduction. Hello and welcome, everybody. Thank you for traveling here today to participate and observe the Spring National Organic Standards Board meeting. I hope everyone traveled safely and is enjoying Tucson's hospitality and very warm weather.

If you don't know, Tucson has the longest agricultural history of any city in North America, extending back some 4,000 years. It has a 300-year tradition in orchards, vineyards, and livestock ranching. It was also

the first city in North America to be recognized as a UNESCO City of Gastronomy. So with that, we'll be making sure we take our lunch breaks this time.

We have a very full agenda with some very weighty subjects up for consideration. We also have a large number of guest attendees present.

During my opening remarks for the last two meetings, I've asked for patience from the public and the community as the new administration's leadership was getting established and settled, and I'm excited that the Under Secretary for Marketing and Regulatory Programs, Mr. Greg Ibach, is present here at this meeting. He'll be addressing and taking questions from the Board in a moment.

It's rare that we're honored with the attendance of such a prominent USDA official, and I appreciate Mr. Ibach taking time out of his busy schedule to join us here today. We're eager to learn more about the

administration's priorities for the organic program, and I hope that this is a first step towards a very close and collaborative relationship with the NOSB and the current USDA administration.

As Ruihong noted, this morning will start with presentations by the Department and proceed into public comments for the remainder of the day. Thursday morning we'll have nine additional guests, one coming from as far away as Germany to be part of a panel of experts to discuss import and fraud issues from the inspectors, certifiers, and industry perspectives. We think this dialogue will be critical as the NOSB looks to further its recommendations to the USDA on this pressing matter.

Later on Thursday we will have the CACS, Certifiers and Accreditation Subcommittee, Compliance Subcommittee, Livestock Subcommittees. And on Friday we'll be wrapping up with the Handling Crops and

Materials Subcommittee.

Our work agenda for this meeting, as approved by the NOP, includes a review of 41 sunset materials, four petitions, four proposals, and two discussion documents. By item, 90 percent of our agenda is comprised of statutorily mandated reviews or NOP-requested items, while the remaining 10 percent is NOP-approved, NOSB-initiated items.

With the review of our agenda done, I'm going to move on to introductions. Right now you'll see that we have 13 board members seated of the 15 seats that are normally filled. We have two vacancies: a vacancy in the environmental/resource conservation seat, the one formerly held by Francis, who termed out in January of this year and has been vacant since.

Also -- which may be news to some folks -- Joelle Mosso, the other handling representative, resigned earlier this year in February, and her seat has also been vacant

since.

With that, we'll start introductions of the members who are present and seated, and I'll start with myself. I am Tom Chapman, Chair of the Board. My day job is working as the Director of Ingredient Sourcing at Cliff Bar and Company, based in the Bay Area of California. Now we'll start with A-Dae and work our way around.

MS. ROMERO-BRIONES: A-Dae Briones, and I work for First Nations Development Institute as a director of programs for the Native Food and Agriculture Initiatives, originally from Cochiti Pueblo, New Mexico.

MS. DE LIMA: Good morning, Lisa De Lima in the retailer's seat. This is my fourth year on the Board. I work for MOM's Organic Market; we're an organic grocery store chain out of the mid-Atlantic.

MR. BRADMAN: Asa Bradman, and I'm a professor of environmental health sciences and public health at Berkeley.

MR. ELA: Steve Ela, Ela Family Farms, Hotchkiss, Colorado, organic tree fruit grower, peaches, pears, apples, cherries, and such.

MR. MORTENSEN: Dave Mortensen, an agricologist at Penn State University. I sit in the scientist's seat on the Board.

DR. SEITZ: Dan Seitz; I serve as a consumer member of the Board. My day job is serving as Executive Director for the Council on Naturopathic Medical Education at U.S. Department of Education, recognized accrediting agency for doctoral programs in naturopathic medicine. I also serve on the board of a food cooperative.

MS. BEHAR: Harriet Behar, Sweet Springs Farm, certified organic farmer; University of Wisconsin outreach specialist, organic educator, organic inspector, and organic advocate.

MR. RICE: Scott Rice, I'm the External Affairs Coordinator with the

Washington State Department of Agriculture, and I serve in the certifier's seat.

MS. SWAFFAR: Ashley Swaffar, I'm from Fayetteville, Arkansas. I sit in the farmer's seat. I have a small certified organic mixed vegetable farm, and I also do animal welfare and organic inspections.

MR. BUIE: Jesse Buie, Ole Brooks Organics, Brookhaven, Mississippi. I'm certified in mixed vegetables, melons, ginger, and turmeric. I sit in the farmer's seat.

MS. BAIRD: Sue Baird, and I am the Executive Director of the Mid-America Organic Association. We also implement a food hub and training for farmers and for prisoners to become farmers. I serve as special interest.

MS. OAKLEY: Emily Oakley, I have Three Springs Farm in northeastern Oklahoma. I'm a full-time farmer, and I sell diverse mixed vegetables and some fruits.

MR. CHAPMAN: Thank you, Board members. As we just heard, the representation

of the Board is made up of various stakeholder interests, farmers, processors, consumer representatives, environmentalists, conservationists, retailers, scientists, and a certifier.

Decisions of this board need to be made by a two-thirds vote, necessitating a lot of dialogue, discussion, and ultimate compromise to satisfy enough stakeholders to pass proposal.

Oftentimes, this threshold is reached, and other times it's unattainable. I've read recently a lot in the press and heard swirlings around the Capital that the NOSB is sometimes considered dysfunctional. I hear at the same time that the NOSB is stacked with large agribusiness and filled with unrepresentatively small farmers and businesses. Apparently, we can be both at the same time, both too large and too small.

These criticisms, I think, reveal the strength of the National Organic Standards

Board, that we do represent a wide set of interests, and that one interest or viewpoint does not predominate; rather, they are balanced.

I'd like to briefly read from a letter sent to the Congressional Agriculture Leadership by the Organic Trade Association that was signed on by 138 American businesses, one of which is represented by myself here today:

The NOSB is the sole authorized forum for consensus-building within the organic community, providing an opportunity to develop formal recommendations to the Secretary prior to the USDA implementing changes to the organic program.

Engaging with consumers, transparency, and sustainability are important to our businesses and our brands, and we are not willing to walk away from the only forum that provides consumers, environmentalists, farmers, ranchers, and food makers a seat at

the same table.

In testament to the bounty that's on that table, we have received over 3,300 pages of public comment. We will have received over 12 hours of verbal testimony by the end of today, and an additional three hours of expert testimony tomorrow.

The Board has dedicated an immense amount of personal time on the issues before us today, and this is an all-volunteer board. Our time working here this week and the hours and hours over the last six months is time not spent on our businesses, research, farms, and families.

I look forward to working more with this remarkable board on the issues before us today and on the material reviews and other items of importance to the organic community and the Administration.

And with that, we'll move on to the Secretary's report. Scott?

MR. RICE: Thank you. The summary

notes of the October/November 2017 biannual meeting have been distributed to the Board members. Do we have any corrections or comments on those? Hearing none, without objection, we'll approve the report by consensus.

MR. CHAPMAN: So moved. And the report is approved. With that and the morning's formalities taken care of, I will hand it back to the acting deputy administrator, Ruihong Guo for the USDA, AMS, and NOP report.

MS. GUO: Thanks, Tom. Now it is my honor and my pleasure to introduce Mr. Greg Ibach. Mr. Ibach was confirmed by the Senate as USDA's Under Secretary for Marketing and the Regulatory Programs on October 26th, 2017. That was only a few days before the last NOSB meeting in Jacksonville.

In his role as the Under Secretary, Mr. Ibach carries out a broad mission of facilitating domestic and international

marketing of U.S. agricultural products and ensuring the health and care of animals and plants. The agencies under Mr. Ibach's leadership are active participants in setting national and international standards that impact people around the world.

Before becoming Under Secretary, Mr. Ibach served as Nebraska's Director of Agriculture. He started in that role in June 2005. He was a visionary leader for Nebraska's agriculture, effectively leading departmental staff and programs, analyzing issues, developing strategies, and creating solutions for domestic and global initiatives.

In that role, Mr. Ibach had oversight of Nebraska's plant and animal health regulatory functions. He has been actively involved in foreign and domestic marketing and development activities for much of his career.

Mr. Ibach has been inducted into the Nebraska Hall of Agriculture achievement, and was honored with a Service to Agriculture

recognition from the University of Nebraska-Lincoln. He's also a former president of the National Association of State Departments of Agriculture.

Mr. Ibach earned his Bachelor of Science degree in agriculture from the University of Nebraska, with majors in animal science and agricultural economics. He and his wife, Theresa, have three grown children. They own a farm and a ranch in Sumner, Nebraska.

On a personal note, all of us at NOP have truly enjoyed getting to work with Mr. Ibach. His support for our program has been clear, and we are grateful for his feedback and insights as we move forward.

And now, please join me in welcoming Under Secretary Ibach.

(Applause.)

MR. IBACH: Thank you very much, Ruihong. It's my great pleasure and privilege to be able to be here and be with the National Organic Standards Board for your meeting today,

as well as being able to learn more about the different aspects of the organic industry across our United States, as you discuss issues today.

I'm going to be here for a while this morning, through the questions and answers of the Board on the presentations; not only mine, but Jenny Tucker's as well.

And then they have plans to take me out and about here in Arizona for a while, but I'll be back in the morning for some more activities around this event as well. So hopefully I might get a chance to see more of you casually and be able to have some conversations, as you might wish.

Also, I do want to thank Ruihong for her service to the organic program and stepping up out of her normal day-to-day duties at USDA to be able to be the acting deputy administrator for the NOP. She told me she's very much enjoying this, but I've got to believe that she also is looking forward to

getting back to her regular day-to-day duties, and we hope to soon have a new associate deputy administrator that can be named and introduced to you all.

I want to thank Tom for your service as chairman and the good work. This is a volunteer board, and I want to thank each and every one of you on the board for the time that you take to serve the organic industry and the thoughtful contemplation you put into the decisions and recommendations that you make to USDA.

To the audience, thank you for traveling; Tucson is in a far corner of the United States for some people, so the effort you made to be here today to be informed about the actions of the Board and to have the opportunity for input into the organic industry is much appreciated at USDA.

Ruihong shared a little bit about my background in her introduction. That was probably the more technical part. As I think

of myself, I still believe I'm a cow-calf and row crop farmer and rancher from central Nebraska. My children represent the fifth and sixth generation of both my mother's and my father's sides of my family to be farming and ranching in our community of Sumner, which has a population of 250 people.

And as I was Director of Agriculture in Nebraska, and as I serve in my role here at USDA, I still challenge myself to be very cognizant that the decisions I make and the actions I take, whether they be regulatory or the way they affect the administration of promotional or marketing programs, have a direct impact on individual farmers and ranchers like yourselves in the audience; those of you involved in the industry, and active producers here on the Board, much like they impact my neighbors back home in Sumner, Nebraska.

I still look forward to the times I get to go back to Sumner. As Director, I was

there almost every weekend; it hasn't panned out to be exactly the same experience at USDA, but if I'm not remembering my roots, when I walk into Tub's Pub for my chicken fried steak when I'm home, they'll let me know where my roots come from.

So anyway, as Ruihong mentioned, my wife and I are the proud parents of triplets. They're 26 years old; we have a son and daughter-in-law who live in Minneapolis; a son and daughter-in-law who live in Kearney, Nebraska, which is only 30 miles from the ranch, and a daughter who lives in Denver, Colorado.

They're all involved in some phase of the agricultural industry, and we're hoping that some of them return to the farm. But it was also very important to us that they spend some time off the farm and realize a little about how the world works and what it's like to be employed by someone, and what it's like to be able to branch out and have different

experiences other than just production agriculture.

So I've had the chance since being at USDA to get out a little bit and start seeing a vast expanse of U.S. agriculture, spent some times at ports in Washington and California and in Miami to understand the process we go through, not only to be able to bring agricultural goods in for consumers across our United States, but also the opportunity to be able to ship our products around the world.

So that is very important because, in the role at USDA and MRP, we have both the responsibility for protecting animal and plant health and welfare and we also have the responsibility for supporting those marketing programs, both domestically and internationally. So it's a very challenging and diverse role which I am very much enjoying.

I look forward to the next few months and years of working together, not only

with the National Organic Standards Board, the National Organic Program and individual organic producers, but the wide variety of production agriculture and agriculturally related industries that exist in these great United States.

And I think that as we look at our agricultural system in the United States, I'm very much committed to promoting market opportunities for all factions within the agricultural community.

I remember as a child going to the grocery store with my mom and dad, and most of the time, my mom had the sales circular with her when she went to the grocery store. She looked very much, and probably all we bought that day was the stuff that was on sale. We waited for other staples to be on sale later on.

Today I watch my daughters in law shop, I watch my wife shop, and it's a very different experience in that they're worried

about where their food came from; they're worried about maybe some of the production practices that were behind that food. They are maybe more concerned about quality than price at times, and I think we very much do that, not only in the U.S., but around the world.

So I think there are great opportunities to provide food at higher values for customers who want to exercise that discretion and pickiness, if you will. But there also still remains the responsibility and the need for us to be able to provide affordable food to people across our United States and parts of the world as well that are interested in price and affordability, so I very much look forward to working with all factions of agriculture to be able to support and ensure their success.

Tom mentioned that we had couple of openings on the National Organic Standards Board, and I'm pleased to announce that we will be filling those this morning. They are not

here at this meeting, but we're announcing them, and we'll be looking forward to their presence and participation from here on out and their attendance at the Fall meeting.

Dr. James Greenwood has been selected to fill the open environmental protection and resource conservation seat. He is from California; he is an organic avocado farmer and handler, and has served on the Board of Directors for the U.S. Hass Avocado Board.

He's also on the faculty at the School of Public Health at UCLA, and he has been part of the Center for Public Health there. He holds two master's degrees, one in public health and one in microbiology, and a doctorate in microbiology as well.

Our next appointee is Mr. Eric Schwartz, who has been selected to fill the open organic handling seat. He is also from California and serves as the Chief Executive Officer for the United Vegetable Growers Cooperative. He has served on panels and

boards including the California Healthy Soils Initiative and co-chairman for the startup of the Arizona and California Leafy Greens Marketing Agreements.

Mr. Schwartz has been involved in different aspects of organic growing, harvesting, and processing over his 20 years in the industry, and he hold a bachelor's degree in logistics management from Penn State University.

So with that, over the course of the rest of my comments I want to talk about the administration's priorities for the organic program. I also want to report on some significant successes that we've had recently in overseeing organic imports. I'm also going to preview some of our enforcement plans and actions as we move forward.

So with that, just a brief introduction: When Secretary Perdue came to USDA, he made it clear that he wanted USDA to become the most efficient, the most effective,

and the most customer-friendly department in all of federal government. That has very much been heard across USDA. We're looking at ways to serve our customers. Those customers are our regulated industry, as well as consumers who rely on those regulations for confidence in their food.

Part of the approach that Secretary Perdue is really emphasizing is a teamwork approach, or a one-USDA approach to administrative and leadership at USDA.

As you think about the marketing and regulatory programs and our interaction with the National Organic Program, you quickly realize that it's not just housed within and fully within the confines of MRP. We also have different aspects of the program that relate to the other mission areas, whether they be trade or food safety, as well as even more.

So it is very important that as we as Under Secretaries approach our jobs, we have open door policies towards each other and to

the other mission areas to be able to accomplish the goals of each one of our programs by working together.

One of the top priorities that we have, and one of the areas that we are also counting on that cooperation in is probably our number 1 priority is to protect the integrity of the organic seal. And that's something that, as I went through my confirmation process, was very important to many members of the Senate in the interviews I conducted there.

They were concerned about the integrity of the organic program and the fairness within the organic program to current organic producers, as well as producers who were interested in embracing organic production.

That we upheld standards and that we held not only domestic producers to a high standard, but we also looked at the imports coming in internationally and made sure that they were meeting those same standards that our

domestic producers were meeting.

As you know, if we allow imports to come in that aren't meeting those same standards, they aren't having to comply with the same production costs and facing those same challenges that end up resulting in higher costs of production that require you to be able to get some reward from the marketplace for your effort for those higher costs of production.

So we look forward to continuing to work, as one of our primary roles, to regulate, enforce, and to protect the organic farmers that we serve as part of the National Organic Program.

Another core goal is to provide efficient and effective oversight of organic production practices and make sure that organic production meets consistent standards. So fair and consistent organic certification is something we are very much interested in and very much focused on across all operations.

The existing standards are public, they're strong, and they're transparent, and we wish to continue to make sure we maintain that as we move forward. The standards have been built using a robust process that encompasses many different interests, as many of you across the room will recognize that. And we want to make sure that the USDA-certified farms adhere to the same standards as we expect to hold businesses around the world to those same standards.

So the regulations, as you know, allow many types of businesses to participate in the organic market if they follow the rules, which is very important to us as we move forward. So we need to maintain those stable regulations so producers and handlers know what to expect. That means stable, consistent, effective oversight to ensure that adherence by everyone.

And third, we want to emphasize that we continue to strongly support innovation both

for farmers and across USDA. Many innovations are occurring in the organic market, from production practices to technology tools, and these innovations are leading to a diversity of organic practices.

There are many entrepreneurial farms and businesses that have innovated new practices that have made significant investments to be organic, and so we continue to support their ability to be in the market as equal members, if they are, again emphasizing, following the rules.

Technology innovation is a priority at USDA as we modernize systems for tracking certification and overseeing international trade. And finally, as I mentioned before, it was Secretary Perdue's charge to us to be efficient and focus on customer service.

We want to respond to our customers, which are each and every one of you in this room, in a timely and straightforward way. I'm emphasizing again that we want to support

consistency and fairness in all of our interactions, and we have asked all of our programs, not only in NOP, but to look for inefficiencies in our business processes.

Efficiencies don't necessarily mean cutting corners; that means eliminating those steps that maybe don't add anything to the process. Because at the end of the day, we want to be efficient, but yet we have to achieve the end goal and the focus of why that regulation or oversight was put into place the first time.

So maybe to summarize a little bit on our National Organic Program goals: organic integrity, fair and consistent organic certification, innovation, and then efficiencies and customer service.

So to highlight, as we've started to implement these goals, some of the successes that we've had in the past several months; and I've mentioned to you about the interest I have as a farmer myself in making sure that there is

a level playing field out there for all U.S. producers, and that is focused mainly on imports and making sure that the rules that imported goods coming into the United States follow are the same rules that our producers are following.

I don't think, at the end of the day, agricultural producers are opposed to imports, as long as they are competing on the same basis. I think that's what part of the discussion you see in trade right now is challenging other countries around the world to follow the same rules in trade that the United States upholds as we send products abroad. We want those products that are coming in to the United States to meet those same standards.

So at the start of this year, there were over 26,400 certified organic operations in the United States, which represents a seven percent growth over last year. There are also more than 41,000 certified operations around the world, which is an 11 percent growth over

last year.

This growth and increased market complexity has obviously created more opportunities for consumers to have access to organic products, but has also created some oversight challenges as the rapid growth has been occurring over a number of years.

One of those challenges is the fraudulent imports that undermine farmers. So as we have looked at this and tried to be more cognizant of those imports, in the cases of fraud, we have revoked organic certificates of the businesses involved and made it so they could not use the organic label. Also, because of our oversight, other businesses have surrendered their certifications and are no longer in the organic marketplace.

Specifically in Eastern Europe, we have taken action against 96 different operations that have surrendered certification, and 30 more that we have suspended or revoked their organic certification since 2016. We are

also targeting the importation of organic grains in two major supply chains. NOP has directly issued proposed or final revocations for four operations engaged in fraudulent activities in that sector.

Thirteen of our organic certifying agencies have been directly involved in import investigations, and four have been of central interest. And the National Organic Program has traveled extensively over the past year to conduct onsite audits of certifier offices.

So cooperation across agencies within USDA and mission areas, as well as across agencies within the federal government, has been key to our successes here. APHIS and AMS each play a great role in working together on the marketing side as well as on the oversight side, with APHIS understanding the rules for bringing products in.

Through that cooperation, we have been able to identify three incoming shipments that have been blocked from entering the United

States; two of these shipments were corn, just recently, and they included about 39,000 metric tons of corn, valued at over $14.5 million.

In addition, APHIS rejected a chickpea shipment from Eastern Europe in January of 2018. The trade data suggests that some of our enforcement activities are starting to have an impact on the flow of those goods coming into the U.S., where we've seen a decline from some Eastern European market areas of 35 percent in organic corn imports and a 15 percent decline in organic soybean imports because of the noted enforcement activities that we've been taking.

We've also heightened our cooperation with customs and borders protection for the role they play as shipments come in, to make sure we're communicating with them and raising awareness to be able to make sure that the proper oversight is given to those shipments as they approach the United States.

We're also working hand in hand to

make sure that we understand, across AMS and APHIS and Customs, those products that are coming in from other countries that require fumigation as a condition of entry because of sanitary conditions in those countries, and communicating so that we make sure that products that require fumigation cannot come in under the organic standards as well, if that fumigation eliminates their qualifications.

So we continue to improve our systems to be able to better detect fraud in the future through the increased number of inspections and the amount of testing we're doing. We're also providing instruction and training for certifiers on how to better track organic products throughout the supply chain, and we want to encourage certifiers to provide more frequent and more complete data into the Organic Integrity Database.

Through these steps, we hope to make it harder for bad actors to commit fraud and help us enforce the law when violations are

found, thus creating a level playing field for all organic producers, and especially protecting our organic producers who are adhering to the standards here in the United States.

So in our enforcement plan of action, our team has learned a lot this year. It's clear that the National Organic Program needs to implement new practices to deepen its oversight and enforcement, and we also need stronger rules related to oversight enforcement.

Our plan of action for organic enforcement has three components. The first component is strong organic control systems, which is what I call the framework, to make sure we have trusted people, processes, and rules.

The second component involves the farm-to-market traceability for the records part, to make sure we can trace that supply chain integrity. And the third component, of

course, is enforcement.

So within that strong organic control system or the framework, we want to make sure we're working with USDA, with certifiers, with organic businesses, and that we share their role in protecting that integrity of the organic seal, and to have the control systems in place that protect that.

We also want to call attention to the standards themselves through a robust accreditation of the certifier oversight process. We want to make sure the certifiers understand their roles and responsibilities at the very beginning of our system.

So we're going to be focusing on training of certifiers, not only here in the United States, but internationally as well, to make sure they understand our expectations. We want to make sure the oversight is as diverse and complex as the operations are, and that includes livestock operations as well as crop and produce operations.

So we're going to be continuing to focus on new models that make us more effective, but we are particularly focused on risk and risk-based approaches to the accreditation. So as we identify areas that show more risk to the system or more risk to fraud, we will be stepping up our oversight in those areas to try to bring everybody into compliance.

We want to, through the import process and the traceability process, we especially want to look at the import process and try to move to more electronic records, a system that will allow us to be notified in advance and be aware of where those shipments are coming from, and where they are going to enter the United States.

Many of our answers and the practices that we're going to be putting into place are part of our response to last fall's Office of the Inspector General's report on international trade. And this again is partly

due to technology and the implementation of technology to be able to enhance our ability to do this.

We are also looking at the rules regarding our ability, and we would like to remove the current exclusion for uncertified handlers. Those are people within that chain of the marketplace that we have, in the past, said that they don't have to understand and be certified in the organic chain. I think there's an opportunity for us to certify them and make them aware of their roles and requirements and responsibilities in that process.

So as we continue to move forward, the third component is robust enforcement, and I think we've talked a lot about that and the focus that we have there, and the fact that we have identified, within a short period of time, the number of shipments that we're concerned about shows that we need to continue to focus on the enforcement piece in imports, but not

ignore the enforcement piece across our domestic production as well.

Again, that's going to be focused on putting internal investigative capabilities at the staff level and expediting administrative proceedings when we identify the need to do that. Again, we're going to focus on being risk-based and investigating resources in the places in the market chain where we believe needs us the most.

We want to institutionalize unannounced inspections as part of the vital role they play in organic control systems. Again, those will be focused on high-risk areas as well.

We're hoping that through this process, we're enhancing opportunities for the entire organic industry and leveling the playing field for the entire organic industry. Many of you out there are dealing with the challenges on a daily basis, and we understand that the panels that you will have tomorrow are

going to address some of the challenges I've talked about today.

I hope that we'll be able to surface, for the staff of the National Organic Program, areas that we can continue to focus on to make our program stronger. Again, I want to close by thanking all of you for being here and being part of the process for the implementation of the National Organic Program and the role that the National Organic Standards Board plays in advising the Department of Agriculture.

Growth depends on the ability to effectively trace products across the supply chain and ensure the integrity of the organic products to deter fraud, and our goal is to support the prosperity of every farmer, rancher, producer, and processor, and to the many other people who support their success, and that's what ultimately brings us all here today.

I want to close with the charge that

Secretary Perdue levels at the end of almost every discussion that we have, and that is to do good and feed everyone. So thank you very much.

(Applause.)

MR. IBACH: So now it's my pleasure to turn the microphone over to Jenny Tucker. She's the Associate Deputy Administrator, and she's been working very hard, very engaged. She's been in my office a number of times with Ruihong as we work through the different concerns and opportunities within the National Organic Program, and she's going to provide the National Organic Program update for you today.

DR. TUCKER: Thank you very much. Welcome, everybody. Thank you so much for being here. Again, this is my second meeting this year, I was at the Jacksonville meeting with you. So, happy to be here again.

Before I go into the planned presentation, we have some very happy news to share that is literally fresh off email this

morning; a new National List proposed rule that will implement the NOSB's recommendations from November 2017, related to materials is on its way to the Federal Register. So we'll look forward to people's public comment on that proposed rule once it is published.

The Under Secretary mentioned the importance of efficiency in our operations, and I think the fact that we are at a proposed rule stage so soon after the last meeting is really a tribute to how the standards division has been translating that goal into a reality. So many thanks to Paul Lewis and his standards team for getting that across the finish line so quickly. So, look for a Federal Register announcement on that soon. Again, thank you so much, Paul.

Okay, let us get into the agenda. First, I want to share some welcomes and thank-yous; second, I'll provide more details into the imports and enforcement work we've been doing over the last several months. Then in

closing, a comment. This is a pretty focal agenda, so we can bring you up to date with the specific actions we've been doing over the last few months in some very mission-critical areas.

I would be remiss if I didn't celebrate our certified organic operations in Tucson. There are seven certified organic operations right here in Tucson; six of them are handlers, and we have one crops grower, and that crops grower produces cactus. Who knew?

In fact, I found that so intriguing that I searched the Organic Integrity Database for cactus, and it turns out there are 64 operations that do some kind of either cactus growing or handling. The Organic Integrity Database produces all sorts of cool trivia like that. There are 214 certified operations in Arizona, so if any of you are here, welcome, and thank you very much for everything that you do.

I also want to thank everybody in the organic community. The spring meeting

engagement has, as with past meetings, been really high. We got 1,600 written public comments. Tom shared the page count of those, so we do an average pages per comment. Tom and I are both very into the statistics of all of this.

We had 48 oral commenters on two webinars. Those webinars have been a really nice opportunity for folks to contribute to the process who might not be able to physically make it to the meeting, so that's been a nice, now institutionalized practice.

We had 146 folks call in for those webinars to listen in, and then we had 84 folks signed up to speak in Tucson. So again, if you're here to provide public comment, we thank you for that engagement and effort.

Last time we met it was Halloween, and today is Happy Administrative Professionals Day. So I want to note Administrative Professionals Day by celebrating our secretary, who is Joan Avila. I have a feeling many of

you in the room have spoken with Joan. Joan's been with NOP for about five years; she runs the place. She answers hundreds of calls and emails each month, many of them from prospective organic producers and handlers. They call her from all over the world to find out how to get certified.

I recently did Joan's mid-year performance review, and she said what she loves about her job the most is talking to people who want to start an organic business and feeling like she's helped them.

So I wanted to mention Joan today, it being Administrative Professionals Day, and just because she is awesome. Joan manages regulations and requisitions with ease and good humor, so if you call the main office, do take a second to thank Joan, because she is an amazing part of the team.

Okay; Mr. Ibach mentioned the three key components of our action plan. The focal aspect of these components is really helping us

pick the top priority projects for what really needs to get done here.

So the strong organic control systems, the farm-to-market traceability, and robust enforcement -- that's really how we are organizing our work plan moving ahead, so I'd like to walk through some of the actions we've been taking in those areas as we're moving forward.

Organic control system: Again, the absolute key framework here, and I want to mention the control system again because of the central importance that certifiers play in everything that we do. We've taken a lot of enforcement actions in the last few months, and certifiers are taking a lot of those actions. So they are really a critical element of everything that is happening in protecting the control systems.

They are taking more enforcement actions, they are asking better questions and tracing supply chains in more depth. So we

have all been learning over the last year here, and certifiers are learning right along with us, and I think that's really critical to point out as part of this larger framework. We are a network of people who are protecting the organic seal in the areas of standards, accreditation, certification, and enforcement.

So I walked through this slide at Jacksonville, and I think it bears repeating. It's really critical to all of our organic enforcement work. Everything that we do rests on, and is dependent on, these three core pillars: The Organic Foods Production Act, USDA organic regulations, and evidence that can stand up in a court of law.

So again, this is ball game for all enforcement and really defines the rules of the game that we're overseeing. So we have to govern and enforce based on these regulations.

I mention it because, as we're talking about new practices, new directions, ways we want to go, the first question is,

Well, are you allowed to do that within the act and within the regulations? Mr. Ibach mentioned some areas where we're aware that we need some new rules, which will change this landscape that we're able to enforce against.

I wanted to give more details about some of the training we've doing for certifiers. We did two face-to-face trainings with certifiers in February. We were in the U.S., we went to San Antonio and met with a lot of U.S. certifiers. Then, not a week later, we went over to Europe and did certifier training at BIOFACH. That was the first time we had been to BIOFACH in quite some time, and we're really happy that we went.

These are all the European certifiers who came; they are right in the middle of dealing with the challenges that we have been talking about today, and were really receptive to the training that we are doing in imports and how to do effective adverse actions that will hold up through an appeals process.

In both Europe and the U.S., we did training on the pasture standards. We needed to do a grazing refresher, and that was an important part of the training. We also covered a number of other topics that are about enforcement and oversight of the standards.

Those have been great opportunities to get out and spend real time with certifiers to hear what some of their questions and challenges are. In this picture we have Penny Zuck, who is one of our wonderful accreditation managers, and Lars Crail, who is our lead auditor. They are both in our accreditation and international activities division.

That division is absolutely critical for the oversight that we do of certifiers. We often talk about our compliance and enforcement team that's investigating complaints; our auditors and accreditation managers are really on the front line of working with our certifiers every day. So I wanted to mention Penny and Lars, because they've done just a

terrific job at helping to build the certifier capabilities.

I also wanted to mention a new self-guided training that we've published. The control system rests really heavily on certifiers and on businesses, in addition to USDA. So increasing training that everybody can access on compliance and enforcement is really a key priority so that all participants in the control system have the skills and capabilities to effectively operate in the market.

So at the recent face-to-face certifier trainings, we launched a new interactive training on how to conduct an investigation. So like the Road to Organic Certification, which is a filmed story of two farmers who are seeking organic certification, this one is also a real-life, choose-your-own-adventure video that follows an investigation.

It involves three certifiers that are participating in an investigation that

crosses the boundaries of all certifiers. So by walking through a number of scenarios, the viewer, the trainee can pick paths. And depending on whether the paths they pick are correct, they will either detect fraud by the end of the video, or they will not.

So the important learning point of the video is asking the right questions, following the right trail, pulling the right thread, in order to detect fraud in the system.

I invite folks to take a look at the training and walk your way through it and see if you can find the fraud that occurs in the story. This is available publicly; it is on the AMS website. If you search for organic training, you will find it fairly easily.

It was an interesting movie to make because it really required us to walk through what are all the different steps, and questions that everybody has to ask across the system, so I encourage you to take a look.

Next, an update on our imports

instruction: In October we shared this interim instruction, and comments were closing right around the time of the Jacksonville meeting. Those comments are available in regulations.gov. The instruction remains available in the NOP handbook.

The instruction explains current regulatory requirements for certifiers overseeing organic products imported into the U.S. It also recommends best practices and provides examples of actions that certifiers can take to comply with the existing regulations.

We received a lot of thoughtful and thorough public comments on the instruction, and many of those are helping to shape our next steps. In fact, a lot of those comments were about the additional regulatory needs that will help make organic import oversight stronger.

It really does take all of us working in the system to protect the integrity, so this instruction remains online. It is an

interim instruction, which means certifiers are following it. So certifiers are following the best practices in the document to continue their oversight in better ways. We do want to thank everybody who submitted public comments on the instruction; very helpful in moving forward.

So at the last meeting we shared certifier directives that have increased testing and inspections in Eastern Europe. Certifiers who are involved in those activities were required to send reports to the National Organic Program. We have been reviewing those certifier reports, and we're designing new directives based on what we learned through that process, and where we think some of the weakest points are.

So in this risk-based oversight approach, where do we need to look next? So we will be issuing new directives to certifiers, but are probably going to be asking for slightly different things as we target the high

risk areas.

So for the certifiers who have gone above and beyond in implementing those directives, we appreciate that investment. We know that that has been an additional labor and expense, but it is helping us get to where we need to go.

We've had a number of enforcement actions taken against both operations and certifiers. And as mentioned earlier, some significant numbers of surrenders and suspensions in the four countries previously mentioned.

I want to also expand on some of this collaboration discussion about CBP and APHIS, both very important agencies. We always like to put the acronyms up to remind everybody of all the different agencies we're talking about.

APHIS has a lead at the border with CBP. Both of these agencies have really been terrifically helpful at the ground staff level

to provide us with information, to get information from us. The flow of information between these agencies is moving much smoother over the past year, and I think it's really helping everybody moving forward.

APHIS has its own regulatory interest in some of these shipments, and so where two agencies have different but compatible interests, that collaboration is incredibly important. I wanted to mention their role in supporting us here.

More specifically, looking at CBP and organic imports data, this builds on a presentation we made in Jacksonville to explain how this landscape worked. At our last meeting we had our panel of government folks who came in from CBP and APHIS to help us understand the landscape better. So some of this is a little bit of a review in that the reality right now is that the CBP system, called ACE, the Automated Commercial Environment, is actually not programmed right now to mark products as

organic.

So some of the actions we've taken is, there has been a formal joint meeting; there's also been a lot of staff level meetings, but a formal joint meeting to really chart out future collaboration options and what that could look like.

We have also submitted an official request for development to CBP for organic message sets. As folks might remember from the last meeting, the organic message set is what translates the USDA organic import certificate into the form that ACE can use.

Now, we're actually ahead of where we thought we were going to be on this, so folks may be aware that Congress gave us some supplemental funding in the FY 18 budget. So there's $3 million that Congress gave us, the appropriations in 2018, in addition to our nine-million-dollar budget.

So we are hoping -- the $3 million is dedicated to enforcement, and we're hoping

that we can use some of that to fund CBP to develop these message sets. So that would put us considerably ahead of where we thought we might be at this stage in the game. So this collaboration is really working well.

The request for development was briefed to a group called the Border Inter-Agency Executive Council. It includes all the participating government agencies that have an interest in ACE, so when we briefed our project we were prioritized. There are a number of projects that the ACE folks need to consider. We have been prioritized, and we are in the top four priorities for moving forward, and the three ahead of us are all really critical, like bug fixes, things that absolutely must be fixed.

So the next step in that is, they will be getting us an estimate on both the timing and the cost of programming these organic message sets. Again, we're kind of ahead of where we thought we would be on that

particular project.

We're also in the midst of reviewing our existing memorandum of agreement with CBP in order to request broader access to trade data. In the government, you often need memoranda of agreements to see data that other agencies have. A lot of data is protected for very good reasons, and you have to have a very good reason for accessing that data. So we're working to change the memorandum of agreement to allow us that broader access that we need to protect organic integrity.

Now let's turn to the fumigation work. APHIS is now providing fumigation notifications, so I really want to highlight that this is a significant change from last year. When we ask, What's really happened over the last year, this is real stuff; it's real progress.

We have received 1,600 fumigation records in eight months, and we weren't getting

those before. We weren't getting those before, and we have that data now. That's a lot of data, so let me walk through what we're doing with that data.

We have done requested targeted investigations by certifiers. Interestingly, the data that comes from APHIS, you can't always tie it back to a 10-digit code in the Organic Integrity Database. So not every one of those fumigation notices is associated with a certified operation.

It turns out that not all of the notifications are actually organic. For example, there was a ceramic tile shipment that was coded as organic. Some of this is a matter of training, and we now have APHIS folks who are on the lookout for organic for us, but they don't always know exactly what that is. So if they're not quite sure, they might click organic when it perhaps had the word organic on it somewhere. But we'd rather them be safe than sorry on that one.

So learning how to read these fumigation notices and how to tie it back to certified organic operations through the supply chain is part of our learning process right now.

I really want to emphasize that just because there are 16 records does not mean that those products were sold as organic. APHIS would have notified the importer of the product of the pending fumigation; we get the notice as well. Then the product would have either been redirected to another port or it could have been sold as conventional. So we are following up when we have these fumigation notices with these targeted investigations.

We're also doing training for certifiers on how to access APHIS fumigation rules. An APHIS representative came for a certifier training in February to literally show all the APHIS handbooks for how you know whether something is automatically going to be fumigated coming from another country.

So now, certifiers can really be on the lookout. If I know this commodity from this country is always going to be fumigated, it really shouldn't be selling it as organic. So they are now introducing more practices to prevent that.

So we're taking both a top-down and a bottom-up approach on this, and the top-down is learning about the data, getting the rule book out to everybody. The bottom-up is these targeted investigations for specific fumigation events.

We're doing a lot of data analysis on this to identify these commodities and countries and working with APHIS to access data reports in more usable ways. Right now we're getting a pdf attachment; we're talking to them about getting a data stream directly from their system. They've been really amenable to figuring out how to get us that data in ways that we can crunch better.

We stole a data analyst from ERS,

Economic Research Service, on a detail with us, and he's just been phenomenal in generating different ways of looking at the data. It's really helping us move the ball forward.

Okay. Investing in data is a huge part of all of this, so full traceability really requires accurate and timely data. So the Organic Integrity Database -- there's a data quality dashboard now, so certifiers can see what they're doing well with their data and what they could improve on.

We launched in February, investing in integrity awards. Good data and complete data is really invisible labor. It takes a lot of time to get data in a useful form where it can inform decision-making. So we wanted to celebrate the top certifiers who are really investing this time to make sure their data was sound. We awarded top six certifiers, based on their data quality and quantity for the data deposits at the beginning of 2018.

I just want to highlight them here:

we have CCOF, California Certified Organic Farmers; the County of Marin Organic Certified Agriculture; New Jersey Department of Agriculture -- New Jersey, by the way, is also the very first certifier that got data into the Organic Integrity Database, so they've really consistently invested over time. Go, Jersey.

Next, NOFA New York, the Northeast Organic Farming Association of New York; One-Cert, Inc., from Nebraska; and OTCO, Organic Tilth Certified Organic. So these folks are providing data in useful and complete forms, and it's really helping us move the data quality world forward. If any of you are here, thank you, and again, congratulations.

Let's talk about some of the key tools for data. We're really focusing on acreage and certificates. Organic farm acreage is absolutely critical for investigations and for data analysis and reporting.

We held a working session in late February, a webinar, specifically on acreage

reporting. It was terrific to hear the certifiers perspectives on this. Some of the folks on the call were already depositing acreage data into the database, so they were able to describe how they're doing it, using the different templates for the database, and how they are reporting on acreage -- how they figured that out with their own systems.

Then there were a lot of certifiers who hadn't quite gotten there yet, but want to get there. So they heard from the people who are doing it, about how they can report on acreage.

What we learned through that is, a lot of certifiers are taking a phased approach of engaging with the integrity database; this year, they are doing this project. For example, adopting the product taxonomy. Next year they're going to turn to acreage, using the taxonomy to report acreage.

A lot of these certifiers have great strategic plans on engaging with the data,

which will really raise the playing field across the board. So we appreciate the certifiers who gave their time and their knowledge, and who were open about what their questions and challenges were.

We're also continuing to encourage federal certificate use. Last fall we had two early adopters of the certificate module, specifically LETIS and the Rhode Island Department of Environmental Management. Now, if you look in the database, there's a total of five certifiers that have generated certificates from the system, and we have a number who are also considering adding that on.

They are now reporting that now operations are starting to ask for a federated certificate. Certifiers can still provide whatever attachments they want, with all of those details, but there are operations out there that are really looking for that consistent cover sheet from the integrity database. So many thanks to the certifiers who

have been adopting that.

There's another technology initiative that we've been investing in since we last met. We are developing an electronic export certificate option. It will support organic businesses that are shipping to Korea, Japan, Taiwan, and Mexico. Those are the modules that we have been programming in.

This is an existing tool that AMS already has; it's the Electronic Trade Document Exchange System. We're really building on systems that are already in place. We did an initial pilot test with some interested certifiers, and that went very, very well. The feedback was, Oh, well, this is sort of like traces. We need to use that, so that works. So that looks good, we'll use it.

So we'll be doing a launch this summer, and again, it will be an option for those who want to produce export certificates. One of the benefits of this is that we are programming in the ability to transfer data

from the Organic Integrity Database, so that saves some typing. But it's also an added incentive to keep data up to date in the integrity database, because it will push over current data into this export certificate system.

It's also providing a lot of valuable learning as we engage in future international systems development work. You pick a small project, so you can learn about it and learn what all the different touch points are. This has been very valuable in both providing a new tool for certifiers, but also learning a lot through that process.

And now, here's a teaser: On May 10th, we are having a technology webinar, Organic Integrity Through Technology Innovation. We're going to cover three topics: the Organic Integrity Database, some updates on what we've been doing there; we're going to give a road show of the export certificate module, so if you weren't part of the pilot,

and you want to know about it, come on to the webinar, and we'll show you what it looks like and how that will work; and then we're going to share some of our future ideas in terms of planning. Part of our response to the OIG is going to include our vision for international systems and how could this work.

So May 10th will be the first time that we launch some of our initial thoughts on that, and we're going to be really eager for some feedback. So if you would like some details, you can go to the Organic Insider, which hopefully everyone is a subscribed to. There you can get more details about the time. It will be a standard ready-talk webinar like we always use.

Okay. I want to close this enforcement section by really highlighting very seriously our commitment to boots on the ground. We have heard this many times, and we finally have some resources that we can devote to boots on the ground.

I present the picture as both a commitment and a metaphor; we are taking this very, very seriously. Betsy Rakola, our Compliance and Enforcement Director, and I recently traveled to visit with a grain importer on the East Coast. This is an importer who is actually doing really well, who is doing full supply chain traceability. It's incredibly impressive, the devotion and dedication they have to the process.

We wanted to really visit with folks who were doing this right, so we can see what this looks like when it's working really well. They walked us through the processes that they use. We took this picture because we saw it as sort of our opportunity to share with you that we get it. We understand the importance of these onsite investigations and surveillance.

This year we have a program for unannounced inspections with U.S. dairies. We're going to be doing site visits and inspections with grain importers. Now, I say

site visits because some of this is -- we're still learning, so we are visiting with folks who have figured this out at the operation level, so we can learn from them. But we're also doing inspections and investigations.

We're going to continue to do our certifier audits in Eastern Europe. We've mentioned before that the number of satellite office inspections has gone up significantly; that's going to continue this year.

Then we're going to figure out how to do a commodity- and country-level certifier audit. How do you do a mass balance at a country level, involved with all the certifiers in a country? We think that would provide a tremendous amount of learning around supply chain verification, so that's one of the projects we'll be doing this year.

We're going to out there; we're looking forward to seeing folks out there, and thank you for everything you're doing.

To close the loop on the OIG report,

this was published in September of 2017. We are on track to complete all of our responses to the OIG by the deadline of July 2018. In fact, an awful lot of what I've been talking about here today is going to be captured in that response.

We mentioned last time that in some cases, we're laying out a response that lays out the plan for the future. We can't build all the systems by July 2018, but we can say what kinds of systems we think we need and what that might look like to spark that future development. But we are on track to have a published response by July.

I'm going to close here. I was going to leave the Secretary's principles for organic up on the screen during question and answer. Again, protecting the integrity of the organic seal and delivering efficient and effective oversight of organic production practices; we're all working together to make sure that organic products meet consistent standards.

So thank you so, so much for being

here; it's a pleasure talking to you. I look forward to being here at the meeting with you, this week.

(Applause.)

MR. CHAPMAN: Thank you, Jenny; thank you, Greg, for sharing all that information with us. I am sure we could use the rest of the day to ask you questions on what was shared here, but I know we don't have that much time. But thank you for all the incredible work you've been doing on this and for providing this update to the Board and the community.

At this time we will open it up to questions from the Board. I'll take a speaker's list of folks who have questions. Can you raise your hand? I will start with my question first, and then move through the list that I've got.

My question is for you, Mr. Ibach. The primary objective of the NOSB is to review substances used in organic production and to advise the Secretary on the implementation of OFPA. As a member of the administration's

leadership that we are advising, I'm curious to hear your perspective on how well the NOSB is functioning in its role today.

MR. IBACH: I think that over the past year, with Ruihong and Jenny working together with the Board, we have some great progress relationship that the USDA's communicated to me, the relationship that we have with the Board.

I think we have a great dialogue that's been developed and continue to look forward to working together with the Board on those recommendations and the evaluation of the recommendations to be able to try to implement as many of the recommendations as possible.

Do you have anything you would like to add, Jenny?

DR. TUCKER: No, I'm good.

MR. CHAPMAN: Thank you. I have Emily next.

MS. OAKLEY: Thank you for being here with us today. I wanted to say that

collectively as a board, we represent the diverse interests of the organic community, and as representatives, we hear from them about their interests.

Some of the items on our work agenda that have originated from public comments include addressing uncertified handlers and eliminating the incentive to convert needed ecosystems to organic production, as just examples.

As representatives, members help facilitate the dialogue between stakeholders and the National Organic Program, and that's a critical aspect of maintaining integrity in the label and the success of the label. So how do we balance priorities of the administration, for example, with the priorities of our stakeholders, particularly with regard to our work agenda? Thank you.

MR. IBACH: I'll let Jenny and Ruihong also comment on this. I think that communication is the first step. We need to

hear from you; that's your role here on the Board, to tell us what you're hearing in your various segments of the industry.

Then I think working with leadership on the Board, as well as understanding the priorities that we have within USDA, our responsibility to react to oversight that we have from the OIG's report and the priorities that we have there, to mix that together to be able to come up with things that we think are most important for the Advisory Board to work on at any particular point in time.

There are more subjects than a volunteer board should be expected to address and spend time concentrating on, so we have to figure out those priorities to be able to make the most out of your time and your volunteered effort, as well as being able to move the program forward as quickly as possible.

DR. TUCKER: Yes, that's exactly right. I would say that the new work plan that Tom spearheaded the development of, the newly

formatted work plan, will really help with that dialogue and communication, because it really helps us see everything that is on the list and where it is in the process.

I think that introduces a transparency into the work plan that supports that dialogue, so we can really see everything in front of us and make those choices and priorities.

So kudos to Tom for having really re-worked that work plan in a way that facilitates that dialogue, I think in different ways than we've been able to discuss before.

MR. CHAPMAN: Ashley?

MS. SWAFFAR: Thank you for being here. The NOSB has provided recommendations to the USDA on the care of organic livestock since 1990. These recommendations have always included both materials and practice standards. The organic livestock and poultry practices final rule was in step with this history and was the product of over 10 years of work on the part

of the Board and the public stakeholders.

Members of this board and our community are saddened by the USDA's decision to ignore our recommendations in withdrawing this rule. Part of the justification for the final rule was that the final rule would exceed the USDA's statutory authority.

Can you please explain why the NOSB and NOP worked on an issue that is now considered outside of their authority for so many years under different administrations, only to be notified that it was out of scope in the final hour?

MR. IBACH: First of all, as you are aware, there are several lawsuits pending on this, so we probably can't be as in-depth and frank about our conversation here as I might like to be. If I am, there will be a frying pan that will hit me across the back of the head to stop me, probably.

But I think it's important that we realize what the statutory rules are, and while

there are other issues and marketing dimensions that organic producers and organic value chains might want to take advantage of, we have other programs within USDA that would allow that opportunity through certification processes like our PVP program, to make claims that might be outside of what the statutes provide for us to be able to do through the organic shield itself.

So we look forward to being able, moving forward, to look at those other programs that USDA might have in place that might help accomplish some of those same end goals, but would be outside of the organic program itself and maybe be a wrapper on top.

Maybe I'll go one step farther and relate some of my specific experiences as director in Nebraska. We did a lot of certification programs in the beef industry, because that's our number one industry, to be able to export. We had producers who exported products to Europe regularly.

So there was that core program that

USDA had, the NHTC program, but some producers wanted to talk about whether it was a Hereford or an Angus. And so those were like wraparound programs that we had certifications that either that breed association went through with USDA to be able to gain a USDA certification that yes, there's a program in place that says that's a Hereford animal, but it was an NHTC Hereford.

We also had a program that we implemented on a state level, a PVP process, so producers could say it was born and raised in Nebraska and had USDA put a shield that through the PVP that said, yes, that was true.

So you would have an NHTC Hereford born and raised in Nebraska. So there were wrappers that you could stack on. And I think that's an opportunity that could be considered within the organic industry as well, and Jenny, maybe --

DR. TUCKER: I really don't have much to add to that.

MR. CHAPMAN: Dave?

MR. MORTENSEN: Thank you for the comments; it was really helpful to hear all of the things that are going on. The Board has been expressing concern about grain import fraud for a while, and we often are out hearing from growers. There was a group of us that were recently at the Midwest Organic Education meeting, where there was a special meeting held where no fewer than 50 commodity organic grain producers were in attendance.

We heard from one after another about losses of $15,000 a year to almost $120,000 a year on individual grower farms from Nebraska to Wisconsin to Iowa, etc., and I hear the same thing in Pennsylvania and New York.

So we want to be sure that you know that the Board stands ready to serve. I would just ask, are there ways that you think we could help advance the cause of leveling the playing field?

MR. IBACH: That answer might be a little bit above my current familiarity and

knowledge level, but maybe going back to a step before that -- I think that's appropriate that we work with you to make sure that we create a level playing field and understand how that's going.

We definitely want to hear from you, whether the standards that we are putting in place, and the new practices and procedures that we're putting into place at the border, you think will be effective.

Throughout American agriculture, we feel that we are most efficient and effective, and we can compete with anybody in the world. But we have to be able to complete on a fair basis, so if products can be priced coming into the U.S. from a foreign country very cheaply because they don't have to adhere to the same production practices, and they are circumventing our organic expectations, that's not fair to our producers.

As we go through this process and identify and protect the integrity of those

shipments coming in, one of my concerns is that we have organic livestock producers who are counting on some of those certified organic shipments to meet their feed needs.

So that could create some real opportunities for U.S. farmers that have been transitioning, a way to enter that organic grain business, to be able to enjoy profits and enjoy pricing and enjoy providing to that marketplace.

DR. TUCKER: I think in terms of specific Board activities, this imports panel tomorrow is really important. I think all of us have been really encouraged by the number and depth of public comments that have come in. I think that's a tribute to the CACS that developed a lot of very thoughtful questions and put them out there and have got a lot of very thoughtful answers.

I think that culling through that data is going to be incredibly important moving ahead, and figuring out, Okay, what can CACS and the entire Board do to help identify the really

focal projects? We're going to, at NOP, keep you guys very well informed on what we're thinking and working on in concurrence, because a lot of these wind up being parallel efforts.

I'm really eager for this imports panel tomorrow; I think it's going to tell us a lot. This was the first time we've had a discussion document on imports; this is the first time we've asked that question in this particular forum, and I think that the amount of response -- you mentioned earlier the importance of providing that bridge to the stakeholder community -- on imports, that is beautifully illustrated through the work that's just happened in the last few months.

MR. CHAPMAN: Harriet?

MS. BEHAR: There are quite a few organic advocates in the audience that have worked with Congress and with the USDA and have been able to secure appropriations for the National Organic Program. I know that not only in the past, but even in the latest House

version of the upcoming Farm Bill, there are significant dollars for the National Organic Program, but we're currently sitting with many vacancies in staff.

A lot of them are direct support to the National Organic Standards Board, as well as the need for continued technical reviews, both of newly petitioned products and sunset materials.

So I was wondering, what are the plans for using those resources to beef up our work so we can continue to do our critical function, and so can the National Organic Program?

MR. IBACH: So your question is two different issues: one is new money because of the growth in the program to be able to meet the expectations of serving that growth. We've figured that into the process we went through, which is the other part of your question.

You know, every new administration that comes in usually has that period of time

where they say, Oh, let's put a stop on things and look at the hiring process and make sure we're comfortable and put our seal of approval on this.

That was one of the first things facing me when I came on board at the beginning of November. We were the first mission area that actually had our staffing plan approved, and so we've had that in place now since before Christmas.

So where we're really at is just that process that you go through to advertise and interview and fill those positions, but we're on track now to be able to move that process forward and get staffed up at the levels that were projected.

I'm not saying that every job out there that's open -- we saw in our future staffing plan as necessary, so we made a shift and said that we've got to have more people in this location or in this focus area, and maybe less here because of work load.

Those were driven by career staff more than political staff, so I feel very confident that moving forward, especially with the increased resources, we're going to be able to deliver on the expectations that the organic community has.

Jenny, do you have anything to add?

DR. TUCKER: Just a little specific update. I know there's a lot of interest in the room on the National List position. The administration has been really supportive of moving that position forward very quickly. In fact, that position has both opened on USAJOBS and closed on USAJOBS. So all we're doing now is waiting for the list of names that are eligible for that National List position.

That's a really critical position for the work that you guys do here, so that has been high on the hiring priorities list.

We've brought in some wonderful staff, and both accreditation, international activities and compliance and enforcement, that

speaks to this reallocation of resources, where, yes, there are some positions we're just going to re-fill, because right now, we don't need those positions.

One example is, we had a chief of staff, and that was really important for some of the activities that we were doing for a while. But honestly, we're holding down the fort pretty well without a chief of staff right now. So we're probably not going to backfill that position because it's more important to steal data analysts from ERS to help us with imports data.

So we're making really strategic choices that help us get the mission done. But the National List one is coming, I promise.

MS. BEHAR: And technical reviews?

DR. TUCKER: Technical reviews -- I understand -- I'm going to sort of be open here a little bit; hopefully that's okay. We often run budget drills and budget scenarios, and I know that there were some very early scenarios

in planning FY 18 that proposed eliminating technical reports, and I know that's gotten a lot of attention.

Those were very early budget drills, and they were related to a budget that didn't happen. We have a budget now, and we have increased money. We have not cut technical reports at all.

So we have asked the Board, just out of efficiency and fiscal responsibility, to take a look at, do you really need that technical report, or actually, this material is probably not going to be on the list. And if it's not going to be on the list, do you really need a technical report?

But I think the Board has been really responsible about that, and there have been a number of items where the Board has not asked for technical report. I don't think there are any technical reports that the Board has asked for, that we have not funded, and I don't see that changing.

So again, early budget scenarios -- we always run different scenarios of what might happen in different circumstances; that's just part of what we do. But we are still funding technical reports. Everybody take notes on that. We get a lot of questions on this.

MR. CHAPMAN: Thank you. Steve?

MR. ELA: I'm curious that you talked about efficiency and, Jenny, you talked about how the NOSB is the bridge from stakeholders to the USDA and the National Organic Program.

I think it's important that in that bridge and in that conveyance, we put a lot of time into reviewing documents, reviewing public comments, evaluating substances. And one of the key components is essentiality; is this material or is this product essential to organic production?

Obviously, things change, and organic production continues to improve, and organic supply continues to expand. Some products that weren't available organically become available

organically, and that provides an opportunity for new companies to expand and hire, as long as we don't allow a previously approved product that's not organic to flood the marketplace, so to speak.

So I'm a little concerned in the past little bit of time that maybe the definition of essentiality for the NOSB, and the way we look at it has started to differ a little bit from what the National Organic Program within the administration views.

We go through lots of public comments, spend lots of time, coming back to efficiency, and make a recommendation. And then when it's opened up for public comment and the rulemaking stage, a company comes in and says, Well, this was essential. And this co-opts that whole process.

How can we work together with the National Organic Program, the National Organic Standards Board, to get at that essentiality and have that be on the same page so we don't spend

a lot of time and come up with different answers?

MR. IBACH: That's a great question, and I think that's a little bit of what you mentioned is a concern or a problem or a frustration is just inherent in the process that is in place.

You have a role to play with advising us; we have a role to play with evaluating that advice and creating a proposed rule, and then the public has a role to play in reacting to that proposed rule. As technology has evolved over the last decade or so, those public comments to proposed rules take on all kinds of shapes now.

There's the computerized, mass-driven comments that are fairly uniform, and then there are comments that come in from industry that are very unique and based on personal experience or company experience. They all have to be weighed somehow in whole, to come with a decision of what the final rule should look like.

So I think it's just an ongoing process to try to anticipate what public comment might be, while we look at your advice and counsel, and what the experts on this board that look at science and those that have that role to play, as well as working with staff to try to figure out.

We probably never will bat 100 percent on this. It might not be a right process if everything you recommend made it clear the way through public comment, because at the end of the day, we're all representative of the greater industry.

MR. CHAPMAN: So a quick follow-up on that: If I understood your comments right, you don't see a need to change the essentiality or criteria. The discrepancies that we have are just inherent in the system, but the system itself is fundamentally sound. Is that correct?

MR. IBACH: Yes. I think that's essentially the theory behind my answer. Jenny, do you want to specifically address the

essentiality?

DR. TUCKER: I think it's important to emphasize that the vast majority of times, the USDA has implemented the NOSB recommendations. So we're thinking about a very small set of materials where USDA did go in a different direction than the Board had recommended.

So USDA looks at the totality of public comment, the way Mr. Ibach just mentioned, and yes, sometimes that's going to lead to a different answer than the Board recommendation. But I would emphasize how often it's in agreement.

We just mentioned that we're going to be publishing a proposed rule very shortly here, that implements the recommendations from the fall. So I think most of the time, we agree; there are going to be times when we don't, but those are pretty rare. And the process matters; the process is incredibly important.

MR. CHAPMAN: Not to belabor this

point, but again, to summarize what I think I'm hearing, the leadership believes that the process itself is intact. It has value, it's a consistent, predictable process, and the fact that there are disagreements itself are not a sign that the process is not working.

DR. TUCKER: Agreed.

MR. IBACH: Right, right.

MR. CHAPMAN: Correct?

MR. IBACH: That's correct.

MR. CHAPMAN: Okay. Sorry, I'm getting back to my list. Asa?

MR. BRADMAN: Thank you for the opportunity to ask some questions. I wanted to comment and ask a question about the development of a list of inert materials for organically approved pesticides and other tools for organic production.

This has been an issue that's been percolating in the Board for many years now, going back to 2012. Right now, the Board is actually well situated to work on these issues

and would like to see some more progress between NOP and EPA and the NOSB to work together to evaluate the current list of inerts we have, look at the current list for materials, and actually develop a more specific set of materials that are specific to the organic program, rather than just relying on a generic list.

So I'd like to hear if you have any comments on that, and also ask the USDA to see if we can move forward on those relationships with the EPA to make some progress on this issue.

MR. IBACH: Okay, I'm going to pass the answer to that question to Jenny.

DR. TUCKER: The inerts project is something that has been of a lot of interest to the Board, and I think this goes back to -- it's almost the same question as how are we prioritizing the work plan.

So it is an example of that question, and I think the answer is kind of the same: How

do we look across all the different requirements right now in the program? Inerts is a really complex topic, and so continuing to work with EPA, continuing to work with all the different partners who have a stake in this -- this is going to take some time.

It is still under review with the program, and right now the other priorities that we talked about today are higher on the list than inerts. I know there are folks who are going to be disappointed by that, but I have promised to be honest about it.

So that's an area where I'm going to be honest and say that inerts is likely not going to be something on our work plan at a program level in the next year.

MR. BRADMAN: Do you have a sense of what the time frame might be? Because we represent stakeholders, we see many, many comments from stakeholders who are very concerned about this issue.

DR. TUCKER: Understood. It is an

important topic; it's just right now, not the most important topic. Let's see where we are in six months on some of these other topics, and if we're getting to a place where some of the really pressing enforcement issues have been resolved and are moving on, then we can think about, Okay, what can we pick up again, that perhaps we've had to set aside for right now while we're working on this other thing. It would be unfair and irresponsible to commit to a time frame.

MR. IBACH: I think it's your job as representatives of the industry to continue to surface those things and to continue to make your case for what you think should surface to the top of the work plan.

We're looking at it, we're evaluating it with an eye to what our expectations are from administration, what our expectations are on the program from oversight outside the NOP program. So we want to work together and formulate that work plan over time.

MR. CHAPMAN: We have two other questions from Board members, and we'll wrap it up there. As a quick follow-up to Asa's question, embedded in that was our cooperation with other agencies, particularly EPA on this subject, also FDA, and I know that question has come up in the past.

Does the program have the sufficient -- or as you say, the sufficient connections with the other Departments to provide the NOSB with the expert information and connections with the EPA and the FDA if needed, on issues that come before the Board? Is there any additional work you are doing in that area?

MR. IBACH: Maybe I'll answer it specific to NOP, more general to the relationship that USDA and FDA and EPA are developing, and that is much more of a cooperative relationship, and interactive relationship than I believe that the agencies have had lately or over the last maybe decade or more.

The Partnership for Rural Prosperity that the president put into place at the beginning of the administration to look at ways that agencies could come together to address rural issues, that Secretary Perdue chaired, really opened up that dialogue, as well as set the expectation that agencies should listen to each other and try to work on common goals, especially those that impacted rural America, and definitely organic agriculture is part of rural America.

So I think that just that leadership at the very highest levels of our government have shown that we're supposed to have a better dialogue and a better working relationship with each other. At the White House level, that continues at the Office of Science and Technology, to be that expectation that FDA and EPA and USDA work together on issues that are common to them.

MR. CHAPMAN: Thank you, and I realize we are running a little bit over time.

We had two more questions, and if you have a moment, we'll do those, and then we'll thank you for your time.

So up next is Dan, and then after that is Scott. Dan?

DR. SEITZ: Again, I'd also like to thank you for this opportunity for dialogue. I think it's very rich, very helpful.

As a consumer representative on the Board, I have the feeling that a big part of the success of the organic standard has been based on giving consumer choice and also on transparency. You mentioned the anecdote of your mother shopping, and there was a time when people didn't focus so much on things that differentiated the food that they ate.

And the organic seal really did fill in an important hole in that, because there were people who were concerned about the quality of their food, how their food was grown, even how animals are treated and so forth.

And in a way, I feel that the organic

seal is still very much the gold standard for sending a message to the public about what the quality of food is that's associated with the organic seal.

So my question, though, relates a little bit to your idea of a wraparound certification that you mentioned at the start. We're seeing right now a welter of new types of certifications out there in the marketplace. We see grass-fed, or pasture-raised, or cage-free eggs, humanely raised animals. There's talk about a certification type for soil-based or regenerative approaches to agriculture, and you also have this non-GMO project, although interestingly, as part of the organic standard, GMOs are not allowed.

But the sense I'm getting is that on both the farmer level, because farmers have different levels that they strive for, and really appreciate the opportunity to be transparent about what they do.

And then on the consumer side,

there's really an appreciation of being able to differentiate, understand where your food is coming from, it seems to me that that's why we're seeing this new welter of new certifications.

And even within our process, we see some contentious issues like the question of whether hydroponics should be allowed under the organic standard. So my question is, whether under the organic process, within the NOP, within the work of the NOSB, there may be a place for these wraparound or add-on certifications.

I could imagine, for instance, just a simple one like, is the product certified organic and hydroponically grown? That way, you're doing two things: You are providing information to the public, but at the same time, it's within the context of a very well-established and, I think, very thoughtful regulatory process that already is in existence.

So I'm curious to know whether there

may be a place to satisfy that need for transparency and information, but in the context of the organic standard.

MR. IBACH: I think I could spend half a day telling you what I think about some of those different comments, because they're complicated, and they have lots of different issues that are associated with them.

One of the dimensions that you talked about is labeling in general, and proliferation of all the labels we see at a consumer level. When we're labeling carrots gluten free and water GMO free, at some point in time, are we going to ruin the meaning of labels to consumers, because they're just like, Come on, what does this mean anymore?

And then, is there a responsibility for consumers to know that carrots don't have gluten? Is it even right that we put that on? I'm talking outside organic now, just so that I don't touch nerves, but as we think about labeling -- at some point in time, I'm fearful

that consumers are going to have so many labels out there that it gets confusing if they don't have meaning behind them, and some regulatory process for putting those labels on, because they do actually have meaning.

I think there's also the difference between a system that has regulatory oversight that's based in statute like an organic label; and then there's value in labeling that is driven by market demand and is voluntary. I think both of those have an opportunity and a role to play.

And I think that when I was talking about the wrappers -- there was one core that was required to get into the European marketplace; there were others that were put on because we thought they added value to the core program. So I think that's a philosophy that's worth contemplating and discussing as you think about adding labeling opportunities. There are opportunities on a voluntary basis and maybe not regulated opportunities.

I think there's a lot of discussion available in that context. Even when we go to natural -- what does that mean? And sustainable hasn't been defined yet.

So there are many terms that people are using on labels that I don't know if consumers, when they go to the grocery store and pick up that product and take it home, if their definition of what they paid for is the definition that went behind that label.

MR. CHAPMAN: And our last question is with Scott.

MR. RICE: Thank you. This is somewhat of a follow-up on the labeling discussion to a degree, but I also just appreciate hearing about the focus on fair and consistent standards and that being a priority, as a certifier representative, I can certainly appreciate consistent standards.

We hear in comments before our board and from producers and certifiers about inconsistent interpretation of the pasture rule,

and we are optimistic that the OLPP rule would address some of those things. We are happy to hear about upcoming unannounced inspections of U.S. dairies, as Jenny mentioned in her remarks.

But in the absence of OLPP further defining those pasture standards, your thoughts on how the community might address some of those issues so that we can ensure consumer expectations are met under the label that we already have.

We offer the wrapper labels or the PVP; we've worked on a transitional PVP, but have not seen that move forward, despite being a recommendation from this board in the past. I'm just looking for any thoughts you might have on that. Thank you.

MR. IBACH: So in a lot of ways, I think we've already talked about a lot of the dimensions that you're asking about. As I walk up to an egg case, especially in Nebraska, it's not quite as diverse as it is in Washington, D.C., or if I go to Steamboat Springs, Colorado,

to the grocery store and what we're out there; I think there are 150 different ways to label eggs at the point of consumption.

So we are offering consumers lots of information there. What I worry about is whether or not the labels -- and I think that's what the core -- where we need to start with at USDA in the organic program, and where we are starting -- to make sure there's value in that very first and that very primary label of, Does this meet the U.S. organic standards?

And after we have addressed that problem and made sure that we're comfortable that we've achieved the goal that, when a consumer sees that seal, it meets the U.S. standards, and that the international products coming in also meet those U.S. standards -- which is a big challenge right now that we've identified -- we have a lot of would to do to make sure, especially on an international basis, that we're meeting that expectation.

Then I think we have a chance to

maybe start talking about some of these other levels and other certifications and other labelings.

MR. CHAPMAN: Okay. So it's a little after 10:30. I really want to thank Mr. Ibach for your time here today, taking our questions and having this thoughtful dialogue. I don't know if you have any other closing remarks, but again, thank you for your time. I hope to see you in St. Paul for our next meeting so we can continue this dialogue, and I look forward to working with the administration in the time in between.

With that, we will move to a recess. Originally, we were going to recess from 10:15 to 10:30; we'll recess until 10:45 and start off with public comment at that time. So please be back in 11 minutes now, at 10:45.

(Whereupon, the meeting regarding above-entitled matter went off the record at 10:34 a.m. and resumed at 10:52 a.m.)

MR. CHAPMAN: All right everyone.

We're going to get started now. If members could take their seats, and if the public could take their seats, as well.

Okay, welcome back everyone. We're going to be getting started with public comment momentarily. Just going to take care of some quick housekeeping items.

And one of that is WiFi. If people are looking for WiFi, the password is the very hack-proof NOSB2018. N-O-S-B-2018. So that's the password for that. And I need to speak louder, apparently. Okay. Ooh, really loud.

So, I'm going to start with speaking about the NOSB conflict-of-interest policy and then I'm going to move into public comment rules, and I'll try to make this as brief as I can.

But the NOSB is governed by its conflict of interest policy. It's in accordance with the policy and procedures manual. NOSB members are classified as representatives under the Federal Advisory Committee Act.

Each representative is appointed to articulate the points of interest of their particular interest group. The Organic Food Product Act describes interest groups that include farmers and growers, handlers, certifiers, environmentalists, conservationists, scientists, consumers, public interest groups and retailers, and as such, NOSB members are not expected to provide independent expert advice. Rather, advice based on the interests of the groups they serve.

NOSB members represent interests of that particular group, and as such, those interests are considered acceptable interests.

Interests. Any interest that is acceptable, that is carried down by half of the represented group, and if the Board member receives no disproportionate benefit, expressing that interest.

True conflicts of interest arise when the interest is direct, or disproportionately benefits a person associated -- the person or

the persons associated with that member, could impair the member's objectivity in representing their group, or has the potential to create an unfair competitive advantage.

The appearance of a personal conflict and loss of impartiality, while not a true conflict, must also be considered when conducting NOSB business.

Once discussion documents and proposals are posted for public comment, each NOSB member is to review those documents across all the subcommittees, researching potential conflicts of interests, due to their organizational affiliations or relationships, and disclose those to the NOSB and NOP.

Prior to the meeting, the program provides a matrix to all NOSB members that lists the items being considered for the meeting. Members use this matrix to disclose conflicts of interest for us to reference recusals when voting on those items -- voting or discussing those items.

If an individual's unsure if they have a conflict of interest, the question's then posed to the NOPDFO, and working with the USDA Office of Ethics, as needed, will make a determination as to whether a conflict exists.

There were no recusals at this meeting and, therefore, we won't be reminding Board members at the start of each subcommittee about the need to recuse themselves. If Board members wish to disclose any information at this time about their interests, they're welcome to do so, but not required, given it's already been done. Does anyone wish to make a statement?

Seeing none, we'll move on to some housekeeping about public comments. I asked folks to be courteous to their neighbors, public commenters and to the Board, please silence your phones, computers, and take any conversations outside to the hallway.

Please try not to be distracting to the Board or presenters if walking around, or using media to document the meeting. We have

stanchions placed and tables. We ask the public to refrain from coming behind the Board, as it's distracting to Board members listening to the testimony and deliberating on issues.

This isn't to deter public interaction with individual members during breaks, and I remind the public that photography use and other media is allowed at this public meeting.

We've provided some space off to the side of the podium for members to take photos of speakers as necessary, but I ask that you don't get distracting and block the speaking members, and come between the speaking public and the Board.

Those being disruptive will be warned, and if disruptions continue, we will ask those individuals to leave the meeting.

To start public comment, I want to remind folks of some of the requirements outlined in the policies and procedures manual. Comments are three minutes. The lighting will

start after you do your name and affiliation.

It starts with green. A yellow warning light comes at one minute left, and then when the time up -- when the time's up, a red light will flash and a sound will beep. Please finish your sentence at that red light.

While I hate interrupting folks, we need to ensure equal access. And so, I ask that you finish that sentence as quickly as possible. But don't run away from the podium just yet, because we may questions from the Board as well.

If you have a presentation, there's a remote up there that you can use to move the slides forward. And if you have a presentation, make sure you get it to Michelle well before your time on the schedule.

I'll be asking everyone to start by stating their name and affiliation for the record. We ask that you disclose all relevant affiliations pertaining to matters of business before the Board. If members want further clarification, I encourage you to ask questions

after the commenter has finished.

Just some more -- please get to the next slide -- just more items to bring up. No proxies are allowed. Commenters shall refrain from making personal attacks or remarks that might impugn the character of any individual.

If I hear something of this nature, I will interrupt the commenter and ask him to refrain from the activity. We ask that public commenters please be clear and succinct in your comments. It's your time to talk on the subjects that you wish, but please keep in mind that we can only hear so many words within a three-minute time span. So, speed-reading might not best -- might not be the best way to get your comments to us.

That's it. Michelle, did I miss anything? Okay. I talked about the timer. Yeah. Okay. So, up first is Kelly Damewood. On deck is Phil LaRocca, CCOF, followed by Zea Sonnabend.

Before we start with public comment,

I realize we had one question that I skipped over -- I inadvertently missed from the program report. So, I was hoping that Jenny -- not to put you on the spot, you might be able to field the questions from Harriet.

MS. BEHAR: Hi, Jenny. I am wondering if there are plans for another peer review for this year of the National Organic Program's accreditation program.

DR. TUCKER: Yes, there is. We have contracted again with ANSI, and it's actually scheduled for, I think about two weeks -- two or three weeks from now. They will be coming -- we've modified it this year to have them come onsite.

It's been virtual for the last couple of times, and we all agreed that it would be best if they came and just sat with us. So, they're going to actually be with us almost a full week going through records.

In the -- do you want -- I can share a little bit more data if -- okay. We

are -- the peer reviews have been super helpful. I've -- at the end of the November meeting -- and I sort of shared what some of the findings have been. We have found that the peer reviews -- last year it ended up being a lot of -- you know, they didn't sign this document, or they didn't sign that document, or this procedure needs to be updated.

So, with some of the challenges that we're having right now in import oversight in particular, we've asked them to really focus actually on a set of sort of accreditation documents that are directly related to some of the challenges that we're having right now, so we have a fresh pair of eyes that are looking at, okay, how are we doing accreditation audit, and are we finding what we really need to find in this environment?

And so, we're kind of -- so it's still the exact same process that we've used in the past, but we have asked them to look through it through different eyes, through a more

systems-level eyes of, are we doing everything we possibly can through the accreditation process to detect some of these problems in a better way?

So, I'm actually really eager and interested to see what they come back with. I think they're going to come back with some different kinds of recommendations, instead of, well, you didn't update this procedure.

I think that they're going to be more foundationally system-driven. And so, that's why we crafted it a bit differently this year, so we can get feedback from a third party.

So, short answer, yes. We are doing a peer review, and we find them helpful.

MS. BEHAR: Will it be just ANSI, or there will be some outside --

DR. TUCKER: So, they have, again, convened a team, as they have in the past. I don't have all of their names. This time we have Organic folks, but we also have folks who are not from Organic, that are taking -- who

don't know us, but do know quality systems, and do know oversight and do know systems thinking.

And so, I think it's going to be -- it's a -- because of that, ANSI decided to add an extra person. We didn't ask them to, but they've added an extra person.

The other thing they're doing is, there has been an update to ANSI's -- the -- whatever the number is -- and I know I should have this memorized, but I don't remember the number --

MS. BEHAR: Is that 17011.

DR. TUCKER: Thank you -- 17011. So, ANSI has updated 17011 into -- in the new one has either just been released, or is about to be released, has a risk-based component to it, in terms of risk-based systems management.

And so, they're also going to be doing a bit of a gap analysis between the existing 17011 that we're using, and the brand new one, so we can figure out what do we need to do as a program, to incrementally change our

operations to be consistent with the latest standards.

So, they're doing a gap analysis, which is also part of why they're also bringing another person in. So, we have a really strong team that's managing that process within NOP and facilitating documents.

And, again, we'll be kind of holed up with them for a whole week on this, coming up fairly soon, which means that at the next meeting we'll present the findings of that week and the past, publish the report online as well.

MS. BEHAR: Thank you.

DR. TUCKER: Yeah, thank you. Good question.

MR. CHAPMAN: All right. So, we'll move on to public comment. First up is Kelly, followed by Phil. Phil, there's an on-deck chair for everyone. There's an on-deck chair over here behind Michelle. And Kelly, if you can start with your name and affiliation for the record.

MS. DAMEWOOD: Hi. My name is Kelly Damewood. I'm the Director of Policy and Government Affairs for CCOF. We're a non-profit, organic certification agency and member-based advocacy organization based in Santa Cruz, California.

I'll admit, I was a little alarmed to see I was the first speaker today, but I am relieved to say that I am speaking on a far less controversial topic than our last few meetings together.

Today, I just want to elaborate on our written comment regarding the native ecosystems proposal. CCOF is not opposed to this proposal. We, of course, support the goal to protect native ecosystems, and are not opposed to moving this proposal forward if the NOSB believes this is the best tool to achieve that goal, the right means to the end.

Our general sense is, the goal of protecting native ecosystems, of protecting fragile habitats and species, is actually best

achieved through local, state, federal and international policy, and very much believe Organic needs to be at the table working on those broad issues.

Because at the end of the day, a ten-year waiting period to convert to organic may disincentivize conversion to organic, but it does nothing to stop conversion to conventional. So, in some senses, you could see a disincentive to convert to organic as an incentive to expand and perpetuate conventional production.

What CCOF would propose is that if it's appropriate to consider disincentives within the standards, we should also consider incentives in the standards. In California -- the state with the highest volume or organic production -- less than four percent of our agricultural land is farmed organically, and less than one percent nationally.

So, we really do have sufficient agricultural land in the United States to support healthy, productive organic systems.

So, what we would propose is that we consider how to move the needle. How to help growers overcome the three-year transition period and other barriers to organic. We should also be exploring incentives to convert existing agriculture land.

So, again, in sum, we are not opposed to the proposal, and would welcome the opportunity to explore incentive-based approaches. Thank you.

MR. CHAPMAN: I have a question, then Harriet. So, what -- do you have examples of incentives that you would propose?

MS. DAMEWOOD: No. We haven't thoroughly thought through what the possibilities could be. You know, I think there have been efforts around a market for a transitional label. And I'm not saying that that's something we would support or not, or what the merits would be, but that's one idea.

Another idea we have tossed around is, would it be possible to allow transitional

ingredients in that five percent allowance and process products? Again, just an idea we've tossed around. Nothing we've thoroughly vetted.

But if the NOSB wants to consider this disincentive in the standards and would put out a call for proposals on incentives, we would thoroughly explore those options.

MR. CHAPMAN: Harriet?

MS. BEHAR: Do you think there's something in research priorities that we could add that might help us discover what incentives could be? I'm just thinking about things that we can actually do on the NOSB. So, I'm wondering if maybe we could put in the research priorities.

MS. DAMEWOOD: I think you could put it in the research priorities in terms of production barriers during that three-year transition period. Yield -- you know, how to increase yields during those three years.

I guess what we're referring to more is, if we're looking at the standards itself at

disincentives, are there areas in the standards, like allowance of some percent of transitional product -- you know, not saying that's the right solution, but, you know, can we look in the standards itself to look at ways to support growers who seek to convert conventional land? And I'll think more on the research question and follow up.

MR. CHAPMAN: Dave, then Emily.

MR. MORTENSEN: The research -- and we've actually done some of this in my lab -- that underpins the thinking in this proposal strongly indicates that in landscapes with predominantly ag use, it's the slivers of non-disturbed land that contain upwards of 80 percent of the biodiversity, even when they only occupy five or ten percent of the land area.

And so, it's the goal of this proposal that we are stewarding that biodiversity. And at the same time, it's ironic that we have implemented numerous federal programs -- like EQIP and others -- to increase

biodiversity, when we actually know that the slivers of undeveloped space are sort of the hotspots of biodiversity within our agri-ecological matrix.

MS. DAMEWOOD: Right. I agree, and completely understand and support that goal.

MR. CHAPMAN: Emily.

MS. OAKLEY: I just really wanted to thank you for your comments, and I also wanted to say that, you know, coming from a state like California that has quite a bit of regulation, I think that can be a good tool in those instances.

But coming from a state like Oklahoma that doesn't have nearly as much regulation, this can be a tool to help even that playing field out. So, just a comment.

MS. DAMEWOOD: Yeah, well exactly, Emily. You know, my sister lives in Oklahoma, so I completely understand the differences between the regulation in California versus Oklahoma.

And one question we would have is, are there regional approaches we could take? Santa Cruz County, where CCOF is located, has incredibly robust regulation.

I'm confident that an organic producer cannot convert a native ecosystem in our county. Yet, keep in mind that this requirement would apply to every new application, every new parcel added, so it's going to be an additional requirement for all of those growers, regardless of your region.

So, one more requirement, one more cost, you know. It's already challenging for certain populations to show three-year land use history. I'm not saying CCOF can't do it, we can't figure it out, because we would -- you know, if this passes, we would be at the table to work on how to figure it out.

So, I think we would ask that maybe some regional consideration, but I completely recognize the differences.

MR. CHAPMAN: Thank you.

MS. DAMEWOOD: Thanks.

MR. CHAPMAN: Up next we have Phil, followed by Zea. Phil, if you could start with your name and affiliation.

MR. LaROCCA: Good morning. My name is Phil LaRocca. I'm the owner and winemaker of LaRocca Vineyards, and I am also -- excuse me -- the Chairman of the Board of Directors for CCOF.

Like Kelly, I think if I was number two in the line at a ski slope, I'd be a little bit more excited than to be number two to address everybody here.

But I'd like to talk about the issue of drift a little bit. It's always been a concern to myself personally, but also to the entire organic industry. And when I'm referring to drift, I don't just mean pesticide/herbicide, but also GMO drift.

I've had this discussion a lot at CCOF, and in my heart, my true belief -- to be fair to the organic industry, the organic

consumer, the organic grower -- there's should be a zero tolerance level.

But the negative side of that is that some innocent grower could be affected by that, and I personally have seen a grower be put out of business because their crop was drifted by GMOs in the Midwest.

A very sad affair, and I honestly cannot justify seeing that. So, yesterday I was talking to a past NOSB member. He mentioned that there was a whitepaper that this board reviewed several years ago regarding a Superfund, that dealt with pollution, government pollution.

And certainly, if you are drifted by roundup, you are being polluted if you are an organic farmer. So, I guess what I'm asking is this Board to re-look up that whitepaper, and maybe take some interest in that and see what we can do as a group about pesticide and genetic drift.

I know it may be an impossibility of

money from the government for something like that, but if we look at it that way, as an impossibility, it will be. So, we got to take a step forward.

The next thing I'd like to talk about briefly is sulfur. I've been using sulfur for over 47 years, in both growing apples and grapes. I mostly use a mined, elemental sulfur. I have used dust in the past, but as the guy putting it on, I hated it, and so when my sons were going to follow me, I didn't feel fair.

But I see nothing wrong with it as a material, and I was -- mentioned another farmer -- organic farmer friend of mine mentioned that the duster that I was using in the '70s is way improved on in the 21st century.

But I also want to make the point that I'm constantly being bombarded with new fungicides for powdery mildew. And what's interesting is, every one gets replaced by another one, because what we're seeing in the industry -- especially the grape

industry -- that powdery mildew is getting tolerant to these synthetic fungicides.

And they actually recommend to the grower that you don't use the same fungicide that you intermix. The only one that can be consistent through all these years is elemental sulfur.

And it's kind of funny, but one of my old mentors was John Parducci, and he told me that 2000 years ago, the Romans used sulfur. They used to hang them underneath their grapevines.

And one of my sons was with me, so he's got six vines by his house, and he hangs bags of sulfur, and he doesn't get mildew.

MR. CHAPMAN: Thank you.

MR. LaROCCA: Thank you.

MR. CHAPMAN: Thank you, Phil. Any questions? Asa, then Harriet.

MR. BRADMAN: I just wanted to thank you for your comments, and also ask about sulfur and dust versus wettable solutions. We've had

some conversations with, I think it's Greg Clark and -- is it Tom Linegar at -- from Sonoma?

And at least in Sonoma, they've been encouraging moving away from dust applications. And I'm wondering if you feel that the wettables are as efficacious or not, and other issues with cost or relative balance, and if there would be -- if it would make sense to discourage the use of dust in organic applications.

MR. LaROCCA: Well, here's the advantage if you're using wettable, which we do. I haven't used dust since 1982. But you're running a spray rig in your vineyard. So, if it's -- your ground is wet, it's easier to just hook a small duster in the back that's -- a great grower friend of mine uses that only when he can't get in the vineyard.

But there are times when you're under such distress for powdery mildew, that to have that tool to be able to go in, in that moment, where you can't go in with a big rig with 400 gallons of water behind you, I think is valuable

to keep dust on the list.

Again, I don't use it. I didn't like it because it was really annoying to me as the guy putting it on.

MR. CHAPMAN: Harriet.

MS. BEHAR: So, on pesticide drift, I know when Miles was deputy administrator, there was discussion with inside the National Organic Program about putting out some guidance. Because right now, you can't get crop insurance, doesn't cover it.

Basically, the only thing that you can do is litigate. And in many areas, it's hard to get a settlement based on the organic price, or even in understanding -- in Minnesota you don't even lose your organic certification if you get drifted upon, according to the Minnesota Supreme Court.

So, I just am wondering -- it's not necessarily fulfilled, but wondering if inside the National Organic Program, if there would be some guidance to actually have the National

Organic Program somewhat state that, in very clear terms, that land that has gotten drifted cannot be sold as organic.

And also to give some more consistency to certifiers, because some will say just that crop is not certified, some will say it's one year, two years, three years, they add extra buffer zone, there is not consistent implementation what happens on an organic farm, and as well just loss of certification.

DR. LEWIS: Thank you, Harriet. So, I'll try to respond to the question. So, yes, we're aware of the issue. It's an area that we have been looking at over time. Obviously, we have a number of competing priorities up -- we spoke about the past hour.

So, we don't have a guidance drafted at this time, but something that we recognize.

MR. LaROCCA: Thank you.

MR. CHAPMAN: Thank you. Thank you, Phil. Up next I have Zea, followed by Richard Wallick.

MS. SONNABEND: Hello, everyone. I'm Zea Sonnabend, representing CCOF, a small farmer from Fruitilicious Farm in Watsonville, California, and a former NOSB member in the scientist's seat.

I am also one of the people who's been coming to many of these meetings since almost the very beginning, so I am a potential historical resource for you, if you have questions of what might have gone on in the past.

Today, I'd like to talk about a few issues of interest to CCOF and their growers. First of all, the seed integrity discussion document. We thank you very much for keeping this work in front of the public. We need, I think, to move towards a goal in the future, of adopting some sort of threshold to assure the genetic integrity of seeds, both organic and non-organic.

We recognize that it's a complicated issue and it really needs people with

specialized expertise if you're going to take on the issue of testing protocols and quantification of pollution and interpretation of results.

And so, we very much urge you to try to keep the effort moving forward to appoint a seed purity task force, which is something the NOSB has now been asking for, for close to a year. No, close to two years in August. And would really help you deal with some of the issues that you don't have your own expertise to resolve.

Meanwhile, we think it's important to keep working on it and focus on concrete actions and action steps that can keep this moving forward, until a task force can be appointed and hammer out the details.

So, one of these would be to encourage growers to hold back seed samples of their at-risk seeds for 18 months, and my colleague, Jake Lewin, will speak a little bit more about that later.

Next, we had a proposal that was presented when I was on the Board on strengthening the requirements for the use of organic seed, that has been worked on several meetings, and is almost done, and we were hoping to see it at this meeting. And it is not here.

So, we would like to strongly encourage you to keep moving forward and come to a proposal, a recommendation, on that.

And then, partially moving on from seed, I want to remind both the NOSB and the NOP that in 2016 the Board adopted clarifications for guidance on excluded methods.

This work is urgently in need of being formalized so that the GMOs are kept out of organics. I realize that you're under pressure from the rest of the USDA to relent, but the organic community is firmly behind, and it was a unanimous vote to pass definitions, criteria, and more for guidance.

And I can talk about sulfur if anyone has a question.

MR. CHAPMAN: Thank you, Zea. Emily?

MS. OAKLEY: Can I ask you about polyoxin D zinc salt, as well? Because that was originally petitioned when you were on the Board.

MS. SONNABEND: Yes.

MS. OAKLEY: So, I just wanted to know if the concerns that the Board expressed in 2012 you felt were resolved in this current petition?

MS. SONNABEND: Okay. First of all, take off my CCOF hat for this, because CCOF does not take a position on new petitions. But I did review it as a scientist on the Board, and I did -- felt that the new information and the information presented to the Board was enough to satisfy many of the concerns we have.

And I think it is a material that could be very useful. In my area, for instance, you almost cannot grow basil outside anymore, because of downy mildew. And so, it's really a necessity in order to produce many of the crops.

And also, what we're just -- what was just being spoken about, about resistance management, so they can alternate materials. Those are important considerations.

MR. CHAPMAN: Harriet?

MS. BEHAR: Do you feel that having transparency on the seed tag for at-risk crops is maybe a first step towards looking at possible thresholds? Or do you feel that that would not be a useful tool?

MS. SONNABEND: No. I do think that would be useful, but I'm not sure if you have the ability to require it for non-organic seed. You know, that's something -- for organic seed, you could, I suppose, put an additional requirement that bags be tagged.

But I think you really would need to poll the seed production community to see if something scary would end up on the tag that would then put them out of business. So, I do think it's an action step to explore, for sure. But whether we're ready for it I'm not

too -- I'm not positive.

MR. CHAPMAN: Asa.

MR. BRADMAN: I'm just asking you about sulfur.

MS. SONNABEND: Thank you. Well, first of all, I'm glad that the Board decided the research that was done by you and your group, it is well-conducted research, and does point to some areas of concern.

It's not enough by itself to build the case to take some form of sulfur off the list. It's not replicated, it doesn't distinguish between wettable and dusting sulfur. While both are used in the Salinas Valley, but it's not a real clear -- because you didn't study which fields were dusting sulfur, and which fields were wettable sulfur, you don't know that one or the other is causing them.

I would like to point you particularly to the comment submitted by Juan Hidalgo in the public record, who is the Ag Commissioner for Santa Cruz county, and it's

particularly about sulfur use in strawberries, which it would be the main crop that gets sulfur applied in the Salinas Valley.

There's grapes in the southern part of the valley, but it's mostly strawberries that would have it there. And he talks a lot about mitigation measures.

And if you just follow the label instructions for the proper protective equipment and the wind -- there are wind requirements, that you don't spray when it's too windy -- and he believes that a lot of it could be just solved with label enforcement -- a lot of the drift issues.

Secondarily, I would really refer you to the -- we compiled comments from CCOF growers about the reasons why they could or couldn't use wettable versus dusting. Many of the ones who say they only use wettable, are only in tree fruit.

Like, I use it on my tree fruit. I wouldn't -- do not need dusting sulfur. But the

berries, the grapes, and there was one person who said they used it on their melons, you know, very low to the ground crop with mildew problems, and those are the issues. Some of them said they didn't even have water, they had dry farm grape orchards, and it would be hard to fill up their spring tanks with water.

Some of them would have to buy new equipment. The sprayer that we have costs, you know, $12,000, and that's not even that big of a one. So, there's some very real issues, which are obstacles to the growers for being able to make that change.

So, if you want to make that change in the future, you really need to build a case and study it quite thoroughly.

MR. CHAPMAN: Thank you, Zea. A-Dae? So, okay. I think Paul had a follow-up?

DR. LEWIS: Thank you, Zea. I just want to follow up in terms of some of the comments about excluded methods, and Harriet might want to add to this also.

Since the Board met at our last meeting, the Department hired a biotechnology coordinator, Fan-Li Chou, who serves a role dealing with biotechnology issues across Department.

We were fortunate to invite her to a recent material subcommittee meeting. So, this provides an opportunity for her to share with material subcommittee, in terms of what's happening with biotechnology issues across Department, and to help material subcommittee with their work in excluded methods.

So, Harriet might want to at least add to some of that. But in terms of what we see her role is, an important liaison role between the Department and material subcommittee, in terms of excluded methods work.

MS. BEHAR: Why would someone who is promoting biotech help the Board keep biotech products out?

DR. LEWIS: It's not that -- an issue of promoting. It's more in terms of informing

the subcommittee in terms of the work that's happening across the Department.

MS. BEHAR: The few terms that are still left to review? Because the others have been decided.

DR. LEWIS: In terms of that -- helping the Board in terms of its work.

MS. BEHAR: Mm hmm. Okay. Well, we hope that it does stay on the work plan.

DR. LEWIS: And it is. Thank you.

MS. BEHAR: So, we did have some discussion with Dr. Chou, and there was an understanding that the National Organic Program does have the statutory authority to choose which methods are excluded.

So, we're -- there is a little bit of a discussion on which -- what is the meaning of biotechnology, and which materials would fit under a USDA definition, and Codex, and National Academy of Sciences, and all of these things.

But our rule is structured in a way that we're looking at methods as excluded. And

so, if they fall under what we've worked out for the terminology and the criteria and the definitions of what should be excluded, I think we do have that authority.

So -- but we want to make sure that the rest of the USDA and the rest of the government is also -- understands where we're headed. So, we're trying to open those channels of communication.

MS. SONNABEND: And that -- you know, we were careful to craft our sub-definitions under excluded methods to be consistent with international norms, with Codex, with IFOAM, and with the other entities in the rest of the world that are tackling the same issues.

MR. CHAPMAN: Thank you.

MS. SONNABEND: Thanks.

MR. CHAPMAN: Up next we have Richard Wallick, followed by Jenny Cruse.

MR. WALLICK: My name is Rich Wallick and I have no affiliations whatsoever. OMRI, with products by Monsanto, Dow, Bayer and

commercial compost that contain lead, arsenic and cadmium, for use under USDA Organic. Next slide, please.

According to the USDA, NOP 3012, and other USDA instructions document, certifiers cannot accept OMRI-approved materials for organic production, and must verify them themselves. Next slide, please?

We have here a document, it is Notice of Non-Conformance, issued to OMRI by the USDA. It is redacted completely, including dates. Next slide, please.

We have here a complaint issued by NOP to -- regarding OMRI, that OMRI has incorrectly evaluated and approved the product, and that OMRI has refused to immediately delist the product containing, in this case, natamycin, as directed by NOP. Next slide, please.

We have here the result of the investigation done by the USDA. As you can see, the investigation clearly states, based on NOP rulings, OMRI is non-compliant to the NOP rule.

They remain in conformance with ISO/IED 17065.

OMRI has followed all the procedures in their manuals that represent the quality management system. 17065 accreditation is not to the NOP. It is independent of the NOP. It does not require OMRI to abide by the Organic Food Production Act, USDA regulation, or NOP directives, according to the USDA. Next slide, please?

ISO 17065 certification is eligible only for accredited, certified bodies or entities. According to the USDA itself, the QADs are granted OMRI ISO certification.

Accreditation to these standards is contingent upon certification body being in good standing as a USDA NOP-accredited certifying agent. OMRI is not a USDA NOP-accredited certifying agent. That's it.

MR. CHAPMAN: Thank you. Any questions? Thank you. Up next we have Jenny Cruse, followed by Beth Rota. Jenny, you can start with your name and affiliation for the

record.

MS. CRUSE: I'm Jenny Cruse, coordinator for the Accredited Certifiers Association. The ACA mission is to ensure consistent implementation of the USDA organic regulations through collaboration and education of accredited certification agencies, and over 90 percent of US-based certifiers are accredited by the USDA National Organic Program are members of our organization.

Our comments for today are in response to the CACS's questions of whether reporting of whether reporting of production acreage and yield information to the organic integrity database would strengthen global organic control systems, and whether this information is currently accumulated by certifiers.

In the ACA best practices on verifying traceability in the supply chain, the working group concluded that lack of transparency and production in marketing was a

barrier to ensuring organic integrity on a large scale.

Part of the problem is that there isn't a clear picture of the total organic land base to enable a mass balance calculation across the supply chain.

The working group further concluded that certifiers should all submit data on organic acreage for inclusion in the organic integrity database. However, we recognize that not all certifiers are readily able to do this, and that use of various databases makes it difficult to implement a uniform solution.

In response to the CACS's discussion document questions on this topic, we conducted a survey of our membership. We received responses from 29 out of 54 of our certifier member organizations, a response rate of 53.7 percent.

I provided a report of this information in the AC's written comment submitted on April 4th. We collected a few more survey results since then, and I'll leave an

updated report here with Michelle for reference.

When asked whether including production acreage information in the organic integrity database would strengthen global organic control systems, 50 percent said yes, about 29 percent said maybe, and about 21 percent said no.

When asked whether, given current resources, organizations could readily -- within two hours -- report on total organic acreage by crop type and state, within a five percent margin of error, about 17 percent answered yes, about 22 percent said maybe, and about 62 percent said no.

When the no respondents were asked what amount of time would be sufficient to put into place a system to enable this, about 37 percent said it could happen in less than a year, 30 percent said a year to two years, 12.5 were uncertain, 21 percent said they could not practically implement such reporting given current resources.

We support further conversation on this topic, recognizing the importance of production and marketplace transparency, but also acknowledging the challenges inherent in moving toward data systems that are more robust, transparent and useful.

The solution isn't clear, but further conversation is important, and we look forward to that.

MR. CHAPMAN: Questions. Harriet?

MS. BEHAR: Hi, Jenny. I'm wondering how much communication there is between certifiers if clients of the certifier has a question. Can they work through their own certifier if they're not getting answers from the certifier of the supplier of the product they're trying to buy?

MS. CRUSE: One thing that kind of came about, or was noted as a challenge during the working group project on traceability, was kind of a lack of uniformity on understanding of what information is okay to share during either

a process of investigation, or an inquiry that is maybe less formal. So, that was noted as a challenge.

MR. CHAPMAN: Dave?

MR. MORTENSEN: Jenny, I was wondering if you were to do a triage, what might be the one or two most impactful steps to take to increase our understanding of what's out there and how much? What might they be?

MS. CRUSE: My perspective is that conversation with our European counterparts is very important. It seems that they have made strides that we haven't quite made yet, and they have given us some great guidance so far. And I think that conversation is pretty critical.

I also, when I heard the phrase research priorities earlier today, I kind of went, hmm. So, those are my two current thoughts on that.

MR. CHAPMAN: Do you have some of those European examples you could share with us?

MS. CRUSE: We had a couple of

members of the working group. I could get you a list of participants and kind of the contributions that they made. I'm afraid I don't have it at the top of my head.

MR. CHAPMAN: That would be great. Thank you.

MS. CRUSE: Mm hmm.

MR. CHAPMAN: Thank you very much. Up next is Beth Rota, followed by Shannon Helms. Beth, you can start with your name and affiliation.

MS. ROTA: Good morning. My name is Beth Rota and I work with Quality Certification Services. QCS is a USDA-accredited organic certifier. We certify over 1400 NOP certified operations in more than 40 states and more than ten countries.

And this morning I want to talk really briefly about imports oversight. The NOSB put together a great discussion document with a lot of questions, and I wanted to cover some of those from a certifier perspective, and

elaborate on my written comments.

First, I would like to applaud the presentation from the NOP this morning, and the USDA really taking the lead in gathering and analyzing data. And I think that's going to do a lot to move us forward as an industry, and I'd like to see that continue, and to have, you know, just continued leadership for the supply chain oversight.

And I think we need to not limit ourselves to just looking at the oversight of imports, but to looking at the entire supply chain, and where there is the risk of fraud in the entire supply chain, because it's not limited to just imports.

And as a certifier, when we're look at the supply chain, it's very piecemeal. We're really only looking at one step back in the process. When we're reviewing -- doing a sample audit or a sample mass balance, a traceability audit as part of our inspections, we're just going back to the last certified organic

producer in the supply chain.

And so, we don't have the -- we really don't have a whole transparent picture of the entire supply chain, and I think that's where we need some leadership from the NOP that they have more information, or access to more information, than just any one certifier can get.

And we touched on -- you touched on a couple of these topics this morning, and I think they're really important, and the questions that were in your discussion document.

We do think that all the documents that are issued by handlers or by certifiers, should identify the product as organic, but it may not be feasible to require documents that are issued by other agencies outside of the purview of the certifier, to identify docu- -- the product as organic.

Things that are issued, you know, at the port of entry, like you were talking about, the CEBP doesn't currently have a way to mark

products as organic, so it'd be important to work on that. But we can't enforce that, as certifiers.

Also, requiring organic certification for all handlers in the supply chain, including importers, would really do a lot to increase oversight and detect and deter fraud.

One of the things that doing that will cause is a big growth in the industry, and certifiers will need help to be able to handle that growth in the amount of operations that we're certifying.

And so, we ask the NOSB and the NOP to support certifiers, as we have to train new staff and new inspectors to meet that demand. Thank you.

MR. CHAPMAN: Questions?

MS. DE LIMA: Okay, I have a question about one of your written comments --

MS. ROTA: Yeah?

MS. DE LIMA: -- it was mono- and diglycerides. And I think you guys have -- you

had said that you would support the removal, because there were alternative substances available for drum drying, and alternative methods.

And I was wondering if you had any more specifics, if you'd actually seen those alternative methods being used by any producers? Because that was something that was mentioned in the TR, but we haven't heard any specific comment about, like, real-life use.

MS. ROTA: I would be happy to address that question later. I'm going to have to go back through my emails with our handling expert who submitted those comments, and I'd be happy to --

MS. DE LIMA: That would be very helpful.

MS. ROTA: Yeah.

MS. DE LIMA: Thank you.

MR. CHAPMAN: If I could follow up on that, particularly in potato applications, would be of interest if you know --

MS. ROTA: It's here.

MR. CHAPMAN: -- of alternatives for potatoes. Yeah.

MS. ROTA: Okay.

MR. CHAPMAN: Scott, then Ashley.

MR. RICE: Beth, you mentioned the certification of the entire supply chain taking -- or putting a burden on certifiers.

Do you see -- what would you see as a realistic timeline as, like a phase-in, or what does that horizon look like once -- assuming that would be required at some point in the future?

MS. ROTA: The certification of the entire supply chain? So, I think that -- I think it would have to be a multi-year. Of course, I would have to go through the rule-making process. It would require a rule change.

But helping certifiers ramp up and get more staff and get inspectors trained would take, I think, as we anticipate that, but giving some time, maybe a year for the transition.

MR. CHAPMAN: Ashley?

MS. SWAFFAR: Thank you for your comments. I have two questions for you. One is glycolic acid on livestock. You had said that your producers have not indicated that the alternatives are not working for them.

And I was just kind of wanting to get a sense of your poll of those producers. Was that the majority of your producers, or just a few handful that you heard from? Do you know?

MS. ROTA: That was just a general consensus of our livestock managers having discussed with inspectors about whether the substances that were currently available were effective.

MS. SWAFFAR: Okay, great. And the follow-up, I have one on native ecosystems --

MR. CHAPMAN: Please speak up into the mic.

MS. SWAFFAR: Sorry. On native ecosystems you questioned the authority of this Board to define that, which I halfway agree

with, and -- but the thing you said was it would be very difficult for certifiers to validate that. Could you expand upon that a little bit for us?

MS. ROTA: Yes. So, when a operation applies for organic certification, we have to review their organic system plan, and then plan an inspection at the time that there is something there to inspect.

So, a crop, for example, there to inspect. So, we would not have the opportunity to go visit a site prior to the conversion of that site to production of a crop intended for an organic market. And we could look at GPS data, maps, but we wouldn't have actual opportunities to do a physical inspection of a site prior to that.

MR. CHAPMAN: Emily?

MS. OAKLEY: Thank you. Are you concerned that the web-based resources would be insufficient?

MS. ROTA: That is one of our

concerns.

MS. OAKLEY: I think that some of that could be addressed through the guidance process and rule-making. And I think that the Wild Farm Alliance was going to be speaking later, might be able to also help address some of those concerns, but thank you.

MS. ROTA: Great.

MR. CHAPMAN: I had one last -- we'll go with Lisa first.

MS. DE LIMA: I've got another handling question for you. And if you need to get back to us after -- it's about gum arabic.

MS. ROTA: Yeah.

MS. DE LIMA: You guys had mentioned that you did think there was organic gum arabic commercially available. But if we could get any more details about how many producers, or in what quantity, and if that was a consistent supply, or if there were, you know, a sporadic supply, that would be helpful to know, as well.

MS. ROTA: Okay. We'd be happy to

get that for you.

MS. DE LIMA: Thanks.

MR. CHAPMAN: And the last question I think is mine, which is, you mentioned you agreed with the certification of uncertified handlers excluding retailers, so, does that include all operations, like warehouses?

MS. DE LIMA: That's a very good question. I don't think that warehouses necessarily would need to be certified, as long as they're included in an organic system plan where they could be inspected, and their records could be inspected, because they don't necessarily have -- if they were to have ownership of the product, I would say yes.

And I think that's where we need to be looking at. Not just physical handlers, but owners and handlers of the product.

MR. CHAPMAN: So, financial owners you would think would need to be certified in all cases?

MS. DE LIMA: Right, so we can be

looking at the supply chain through ownership as well.

MR. CHAPMAN: Okay.

MS. DE LIMA: Because I think there's a lot of risk for fraud in that.

MR. CHAPMAN: What about warehouses that handle products -- warehouses or other operations that handle products that aren't packed, so they're exposed to the environment, be it a -- it could be a produce warehouse, it could be a railcar, it could be a bulk vessel.

MS. DE LIMA: I think that anything that is being handled that is not packed would need to be certified under the existing regulation.

MR. CHAPMAN: Okay. Anything else? Okay, thank you very much for answering our plethora of questions.

MS. DE LIMA: Sure.

MR. CHAPMAN: Up next is Shannon Helms, followed by Jessica Knutzon. Shannon, if you can start with your name and affiliation.

MS. HELMS: Absolutely. My name is Shannon Helms, I'm a global regulatory manager at CP Kelco.

MR. CHAPMAN: Could you speak into the mic a little closer?

MS. HELMS: Yes.

MR. CHAPMAN: Thanks.

MS. HELMS: Get a little bit closer. So, my name is Shannon Helms, I'm a global regulatory manager at CP Kelco. CP Kelco is providing comments in support of the relisting of 205.605a, gellan gum, and 205.605b, xanthan gum.

CP Kelco's customers and organic community benefit from the use of gums because they are used in very small amounts in ingredients and foods and beverages. Gums also provide options for healthier choices and dietary considerations, such as fat replacers -- replacements, for gluten, or replacements for traditional thickeners.

CP Kelco supports gellan gum and its

relisting as an approved food additive regulated by the US Food and Drug Administration under 21 CFR 172.665.

Gellan gum also meets the FDA definition of a stabilizer and thickener, and as such, gellan gum may be used to achieve a technical, functional effects listed in the standards of identity.

Gellan gum provides the organic industry with unique properties to formulate products for consumers across various application segments.

For example, gellan gum can be used in fortified beverages to suspend proteins, minerals, vitamins, fibers, and pulp. Calcium-fortified beverages are of great interest to the organic consumer.

Gellan gum also provides milk solid suspension, and diluted milk drinks.

Gellan gum will also provide the organic community with a non-animal source suitable for vegetarians, vegans, and those of

religious dietary restrictions.

Based on the unique functionality of gellan gum in numerous organic food applications, this substance is essential to the organic production, and should be retained on the national list.

Additionally, CP Kelco has recently filed a petition to include low acyl gellan gum to the 205.605 non-synthetic list, allowing -- allowed listing in support of requests from our customers.

CP Kelco also supports the continued listing of xanthan gum. We would like to reiterate our previous request that the NOSB consider listing this substance as a non-synthetic under 205.605a, as xanthan gum is a natural extracellular polysaccharide, and is produced through the natural process of bacterial growth.

Xanthan gum contributes unique attributes to foods and beverages, thus allowing many more organic products to be formulated and

marketed to the consumer.

Xanthan gum functions as an effective thickener, stabilizer, and emulsifier, with texturing attributes that are attractive to many applications.

The typical amounts of Xanthan gum are used in various small amounts. Thank you.

MR. CHAPMAN: Thank you. Any questions? Thank you very much. Up next is Jessica, followed by Wanda Jurlina. Jessica, if you can start with your name and affiliation.

MS. KNUTZON: Sure. My name is Jessica Knutzon, and I'm a marketing manager of CP Kelco. So, my colleague, Shannon Helms, just reviewed the regulatory elements of CP Kelco's comments. My portion of our comments to support the relisting of xanthan gum and gellan gum, I will go over the essentiality of these products in several applications.

One application that is important for consumers today is plant-based, or dairy alternative beverages. Since the dairy

alternative market is competing with dairy beverages, there's a need to match or exceed diary's calcium claims to make these products competitive in the market. Soluble calcium causes destabilization of proteins during pasteurization. Therefore, soluble calcium is used in non-dairy beverage applications.

Soluble calcium is heavy and dense, making it difficult to suspend during processing in hard packs during storage. Therefore, an ingredient that provides suspension is vital in this application.

Other challenges in these types of formulations include creaming or fat separation, and insoluble cocoa.

So, what can be used for suspension in these applications? Carrageenan, high acyl gellan gum and CMC can be used. Carrageenan provides some suspension with mouthfeel, but does not suspend materials like calcium very well.

There's a negative consumer

perception of carrageenan, which may discourage some food manufacturers from using this ingredient. However, it is suitable for use in organic products.

High acyl gellan gum is flexible and works across all beverage applications, is easy to use, and provides the best suspension, with the lowest mouth feel. High acyl gellan gum is also suitable for use in organic products.

CMC, which can be labeled as cellulose gum or cellulose gel, could also provide suspension, but cannot be used in organic products.

You can see in this image that a .15 percent use level of locust bean, this application has no suspension. However, at only .03 percent use level of gellan gum, this -- excellent suspension in the same product.

For gellan gum essentiality compared to other gums such as carrageenan, pectin, guar gum and locust bean gum, I want to highlight

that there are limited options in beverages for using other stabilizers.

High acyl gellan gum is the one ingredient that works across neutral and acidified systems with protein, without -- with or without protein, to provide stability. Many of the other ingredients cannot -- are only used for mouthfeel.

Let's see, I'm running out of time? So, for xanthan gum, what makes it unique is cold soluble, pH stable, temperature stable. And you can see it outperforms the suspension across several applications, as well.

Xanthan gum versus the competition. You'll see that xanthan gum performs in acid stability, viscosity, and suspension. Locust bean can only perform comparably in acid stability, and guar gum can only perform comparably in viscosity.

So, for looking at the other alternatives across other applications, I want to highlight that for dressings, xanthan gum is

the best product to use both in production and at the end-use products.

For gluten-free applications, it can provide volume in the same mouthfeel qualities that consumers are looking for in non-gluten-free products. And --

MR. CHAPMAN: Thank you. Any questions? Thank you very much. Up next is Wanda Jurlina, followed by Theojary Crisantes.

MS. JURLINA: Yep, no worry. All right, my name is Wanda Jurlina. I'm the Tech Service Manager for CP Kelco. I have over 25 years of experience working with gums and hydrocolloids in the food industry.

So, first off, I would love to see xanthan gum and gellan gum relisted, but I wanted to spend a little bit of time today talking about gums and hydrocolloids in general.

In the industry -- particularly the food industry -- we use those two terms interchangeably. At this meeting, we're currently reviewing gums. But I want to remind

you that really, the broader term would be hydrocolloids. It's ingredients that love water, and provide some sort of viscosity or gel structure.

When we talk about hydrocolloids, we're talking about a wide range of ingredients. Not only those that have gums in the name, but those, like augur, pectin, carrageenan, alginates, gelatin, that are also approved for use in organic products. So, when we talk about these, we really need to look at the broad category.

This is a table in the technical report on gums that details some differences about gum arabic, tragacanth, guar, locust bean gum, gellan and xanthan gum. It is kind of hard to understand what's going on and really develop any information on essentiality from this table.

So, what I've done is I've taken that table and I've adapted it a little bit based on my experience with hydrocolloids. And I've changed some of the categories to try and give

you a better picture of how these particular ingredients compare in different attributes that they bring to products.

So, if you're looking at things like suspension, really, there are limits as to the ingredients that can provide suspension in food applications for those who are trying to produce products for the organic consumer.

If we're talking about things like forming gel structure, with the table the way it's structured now, it is hard to understand what's going on. With these ingredients here, with the exception of high acyl gellan gum, all of these ingredients are thickeners, and on their own can't create gel structure.

So, it's a little misleading having it on that table -- table 6 I think it is -- in the technical report.

So, from there I wanted to -- because this is so focused on thickeners -- include a table that would give you an idea on the gelling agents. While very few of these have gum in the

name, they are in the same category of the ingredients that we are talking about here, to highlight how unique each one of these ingredients are.

So, across the products that have gum in the name, or truly are in the hydrocolloid realm, there are a significant number of different functionalities.

Now, Shannon mentioned before, because of the needs of the processors, we have petitioned for low acyl gellan gum to be added to the list of approved ingredients for use in organic products. Thank you.

MR. CHAPMAN: Steve?

MR. ELA: In the spirit of hydrocolloids --

MS. JURLINA: Yes?

MR. ELA: -- I'll learn here. Alginates are also on the list, I'm guessing that you may not manufacture them, I'm not sure. But do you have any comments on alginates versus some of these other gums?

MS. JURLINA: I actually would have comments on alginate. When I first started working at Kelco, we were the major alginate producer, and I went into applications research for alginates.

So, alginates is actually very unique when we look at it, as compared to the other gelling agents. It is cold soluble, so it has some functionality that you can use that it's very hard to do with the other ingredients that are listed on this product.

It does have some issues with acid stability. So, if you're working at very low pHs, it can be difficult to work with. It does have a very typical texture.

If you see on the range that I've posted there on the bottom, all the way from the soft, elastic texture, to very firm, brittle texture, it's kind of in the middle of the road, so it has a very distinct texture, versus some of the other gelling agents.

And there are many places where it is

beneficial. It does have heat stability in the gels that it creates, one of the original applications for alginates is the pimento strip in the olive, where my very first boss at Kelco was part of the team that developed that technology back in the '50s.

It's a heat-stable gelling agent, so when you go through the retort process in the jar, the pimentos don't melt when you go through it. So, anything else you want to know about alginates, or -- I'd be happy to tell you stories at lunch.

MR. CHAPMAN: Thank you very much.

MS. JURLINA: All right, thank you.

MR. CHAPMAN: Up next is Theojary, followed by Zak Wiegand from Oregon Tilth. Theo, if you could start with your name and affiliation.

MR. CRISANTES: Hi. Good afternoon, ladies and gentlemens. Welcome to Arizona. My name is Theo Crisantes. I'm a grower at Wholesum Harvest. We grow organic vegetables in

open field -- shade houses, green houses, both in ground and in containers.

I would like to take this opportunity to comment on the Crops Subcommittee request for comments on the following materials. First would be elemental sulfur. For us it's an elemental tool, an essential tool as a disease and pest control. It is widely used in our operations.

In our case, we use it as a mineral spray application, since it's a lot easier to handle. Secondly, I would like to comment on liquid fish products.

For us, it's a good source of nutrition for organic agriculture, and provides good food for organisms in our compost, and it's a good source of micronutrients.

Talk a little bit about pH. We found it that sometimes some applications do have a very, very low ph when we receive it. So, I guess, talking about pH, I think there is something to be said about the pH when it's

being manufactured.

So first, acid. For us, it's a very essential tool, especially here in Arizona, because of the well water that we have. Because we use it to treat pH in irrigation of water, because we have high levels of bicarbonates.

So, it provides an effective tool to maintain clean irrigation systems, and to help us reduce built-up mineral sediments and irrigation lines and drip lines.

And lastly, potassium chloride. We find it to be a great source of potassium, and in our experiences, we have not observed any accumulations of chloride in the soil.

I would like to move a little bit on to the topic of imports. You know, it's been something that has been a lot of focus on grain imports.

And, as the Board looks to strengthen the organic integrity of the supply chain, please bear in mind that a lot of other products, like fruits and vegetables, are being

imported and exported.

And that these products have very different supply chain than grain. And that difference in the supply chain will require differences in how to approach that strengthening.

Because, you know, fruit and vegetable takes a few hours, or maybe a day, to get here, compared to a grain that takes months. Anyways, thank you for the opportunity to comment, and any questions?

MR. CHAPMAN: Questions? I see Emily, Harriet, myself.

MS. OAKLEY: Thank you. You mentioned using liquid fish?

MR. CRISANTES: Correct.

MS. OAKLEY: And some of the questions that we asked this time around are around the sourcing of those fish --

MR. CRISANTES: Correct.

MS. OAKLEY: -- and we've learned that there are not an insignificant number of

products that are gathering, or harvesting, wild fish solely for the purpose of fertilizer. I was wondering if, as a grower, you have any concerns about that.

MR. CRISANTES: It's a good question. The source that we use is for -- it's a company that uses it. It's a byproduct of making soy -- I'm sorry, not soy -- fish meal. So, it's like a byproduct. They don't harvest it for -- to make a fertilizer.

But I'm concerned about the pH level, because sometimes you get -- you could get it like a very, very low pH, and then it becomes a problem. So, that's my only comment there.

MS. OAKLEY: So, if I follow up with you, you say you use a product that's primarily bycatch --would you -- or is exclusively bycatch. As a grower, would you want to use a product that was sourced from fish, harvested exclusive for fertilizer?

MR. CRISANTES: I don't -- I think there is plenty of, you know, fish that has been

caught for something else, that the byproduct could be used as fertilizer. I definitely think I would agree with that.

MR. CHAPMAN: Harriet?

MS. BEHAR: You mentioned potassium chloride.

MR. CRISANTES: Correct.

MS. BEHAR: And how are you meeting the annotation? Are you doing testing, or to make sure there's no chloride accumulation in the soil? What are you doing, and how often do you do it?

MR. CRISANTES: Correct. We do testing, and we have our -- we schedule it once a month. We schedule it once a month in our fields, and we do run a complete test of all the elements, and we use it in combination, usually with potassium sulfate.

So, it's definitely something that we, you know, haven't seen any accumulation. So, just wanted to give that information out there. I wouldn't know if there is, but in our

case we have not seen any.

MR. CHAPMAN: So, you were talking about imports?

MR. CRISANTES: Correct.

MR. CHAPMAN: And the risk to the fresh produce industry, the fresh produce industry being different.

We received some comments from the public around the need for certifying warehouse that further distribute organic products, because of their open nature and testing, how they're handling their maker. Do you agree with those sentiments that --

MR. CRISANTES: I couldn't hear your question, Tom.

MR. CHAPMAN: Sorry. These mikes are a little finicky. We received some comments around warehouses that distribute organic produce, and the fact that they're open and available for contamination with the environment or other areas around them, and also are subject to quality tests and other tests unique to the

produce industry.

Do you think all handlers of organic produce should be certified? Do you think there's an integrity risk with those types of operations?

MR. CRISANTES: Definitely. I believe that all -- every handler should be certified, especially in the produce industry, for sure. And I think there is risks associated there as well in the produce industry, for sure.

MR. CHAPMAN: Okay. And then, you were speaking a little bit before your time ran out, about the speed to market in the produce industry, and how that's unique.

Do you have some concerns with some of the questions we posed, or areas that we were looking at, including testing, or import certificates that -- or other areas --

MR. CRISANTES: So --

MR. CHAPMAN: -- that would be unique to the produce industry?

MR. CRISANTES: So, for example, I

think on the import certificates, I think there was a period of time last year that we tried to implement import certificates coming from Mexico into the United States.

And that posed a great deal of problems because of the ability for certifiers to provide those import certificates in a timely manner, as shipments were coming from Mexico here, especially for the produce industry, since the shipment was, you know, leaving the warehouses, and it would take one or two days to get to the order, and the certifiers, you know, could come back and turn around, then at the fastest they could do it, it would take three to four days.

So, then, there would be a great disconnect between the time the certifier could provide that information, and the time of travel between the produce leaving the facilities and getting to the order.

So, those are the things that are -- you know, we need to look at when we're

strengthening the supply chain, especially in fresh produce, and being so close by, you know, in the United States, Canada, and so on and so forth -- Mexico and Canada.

MR. CHAPMAN: And as we're trying to evaluate imports on a risk-based system, are there attributes that we should consider that would be of higher risk in the produce industry?

MR. CRISANTES: For sure. Definitely, contamination from pesticide use, stuff like that. I would think that's definitely one that I would stress, for sure.

MR. CHAPMAN: Thank you. Thank you, Theo.

MR. CRISANTES: Thank you.

MR. CHAPMAN: Up next, we have Zak, followed by Ryan Costello. Zak, if you start with your name and affiliation.

MR. WIEGAND: Good morning. My name is Zak Wiegand. I am the Processing Program Technical Supervisor for Oregon Tilth Certified Organic. We are a leader in organic

certification, and we certify over 1900 operations in six countries.

I'm here to talk about imports and provide a few suggestions to the Board, as well as the NOP if they'll listen, which I believe they have.

Some background as it pertains to organic -- Oregon Tilth, and what we've done around imports. We've implemented an internal import policy back in June 2017 that required all at-risk product coming from any country be subject to preapproval review by Oregon Tilth. I would continue to do that today, as well.

Since then, we have verified and approved -- verified, reviewed, and approved, hundreds of import documentation chains, and today I'm happy to report that we've heard a lot of forward movement regarding import oversight from the NOP, and really, I want to reinforce three primary areas we want to see improvement on, just based on the current situation.

So, number one, we want to require

that all importers and exporters be certified. Uncertified handlers -- particularly importers and exporters -- possess and maintain critical data for certification, but they're not subject to the same oversight, and we're often missing information.

Additionally, because of this, manipulated or falsified documentation runs a greater risk of going undetected.

The second thing is, we would like to require transaction certificates for every export and import. They are incredibly valuable, as they provide specific information that connect the dots in audit trails.

Some opportunities for use of these transaction certificates in the verification process, we feel that electronic -- an electronic system is essential for this, just due to the high volume, and it will help eliminate any document tampering and improving efficiencies and accessibility.

Additionally, we would like to see an

incorporation of production volumes -- acreage, and things like that -- to help improve the traceability for entire crops.

The third thing we would like to reinforce is, we'd like to see education outreach and information on fumigation activities at US ports. We need to develop efficient systems to collect and share information about -- around streamlines for certifier notification, and detailed information for investigation when fumigation does occur, and better information at understanding of fumigation expectations at US ports, because the information is very limited.

Additionally, we'd like to see more education and outreach opportunities provided to stakeholders. Buyers need resources to understand documents and verification requirements, and certifiers and inspectors need ongoing training on how to use these systems and interpret the information.

So, those are the three things we

would like to see, and we feel are very important.

MR. CHAPMAN: Thank you. I got a couple of questions, and then we got Harriet and Sue.

So, in the case -- which there's a lot of public information out there about -- that was highlighted in the Washington Post last year. It involved certified handlers and organic transaction certificates.

And yet, the fraud was still implemented. So, given that it -- like, in that well-documented case, certification of handlers that did need to be certified -- brokers, and the presence of transaction certificates -- were insufficient and blocking that fraud. Why are those your two critical areas?

MR. WIEGAND: If we look to other countries and their electronic systems, they provide a lot more transparency and regularity to these systems. And seeing those examples, we feel that focus on electronic versions of

transaction certificates, rather than paper systems -- which can be falsified easily -- are just really important, and a move forward.

MR. CHAPMAN: And then, you talked about an at-risk system. What are your attributes to determine as-risk supply chains?

MR. WIEGAND: There's a lot of criteria. We are focusing on known crops and materials and commodities that are subject to fumigation import, as well as regions that are known for fraud, based on information that has been provided to us through the NOP.

We also want to focus on commodities that have been identified through APHIS that have been -- organic commodities that have been fumigated upon entry into the United States.

MR. CHAPMAN: Okay. And then, one last one. Sorry to put you on the hot spot.

MR. WIEGAND: That's fine.

MR. CHAPMAN: The interim guidance, interim instructions, 4013, provide some guidance to have certifiers kind of go beyond

just a broker, certified or not, to get further documentation, or require handlers to get further documentation. Why is that practice not sufficient?

MR. WIEGAND: Well, it's difficult -- that system is difficult. It's challenging, especially for small operations. They typically, when we're talking about handlers, small operations don't have the purchasing power of somebody like Clif Bar, and cannot turn around and say, hey, provide me all this information, you're a distributor, you're an uncertified entity, give me information all the way back to your supplier that is certified.

They'll say, no, we just won't do business with you. No thanks, we don't want to disclose that information.

So, that's one challenge. And so, it's small operations that's challenged. Otherwise, there's just a general reluctance for these uncertified operations to provide that information.

And a few ways around that, and some certifiers have produced certain documents and forms that people can fill out, and we're providing things like a letter to clients that they can show to their suppliers that'll help that information provide information clearly.

MR. CHAPMAN: Harriet? Sue?

MS. BEHAR: You mentioned that there had to be preapproval. Are you saying that a buyer then notifies you that they want to purchase a product and they supply you some documentation, and then you approve it?

MR. WIEGAND: Correct.

MS. BEHAR: Can you explain what you're looking for in that preapproval?

MR. WIEGAND: Yeah. So, we -- we request all documentation that's relevant to the import of a commodity be provided at a timeline prior to actually recei- -- usually, when the product's on the water, or bef- -- usually, it has to be on the water before we receive the information.

But it includes things like phytosanitary certificates, transaction certificates, quality certificates, testing results, organic certificates, bill of ladings, certificates of weight, certificates of origin, the giant pile of paperwork that comes with an imported product.

We don't necessarily know every piece of information that's required. We're requesting as much as we can, and going from there.

MS. BEHAR: Have you ever rejected any because the documentation is not present?

MR. WIEGAND: Certainly.

MR. CHAPMAN: Sue?

MS. BAIRD: Yeah, about that. You almost have implemented an export certificate requirement for the import. My question, you're saying that you think that all companies should have a transaction certificate. And if -- and do you implement that now?

And it sounds like perhaps you do for

all imports. Do you do that for all -- actually, domestic products, as well?

MR. WIEGAND: I think I may need to clarify a little bit on my comment. Is the -- we would like to see transaction documentation provided for any import or export --

MS. BAIRD: All right.

MR. WIEGAND: -- activities. Not solely domestic transactions.

MS. BAIRD: Yeah, not for domestic. Okay.

MR. WIEGAND: Correct.

MS. BAIRD: And -- I'm sorry, I could -- okay. And on the transaction certificate, normally there is a balance of product -- potential product into product being sold. Do you think that all certifiers would have the ability to do -- to maintain all the database it would take to do that balance-in, balance-out thing?

MR. WIEGAND: Absolutely not.

MS. BAIRD: Okay.

MR. CHAPMAN: Scott?

MR. RICE: Sue, you just asked partially my question. But also, can you talk about your experience with cross checks and just communication with other certifiers, and how you bridge those data gaps, if so?

MR. WIEGAND: Absolutely. It's incredibly varied. It depends on who you talk to. If you're talking to a domestic certifier, generally you get a faster response.

If we're verifying information from a certifier, say in India or in Europe, it can vary. We can get a month turnaround time to get verification of information or no response at all. It all just kind of depends on the circumstances. Sometimes it's easy, sometimes it's hard.

MR. CHAPMAN: Thank you. Thank you for that.

MR. MORTENSEN: Yeah, briefly, that --

MR. CHAPMAN: Yeah.

MR. MORTENSEN: I'm just curious. If something did take a month to get that information, what happens to the shipment then?

MR. WIEGAND: It sits.

MR. MORTENSEN: It sits.

MR. WIEGAND: And then, a lot of these operations look to the domestic market to purchase organic product. They won't have to go through these processes.

MR. MORTENSEN: Okay, thanks.

MR. WIEGAND: Mm hmm.

MR. CHAPMAN: Thank you for answering our many questions.

MR. WIEGAND: Sure.

MR. CHAPMAN: Up next is Ryan, followed by Lee Frankel.

MR. COSTELLO: Hi. My name is Ryan Costello, and I am the Farm Technical Supervisor with Oregon Tilth Certified Organic. Thanks for giving me the opportunity to provide an oral comment today, in addition to our written

comments.

I'm going to comment on seed purity, and on vaccines. For seed purity, we would like to continue to thank the Board for your focus on seed purity and GM contamination in organic production.

The organic farms we certify use a variety of process-based measures to prevent GM contamination, which is an increasingly difficult challenge in the corn and soy regions, like in the Midwest, where we have a lot of farms we certify.

The pesticide residue program that was put in place by the NOP in 2013 drew from an existing EPA maximum-residue level, and then FDA action levels, to establish a baseline for an acceptable threshold of residues in organic products.

And similarly, we would encourage the Board to collect data to understand the baseline levels of contamination for each crop that has GM varieties, prior to developing purity

thresholds for GM contamination and seed.

Third-party verification programs, as well as large scale organic buyers, may have this data that they can provide to the Board to help determine the scope of this problem.

We also strongly support the development of additional guidance and instruction from the NOP for laboratory criteria and GMO testing methodologies.

We would advise caution before mandating GM testing disclosures for seed use in organic production. Non-organic seed companies may be hesitant to comply with such a disclosure method for reasons of liability.

And then, you have the bulk of the testing requirements left to the organic seed producers. GM tests range from $300 to $600 in our experience, and if you're testing every seed lot, it can -- that could add up really quick and cause a burden.

For vaccines, we would also like to address the topic of non-GMO verification, which

currently allow vaccines without further review of the ingredients within them, per 205.105e and 603.804.

We believe that the majority, if not all, of the available livestock vaccines have been produced using some form of GM technology. With limited treatment options available, organic livestock producers are even more reliant on vaccines to prevent disease then to non-organic counterparts.

We certify more than 250 producers that use five or more vaccines in their organic livestock production system, demonstrating a clear value, and the need for vaccines in organic livestock management.

Similarly, requiring vaccines to be listed individually on the national list, it would place organic producers at a disadvantage, because new vaccines would have to be approved through a petition process, and so we would urge the Board to continue to allow livestock producers to use vaccines produced through any

method which will permit the organic industry to react nimbly to future disease outbreaks.

The use of current generation vaccines plays a vital role in the prevention of illness, which is the -- also, subsequently prevents animal suffering. And that is a goal of the livestock healthcare section of the rule. Thank you. All right.

MR. CHAPMAN: Thank you. Harriet?

MS. BEHAR: So, your point in the vaccines is to -- you don't want to see any change to the rule? Just kind of, don't ask, don't tell kind of --

MR. COSTELLO: Yes, that's --

MS. BEHAR: -- view here on the vaccines?

MR. COSTELLO: I guess we just would advise caution before requiring anything new for vaccines, because it's one of the few things that organic livestock producers really rely on, since we don't have many treatment options available.

And, unfortunately, a lot of vaccines use GM methods at some point in their production. So, I guess we would just advise caution.

MR. CHAPMAN: Dave, then Ashley.

MR. MORTENSEN: Right. Ryan, we are -- we have begun collecting data on --

MR. COSTELLO: Excellent.

MR. MORTENSEN: -- purity out of the seed bag, going into the planter box. And I would just say to the audience, we would love to hear from folks that have data that they're willing to share.

I met with someone this morning over breakfast, who is quite willing to share data on seed purity out of the bag. And so, I agree with you, we need to get -- we need to get our heads wrapped around what are we working with, and then go from there. But any data that anyone is willing to contribute, would help us to wrap our head around where we are right now.

MR. COSTELLO: Okay. Thanks, Dave.

We have a small dataset we could help with.

MR. MORTENSEN: Thank you.

MR. CHAPMAN: Ashley?

MS. SWAFFAR: Yeah, I just wanted to state on the vaccine part is, we were just asking those questions. There's no intention right now --

MR. COSTELLO: Sure.

MS. SWAFFAR: -- to do anything. So, everybody take a deep breath on vaccines. So --

MR. COSTELLO: Thanks, Ashley.

MR. CHAPMAN: Thank you.

MR. COSTELLO: Thank you.

MR. CHAPMAN: So, quick time check. It's 12:24. We're running about 45 minutes behind schedule, so we will eat up a little bit into lunch. We have an hour-and-a-half scheduled for lunch, so we will go until 1 o'clock. Hope you guys had a hearty breakfast.

Then, we'll break at 1 o'clock. Whenever we get to in the list, we'll break at

1 o'clock, and reconvene at 2:00. So, Lee, you're up. After Lee, we have Terry Shistar. Lee, if you can start with your name and affiliation.

MR. FRANKEL: Okay. My name is Lee Frankel, and I'm here on behalf of the members of the Coalition for Sustainable Organics. The Coalition for Sustainable Organics is a group of environmentally and socially responsible growers committed to maintaining the USDA's current high standards for certifying organic produce.

Comprised of growers big and small, we advocate for the continued -- allowance of containerized growing methods under the National Organic Programs, while enabling growers to select the most appropriate production system for their site-specific and commodity needs.

First of all, I'd like to thank the members of the National Organic Standards Board support for the time that you devote to help maintain and strengthen the organic brand and the organic program. I really appreciate your

dedication.

In addition, I'd like to thank the staff of the US Department of Agriculture for their thoughtful oversight of the industry, and first-hand efforts to maintain the integrity of their organic label.

Furthermore, I wanted to express my appreciation to Under Secretary Greg Ibach for his participation today, and his recent letter to the coalition explaining the legal foundation for continued certification of container and hydroponic methods. I'll quickly read his letter to us:

Dear Mr. Frankel: Thank you for your letter of March 21, 2018 on behalf of the Coalition for Sustainable Organics. We appreciate your support of the US Program of Agriculture's statement on the allowance of hydroponic, inorganic production.

Our statement on hydroponics is driven by the Organic Food Production Act. Section 6503 of the OFPA required us to consult

with our Federal Advisory Committee and National Organic Standards Board, when developing organic certificates and program.

Section 6512 of the OFPA also states that if a production of handling practice is not prohibited, or otherwise restricted under this chapter, such practice shall be permitted, unless it's determined that such practice would be inconsistent with the applicable organic certification programs.

Hydroponics has been allowed in organic agriculture since the National Organic Program began. During its 2017 fall meeting, the NOSB voted on a motion to prohibit this production method. The motion failed. Based on the provisions of the statute outlined above, and the NOSB's absence of a recommendation prohibiting hydroponic production systems, hydroponics may continue as an acceptable production practice for the organic operations, to comply with the USDA organic regulations. Thank you for your support of our organic

agriculture. Sincerely, Greg Ibach, Under Secretary.

If the NOSB sees the need for specific regulations on greenhouse and container production methods in the future and puts the topic back on its active agenda, the members of the coalition are happy to work with the NOSB in the future, to make sure you have accurate information to inform your recommendation. Thanks again.

MR. CHAPMAN: Thank you, Lee. Emily?

MS. OAKLEY: I'm not sure if you'll be able to answer this question. It's related to the look at fish fertilizer question. I'm guessing that some members within the coalition use liquid fish, and I was wondering if they would have any concerns about products that were derived strictly from wild caught fish just for the purposes of fertilizer.

MR. FRANKEL: Yeah, I haven't specifically polled the members on it, but yeah, in general, people are looking to -- you know, I

think our members take a broader view of their operations in general.

Not just what they're doing on the farm, but kind of what's the origin of products, or particular -- like, sprouts, micro beans, as an example.

You're looking at, you know, where was this grown, I guess an additional -- when you're generating green waste in a urban facility, you're looking for partner farms to compost that material and feed it into organic livestock operations. And so -- and I think that members, in general, are sensitive to that, and I'd be happy to help educate them further, if the NOSB ever develops specific guidelines.

MR. CHAPMAN: Thank you. Up next is Terry, followed by Deborah Klein. Terry, if you can start with your name and affiliation.

MS. SHISTAR: Hi. My name is Terry Shistar, and I'm on the Board of Directors of Beyond Pesticides. Our board members have expertise in many areas, and guide us in our

efforts to promote organic practices.

We submitted comments on all of the issues before the Board at this meeting.

As organic production has grown to nearly $50 billion enterprise, the NOSB needs to exert its authority. Organic integrity depends on the NOSB, and the NOSB's authority is under attack on several fronts.

The Organic Foods Production Act gives a leadership role to the NOSB in advising the USDA on all aspects of the National Organic Program, from the nationalist materials, to staffing.

Thus, the law gives the NOSB broad authority and responsibility. The integrity of the organic production and consumer confidence in the organic label, depend on NOSB's leadership, and USDA's respect for NOSB guidance.

Although organic sales continue to climb, indicating a strong desire for organic food, interest in add-on labels has indicated

some dissatisfaction with the way organic program is being implemented.

Add-on labels are most evident in organic egg sales, for they reflect consumer demand for outdoor access and other elements of the OLPP.

However, the creation of the Real Organic Project and regenerative organic certification, reflect broader dissatisfaction by both consumers and farmers, and need for clear and consistent standards that prohibit hydroponics, require meaningful outdoor access for poultry, and prohibit feedlot barriers.

On the other side, politicians are seeking to weaken organic integrity by attacking the NOSB. The goal is quite clearly to weaken organic standards by reducing NOSB control over the national list, and allowing practices never intended to be certified organic.

A minority of the organic operations benefit by weakening standards. But large operations provide a lot of organic food.

The NOSB represents the organic community. You are responsible for upholding integrity in the face of political pressures on the USDA. You must maintain consumer confidence in the organic label.

In order to do so, you must maintain control over the NOSB work agenda. You must ensure continuous improvement by addressing difficult issues, like eliminating incentives to convert native lands to organic production.

Hydroponics and container production, contaminated inputs, excluded methods, sanitizers, and inert ingredients. You need to speak up when USDA fails to base its national list on NOSB recommendations, as it did with carrageenan. Thank you.

MR. CHAPMAN: Emily?

MS. OAKLEY: I did just want to say thank you for making a comment on everything before the NOSB, because that is definitely helpful.

And I wanted to ask you to elaborate

a little bit more on your comments on sulfur as a molluscicide, and your concerns with the proposal.

MS. SHISTAR: With?

MS. OAKLEY: And your concerns with the proposal that we have before us now.

MS. SHISTAR: Okay. There's a sided road on everything.

MS. OAKLEY: I know. I should have asked you probably -- or told you I would ask you about that. I'm sorry.

MS. SHISTAR: I think part of the concern with sulfur as a molluscicide is that it's, you know, when it's used as a dust, it is hazardous to the user. And it also does have some effect when it's broadcast on the soil.

MR. CHAPMAN: Steve?

MR. ELA: Kind of -- on the polyoxin D zinc salt petition --

MS. SHISTAR: Okay.

MR. ELA: -- as well, what -- you submitted comments on that.

MS. SHISTAR: Right.

MR. ELA: Do you -- I guess what -- you know, it's obviously potentially an alternative for sulfur and copper --

MS. SHISTAR: Yeah.

MR. ELA: -- you know, we heard other public comments that there's really no alternative for some crops. But yet, I mean, I guess, could you elucidate a little more on your feelings about it? And again, I know it's -- we're kind of catching you off-guard here. So --

MS. SHISTAR: Well -- yeah. It's a general fungicides. Right? Fungicide. So, it has effects on non-target fungi, as well as the target fungi. So, I guess that's what I'm remembering the -- my main concern -- as an ecologist, my main concern is that when you use something that's broad -- that has a broad effect on all fungi, then it's affecting beneficial fungi that you depend on -- depend upon, not only in the soil, but on the plants,

as well.

MR. CHAPMAN: Thank you. So, up next is Deborah, followed by Lynn Coody. Deborah, if you could start with your name and affiliation.

MS. KLEIN: Good afternoon. I'm Deb Klein, I'm the Principal Regulatory -- oops. Sorry. Good afternoon. I'm Deb Klein. I'm a principal regulatory specialist with Ecolab.

We appreciate the many passionate commenters, NOSB efforts today to preserve the integrity of organic -- food safety and organic handling.

First, I'd like to comment in support of sodium chloride acidified to the national list as an organic teat dip treatment. I urge the NOP to finalize rulemaking as quickly as possible. Our certifiers are anxious to see this finalized for conserving dairy herd health.

Secondly, and of critical importance, I urge Board members to please support the addition of sodium dodecylbenzene sulfonate to the national list for handling and processing of

organic foods.

We acknowledge the Board's concerns as to whether or not SDBS is essential, and whether alternatives exist. Chlorine, ozone, peracetic acid, are alternatives. However, as previously addressed, these technologies, other than chlorine, are not practical at the retail grocer, nor in restaurant settings.

So, while the national list includes these alternative chemistries for industrial use, NOSB must also consider the role the retailer and restaurants play in food safety, who are the front line and food safety to our organic consumers, and they need a practical, easy-to-use, safe technology, to wash fruits and vegetables.

It's time for a kill step for pathogens on produce at retail, and this has been widely distributed in several magazines. USDA, FDA, CDC, recognize that, historically, fresh and fresh-cut produce cause more illnesses and higher number of food-borne diseases than

any other commodity, including beef, poultry and seafood.

Fruits and vegetables don't typically have a kill step, such as cooking, and they are often used fresh in sandwiches and salads in the home, restaurant, and mail order. So, they are a food safety risk.

Just this past week, we saw the outbreak with romaine lettuce, and that put many consumers in the hospital, five with severe kidney failure.

Wash steps are critical to prevent cross-contamination. And retailers and restaurants and small processors need an alternative synthetic that are designed for their kitchens and processing operations.

Retailers tell us, I don't want to have to navigate between using SDBS for my traditional produce, and nothing in the wash water that I use on my organic produce. That's a food safety risk.

Lactic acid is on the national list,

and this organic acid is used as a fruit and vegetable wash, and boosted by SDBS. SDBS is on the safe -- EPA safe-listed. And that should be support to the Board for their consideration of SDBS for national listing.

Please consider in your vote the urgency of safe synthetic substances available for the retail markets, and urgency of promoting --

MR. CHAPMAN: Thank you.

MS. KLEIN: Can I finish my sentence?

MR. CHAPMAN: Yeah, go ahead and finish the sentence.

MS. KLEIN: Just the urgency for promoting safe handling of organic fruits and vegetables to our organic consumers.

MR. CHAPMAN: Thank you. Questions? So, you just commented that you have heard from retailers and small operations about the necessity for the substance, but I -- in reviewing the public comment -- unless I missed something, and I invite Board members to correct

me if I'm wrong -- I did not see any retailers or certified operations, or potentially certified operations, speaking up and requesting this substance. So, how do we balance that from our perspective, when we don't hear from the industry that would need to use this substance?

MS. KLEIN: We did go back to the industry. One of the things -- I think you saw some petitions that were signed by some major -- well, Marriott, for example -- that did sign the petition.

I think we also had a couple of retailers also sign these petitions. We did go out. The problem is, is that their using fruits and vegetable washes, but they're not certifying those as organic.

When we eat here in these kinds of operations, you know, we're not just just consuming organic produce, so it makes it more difficult, and our organic -- some of our retailers, like what we're talking about, grocers -- other than, like a Chipotle, or

something like that -- but the grocers themselves can't differentiate between -- they just don't have that way to do that.

So, when they're serving in salad bars and so forth, they either use a fruit and vegetable wash, or they don't. But, that's -- you're right, did they publicly comment? We did go back and ask them to. Some of them weren't comfortable with doing that, because maybe they're not comfortable with the practices that they're using at the retail level. So -- but certainly, we can see, even three years ago with Chipotle and those kinds of organizations, they probably would have benefitted by being able to use our fruit and vegetable wash, but they didn't have one available.

MR. CHAPMAN: Steve?

MR. ELA: And so, I'm a little unclear. Maybe my memory is faulty here, but why wouldn't chlorine materials be an alternative in that situation?

MS. KLEIN: They are an alternative, and we've talked about that several times. The issue with chlorine is that it breaks down in the presence of organic matter. So, it's not as effective as, like a peroxyacetic acid, or something like this lactic acid and SDBS combined.

And so, when we're talking about efficacy, do we want to use the most efficacious thing, or do we want to use something that's a little bit less?

And also, chlorine's difficult to manage, and a lot of -- a lot of the customers and smaller retailers and that sort of thing, they don't -- either don't know how to use it, or they don't manage it in their process. It's more difficult to manage. Any other questions? Sure.

MR. RICE: One question on -- when you speak of retailers and restaurants, those are not currently required to be certified. Do you see having other tools would encourage more

of those operations to become certified? Or -- do you have any thoughts on that?

MS. KLEIN: You're right, they're not certified. But certainly, from an organic consumer perspective, we would like to know that when we're purchasing products that are organic, or that we're voting with our dollar, such as with, like, Blue Apron, or something like that, that the products that we get in are treated -- you know, are treated and safe. Did I answer the question?

MR. RICE: I think so, yeah.

MR. CHAPMAN: Thank you.

MS. KLEIN: Thank you.

MR. CHAPMAN: Up next is Lynn, followed Kiki Hubbard.

MS. COODY: Hi. My name is Lynn Coody, and I'm presenting comments for the Organic Produce Wholesalers Coalition, seven businesses that distribute fresh organic produce across the United States and internationally.

In our comments to the NOSB, we

express our own ideas, and also provide a conduit for the voices of the many certified growers who supply our business.

OPWC has provided detailed comments on 15 of the 2020 sunset materials specifically focused on how these materials are currently used and needed by produce growers and handlers.

We emphasized responding to the Board's request for information about the continued need for ethylene for ripening tropical fruits and degreening citrus. We note that bananas are the number three import crop by value, and documented their great importance to OPWC-member businesses.

Ethylene is needed to maintain the quality of this fruit, which must be shipped before it fully ripens, due to its susceptibility to bruising.

The alternative to ethylene, using heat to induce ripening, creates inconsistent results due to uneven penetration, and failure to bring out the full color of the fruit.

We are due to view the photos of banana ripening rooms in our comments, to see produce wholesalers' significant investment in handling bananas.

Our written comments mainly focus on the import to oversight document, which is indicative of the importance that OPWC places on maintaining organic integrity throughout the supply chain.

We especially appreciated the inclusion of question 7, about supply chain of perishable products. We think some of the most effective changes with regard to organic produce supply chain, would be, (1) to require supply chain documents to show the organic status of the product, and (2) to require product packaging, including bulk packaging, such as produce cartons, to show sufficient information to support the trace-back process.

OPWC members believe that in the produce trade, the most effective method for preventing fraud, would be to certify the entire

supply chain, while allowing special consideration for transport operations that provide service under agreements with certified operations.

OPWC asserts the current system of excluding some handlers from the requirement to be certified disrupts the standard operating procedures of the organic trade, and results in the need for additional management by all other entities throughout the supply chain and regulatory systems.

In our opinion, special attention must be directed toward certification of distribution of operations run by retailers. We know such operations are conducting activities that do require certification, such as repacking, sorting, labeling with stickers, and managing ripening rooms, all without these distribution operations being certified.

We ask the Board to continue certification of the impacts -- consideration of impacts of fraud on all types of organic

products, in addition to the commodities that made recent headlines, and also to develop a proposal for regulatory change, to close the gaps in the supply chain caused by lax requirements for labeling, product documentation, and certification. Thanks.

MR. CHAPMAN: Questions for Lynn? Steve?

MR. ELA: Lynn, I guess just in light of the sanitizing issue that we were just talking about, do you have any thoughts? I mean, on your retail level, I mean, this is kind of where we're getting at about SDBS --

MS. COODY: Yep.

MR. ELA: -- use and whether it's critical or not.

MS. COODY: We did submit comments on that, and we did not consider it to be critical, because we felt like there were other options that certified handlers, such as OPWC members, do use on fresh produce, and we thought that that was adequate for use by retailers and

restaurants.

MR. CHAPMAN: Dave?

MR. MORTENSEN: Lynn, my area of expertise is not in the supply chain and folks being certified throughout the supply chain. Could you give us just a brief idea of how far away from that we are, and, you know, what it will take to get there?

MS. COODY: Well, as I said, we really appreciated the emphasis, or the special question, about perishable supply chains, because we have very different needs than green supply chains.

For the first difference, is that the boxes and containers that produce are in are open. They're very able to be affected by environmental contamination through water, or even air.

We also have a problem with potential for commingling, because in many cases, produce is literally taken out of the boxes that it comes in, and it's either re- -- it's stickered,

it's sorted.

Have you ever had a bowl of oranges on your counter and one of them gets that blue gray mold on it? That happens in warehouses, too. You have to sort them out. They are stickered, etc.

And we have to do a lot of quality testing, such as brix quality, or quality for ripening and hardness, and things like that. So, produce has a lot of differences. And we have to be able to have a supply chain oversight for each of those steps.

In our view, and we have participated in work on this with both ACA and OTA, we have come to the conclusion that the only way we can handle it is through certification, which brings in expertise and training to the people who are doing these actual activities.

So, we tried every way of thinking ourselves out of this box with many different people, and we did not find any other answer, other than certification.

MR. MORTENSEN: Okay.

MR. CHAPMAN: So, I'll go with a couple of questions, and I'll also keep going around. So, I'll go before you, Harriet.

MS. BEHAR: Okay.

MR. CHAPMAN: So, you talked about -- - made it clear that you wanted to certify -- on certified warehouses at the current time. Does that extend beyond the produce industry? Do you think that's also a requirement of other industries? What's the threshold for --

MS. COODY: Yeah. In our view, we felt like if a product was fully packaged in a container that was not -- that was impermeable --

MR. CHAPMAN: Yeah.

MS. COODY: -- that the requirements could be lessened. But we don't deal with that. So, we just -- our opinion just applies to what should happen in the produce world at this time.

MR. CHAPMAN: Okay.

MS. COODY: Yeah. But we felt like,

because we're vulnerable through permeable packaging, that there could be a distinction between those two if -- you know, if other industries felt differently, we would listen to their ideas.

MR. CHAPMAN: Okay. And then, you talked about produce boxes needing to be labeled to be fully traceable?

MS. COODY: I'm having a hard time understanding you, Tom. So --

MR. CHAPMAN: You talked about produce boxes needing to be labeled to be fully traceable?

MS. COODY: Yes.

MR. CHAPMAN: What information is missing currently?

MS. COODY: Oh my goodness. Well, tomorrow my colleague from Organically Grown Company, Mike Dill, will be showing some pictures, in that he's one of the presenters for the panel.

So, you'll have to hold on for the

actual pictures of it. But in your mind, you can imagine a general produce box. It simply just says, Northwest Produce. It doesn't necessarily have a -- information about the actual product, no lot number, no declaration about certification.

There's really not -- unfortunately, you -- we're unhappy with the amount of information that comes through the supply chain, that links the documents to the actual product. And we would like to see that -- see a major upgrade in that area.

Tomorrow, like I said, Mike will show you the actual pictures about that.

MR. CHAPMAN: Do you find those are they're labeled now to be, based on your interpretation of the standards, compliant with the standards as the way they're done now, or --

MS. COODY: We do find some that are compliant. Yeah.

MR. CHAPMAN: So, that lack of labeling is still compliant. It's still

regulated -- easily auditable.

MS. COODY: Oh, maybe I'm not understanding.

MR. CHAPMAN: Do you -- is it your understanding that that lack of labeling is a compliant practice?

MS. COODY: No, it is not. We -- in fact, in our business we have to do a lot of verification to overcome that very lack of labeling. So, we have to make calls back and back and back in the supply chain, to actually verify what is on maybe a certificate, that that is actually the box -- what's in the box.

So, it takes a lot of work while the product is literally deteriorating in the cooler. And this is a huge problem for all produce businesses, starting from the farmer, the second it's picked, all the way through the time it gets to the retailer.

And we don't -- in our business, we don't consider that to be compliant.

MR. CHAPMAN: Okay. And did I

understand you correctly that produce stickering was occurring at uncertified operations?

MS. COODY: Yes, you did.

MR. CHAPMAN: Okay.

MS. COODY: That is true. We know that to be as a fact.

MR. CHAPMAN: And then, I realize that our written comments -- we talked about residue testing of green shipments, and I -- from previous, I -- we didn't talk about residue testing of produce.

Our previous commenter talked about, speak to marketing concerns about that. What role do you see residue testing playing in the perishable products space?

MS. COODY: Ooh. We did discuss this a bit, and I think our conclusion was, it's limited, because it takes so long for the analysis to be done, and you get the results and then, in the meantime, you have a puddle of melted produce.

So, it doesn't really -- it's not a

really viable or good tool for most produce. You have to have really -- the supply chain has to be freestanding, with documentation, certification, and really clear linkages between the actual product and the documentation. That's what would work for us.

MR. CHAPMAN: Thank you. Harriet?

MS. BEHAR: I pulled out my handy-dandy rule --

MS. COODY: Oh?

MS. BEHAR: -- the definition of retailer --

MS. COODY: Mm hmm.

MS. BEHAR: -- but especially, you know, that they're doing this repacking -- they're doing the repacking --

MS. COODY: Uh-huh.

MS. BEHAR: -- in another facility? Or is this the --

MS. COODY: Yeah.

MS. BEHAR: -- retailer repacking in the back of their store?

MS. COODY: No. We are concerned about a new trend where retailers are now running their own distribution centers. So, may -- I won't use any names -- but say a retailer has 15 stores all around an area. They have their own warehouse, which is owned by a retailer which is exempt from certification, but they're doing exactly the same handling activities that normally you would expect to be certified under -- as a distributor.

MS. BEHAR: Right. So, I'm really am looking at the definition of a retailer, and they don't actually -- that would not fit in that definition.

MS. COODY: Yes. In my mind I agree with you totally, Harriet. But in practice, the way things have happened is, there is a big, giant gap in this retail handling operation.

So, this is not just in the back of the store. This is a big, big operation, with many coolers and, interestingly, both conventional and organic produce being handled

in the same cooler. Yeah.

MR. CHAPMAN: Scott?

MR. RICE: So, obviously, that sounds like it does require certification. But --

MS. COODY: Yes.

MR. RICE: -- would -- do you have thoughts on how best to -- we've heard a lot of ideas about education and outreach, and do you see that as NOP's role, or what -- what do you see as some good bridges for that gap?

MS. COODY: Ooh, that's a good question, Scott. This is my personal opinion, but I see this as very similar to the types of enforcement activities that the NOP has explained many times to us, where they see a product that is not certified and they know it should be, and then they -- someone maybe makes a complaint or turns it into the NOP, and they write them a nice letter and say, you should be certified.

That's what I think should happen here. You should be certified. They should get

a letter, and suddenly, they're confronted with, well, they can put in their application, or they can figure out another way to handle the organic part of their supply chain.

MR. CHAPMAN: Emily? Did you have a question?

MS. OAKLEY: Is there someone else before me, though?

MR. CHAPMAN: I don't know. I was going around the room, and so Ashley, Jesse -- nope, it's you.

MS. OAKLEY: Okay. This is changing the subject.

MS. COODY: Okay, Emily.

MS. OAKLEY: Thank you for your comments on ethylene and pineapple.

MS. COODY: Oh, yes.

MS. OAKLEY: And I wanted to ask you your thoughts about some other comments that were received suggesting that the criteria used for ethylene doesn't fit the off-the-criteria, because it's basically -- in pineapples, that

is -- because it's basically an economic rationale, and so I wanted to know what your thoughts were on that.

MS. COODY: I understand that concern, and I do think it's a little bit of an oddball situation, as far as that goes. But I also think that it's been in use for a really long time, and it was understood even way before the NOP, to be something that was appropriate for organic use.

So, that issues has only recently been of concern. And we now have allowed, you know, many growers to be reliant on it. It's a very, very important crop for the whole supply chain.

So, yeah, there are many economic issues related to it. But there are also agronomic issues, as well, and that's kind of where we focus with our growers, is understanding, could you do this differently? Is there any other option?

And we have not been able to identify

any other option that's workable for them. Most of the people that are using it -- well, they're the ones that are exporting/importing into the US, and they -- they're not really the tiny, tiny growers that are growing the crops for the local use.

And so, in order to do that, there has to be a harvest at -- all at one time in order to make it viable for that type of supply chain. That's what we focus on.

MR. CHAPMAN: Thank you, Lynn.

MS. COODY: Thank you.

MR. CHAPMAN: So, up next we'll have Kiki. And then, we'll stop with Kiki, break for lunch, when we come back from the break, Abby will be up first at 2 o'clock.

MS. HUBBARD: Good afternoon. My name is Kiki Hubbard. I'm the Director of Advocacy for Organic Seed Alliance. We are a non-profit that works nationally to ensure that organic farmers have the seed they need through research, education and advocacy.

I want to thank the Board for all of your work, and for your commitment to this very important public process. My comments will touch on three seed-specific topics.

First, we thank the Board for keeping conversations about seed integrity moving forward. We agree that testing for and monitoring unwanted genetically engineered material and seed sourced for organic systems, is a good idea.

After four discussion documents, we'd like to see those four taken to the next level. We know a proposal can't be put forward with any degree of competence at this time until we have more data, which is something public comments have repeatedly called for.

We still lack information that helps us understand the extent of the problem in organic and other forms of non-GMO seed. Seed companies that serve organic growers are testing and tracking levels of contamination in agriseed crops.

And as was mentioned earlier, this data could possibly be collected in a way that protects the anonymity of companies, to help us understand the scope of the problem, and what threshold, if any, is feasible.

We're very much supportive -- we very much support establishing a task force on seed integrity. We also support the idea of a pilot project focused on a single at-risk crop.

Organic seed companies and growers would have to be closely engaged in this process from the beginning, however, to avoid undue costs and burdens down the road.

Such a pilot project could also help answer some of the questions that were listed in the discussion document before you this week, including those related to testing methods and protocols.

Secondly, we're disappointed that the topic of excluded methods isn't moving forward at this meeting. This is a critical area in which the materials in GMO subcommittee was

making much progress in clarifying the terminology used for making determinations about which methods are excluded, or aren't excluded, in organic systems.

We believe the subcommittee has established a useful framework to serve as guidance for making strong and consistent decisions regarding compliance in this regard.

We hope to see the working excluded-methods proposal move forward with a terminology chart and list of methods that includes more background information, and definitions to support this work and this conversation, moving forward.

Lastly, we hope to see the crops of committee's proposal to strengthen the NOP's 2013 organic seed guidance document, back on the fall agenda.

This proposal clarifies and strengthens the organic seed requirement, and signals to the broader organic community, that organic seed is important to the integrity of

the end-product, and that further investments in organic seed will have a positive ripple effect that leads to more high-quality organic seed options that are well-suited to organic production systems.

We hope to see an improved version of this proposal at the fall meeting, and encourage the NOSB to make organic seed policy a priority moving forward. Thank you.

MR. CHAPMAN: Thank you. Real quick, I just to make a clarity, and then we'll go to questions. So, excluded-methods terminology is on our active work agenda. There was no product produced by the subcommittee to be ready in time for this meeting, but doesn't mean if there's a product ready by the fall meeting, then that's when we'll hear it next. It is on the active work agenda.

MS. HUBBARD: Thanks, Tom.

MR. CHAPMAN: So, questions. Harriet?

MS. BEHAR: What would be the impact

of requiring non-organic seed to have some testing. It would maybe not have to be on the seed tag, but before an organic producer could use non-organic seed, they would have to have some sort of tracking of the GMO contamination.

Or do you think we should just only stick with the organic seed suppliers.

MS. HUBBARD: Oh, absolutely not No, I think -- I like the idea of requiring some verification that the testing has been done on untreated, non-organic, conventional seed being sourced by organic growers.

I absolutely think that non-GMO, non-certified organic seed should be part of this conversation, and process, as well, if not more, because organic seed suppliers, organic seed production companies, in particular, are doing a really good job of testing and monitoring the problem, and taking measures internally to address it, meaning they are working hard to meet customer demand, or customers' expectations, in the way GMO pre-seed.

MR. CHAPMAN: Dave?

MR. MORTENSEN: Kiki, if you could, you know, now or after we break, any ideas you have about how we gather existing data and cite about crop species, and, you know, data that is being kept and could be shared with us, we would really benefit from hearing that.

MS. HUBBARD: Yeah, it's -- I definitely think it's a conversation that needs to be had with seed suppliers first, especially -- starting with seed suppliers who sell mostly organic, if not sell all, if not mostly, organic seed, because they're going to be most committed to helping us address the problem.

The challenge is going to be when we try to gather data from the larger genetics firms that have strict intellectual property right protections, including restrictions on testing for genetically insured material, and the seed they're selling probably -- including seed that is conventional and treated -- and so

that is going to be a barrier for sure.

But I do think there is a way to come up with a solution with organic stakeholders, to try to create a model or system for doing that research.

We keep talking about it, and now is the time to really be more coordinated and motivated to come up with that plan. And I'm happy to talk further about ideas, and engage other stakeholders, as appropriate.

MR. CHAPMAN: Dan?

DR. SEITZ: So, I'm not an expert in excluded-methods terminology. My sense is that because this technology has evolved so rapidly, there really isn't at this point necessarily settled agreement on what constituted excluded methods.

And there may well be some differences between people in the GE industry, and people involved with organic -- the organic industry, as to what constitutes excluded methods from -- using our terminology.

I imagine there are also differences between how Europeans are looking at this, and the US looks at this. And I'm just curious, I mean, obviously this is a big subject, but if you could just take a minute and explain, where are some of these differences, and where are you seeing some good degree of consensus within the organic industry, about how excluded methods should be -- how the terminology should be classified?

MS. HUBBARD: Well, let me start by -- yeah, thank you for the question, Dan. Let me start by saying that the definitions that the subcommittee has been working on in the context of excluded-methods discussion, have been reviewed by a number of people, including plant breeders, and other scientists.

There is general consensus that the methods that have been determined as excluded, should be excluded with the current excluded-methods definition.

Now, one of the benefits, or one of

the strengths, of the framework that the subcommittee has put forward, is that it provides additional definitions to help clarify the excluded-methods definition, including definitions around conventional breeding, and what a GMO is.

It goes beyond the excluded-methods definition, to provide more clarity, to help us all -- especially the NOP, the NOSB with the recommendations, as well as certifiers and others who are enforcing the rules -- helping all of us to make strong, consistent determinations and decisions, so that we're in compliance with prohibiting those excluded methods.

Now, yeah, there is going to be disagreement, especially within the biotech industries, but -- including with the definitions themselves.

But my understanding is that the USDA's regulations governing biotechnology, including their definition of bioengineering,

should have no impact on the NOP's excluded-methods definition, and should have no impact on the efforts of NOSB to determine which techniques should and should not be excluded.

MR. CHAPMAN: Thank you. Thank you. And so, we'll break now for lunch. We'll start back up sharply at 2 o'clock. At 2 o'clock, just so you're aware, is Abby Youngblood, followed by Margaret Scoles. Thank you. We're in recess.

(Whereupon the above-entitled matter went off the record at 1:06 p.m., and resumed at 2:04 p.m.)

MR. CHAPMAN: If folks can take their conversations outside, we'll get started. First up is Abby, in the unenviable spot of first after lunch. After Abby is Margaret Scoles. Abby, if you can start with your name and affiliation.

MS. YOUNGBLOOD: All right. Thanks, Tom. I'm Abby Youngblood, Executive Director at the National Organic Coalition. And I want to start by expressing my gratitude to members of

the NOSB. Thank you so much for your dedication.

NOC wants to convey our support for the proposal on eliminating the incentive to convert native ecosystems. We urge the NOSB to seize this opportunity to make progress on an issue that is critically important to organic stakeholders.

We agree that further clarifications are needed to address concerns about forested land in the northeast region, but we believe this can be done through guidance. The fundamentals of the proposal provide a solid foundation for moving forward on this issue. Please vote yes on this proposal tomorrow afternoon.

On excluded methods, NOC urges the NOSB and the NOP to continue work in this arena. Please publish the NOSB's draft discussion document on this topic and put this item on the agenda for the meeting in St. Paul this fall.

The NOSB's work on this topic is

incomplete, and next steps are essential to protect the integrity of organics. There are nine new genetic techniques that the NOSB has already voted on and unanimously determined that they should be prohibited.

The NOSB must continue its evaluation of the eight technologies that are still listed in the terminology chart as to be determined. The Board also needs to provide definitions for agroinfiltration, cisgensis, and intragenesis to accompany the unanimous recommendation from the fall of 2017.

NOC commented on silver dihydrogen citrate. Because the NOSB has received a petition to add this material to the national list, NOC urges the NOSB to vote against this petition when it comes before the Board. The material is a type of nanosilver. Nanotechnology and nanomaterials are incompatible with organic production due to strong evidence that they are not safe for human health.

Unfortunately, the NOP policy memo on nanomaterials from March of 2015 has left the door open to petitions like this one and to the inclusion of nanomaterials on the national list. Nanomaterials are becoming an increasingly common, and companies are seeking to market their products to organic producers.

Without an effective prohibition on nanomaterials in organic, the NOSB may encounter many similar petitions in the future detracting from their ability to work on other critical issues.

We urge the NOSB to put the topic of nanotechnology on your work agenda. We need an NOSB recommendation to permanently prohibit this technology. Thank you for considering my comments.

MR. CHAPMAN: Thank you, Abby. Any questions for Abby? Ashley?

MS. SWAFFAR: So on the native ecosystems, back to that, you say that a lot of the concerns can get worked out through

guidance. And guidance is just guidance. And we're depending on the program to hear those concerns. Any thoughts or elaborations on that.

MS. YOUNGBLOOD: Yes. So our thought on that is that not all wood lots in the northeast are native ecosystems. So we would expect the NOP to clarify this issue and others through guidance with support from a broad-based team of organic experts including farmers, conservationists, certifiers, and others.

MR. CHAPMAN: Any other questions? Emily?

MS. OAKLEY: On the inspector qualifications documents, I know that you expressed concern about leaving some of the guidance up to the NOP. Would you suggest voting on this proposal as it is, given the complications of sending it back for further work?

MS. YOUNGBLOOD: We support the proposal. And my colleague, Christie Badger, is going to speak a little bit more on this topic.

While we support the proposal, we do believe that NOSB should remain involved in that issue.

MR. CHAPMAN: Thank you, Abby. Up next is Margaret followed by Jay Feldman. Margaret, if you can start with your name and affiliation.

MS. SCOLES: Margaret Scoles, Executive Director, International Organic Inspectors Association. A year ago, I asked the NOSB to focus on inspector qualifications. Thank you for doing that. We're moving toward our goal, better inspections and better inspectors.

The timing is critical. Yesterday, I heard several people speak about the importance of qualified inspectors in detecting fraud, whether for imports or domestic fraud.

To respond to your first four questions, Question 1, are the criteria on qualifications in the ACA best practices sufficient? IOIA supports this document. It was a collaborative effort of a cross section of

large and small state agency and private certifiers, and IOIA.

What changes do we suggest? Work that IOIA did for the NOP is Appendix 1 to your proposal, IOIA Criteria for Inspectors and Reviewers, November 2011. It included two important items that were above baseline competency and therefore were not incorporated by the working group.

IOIA recommends additionally, first, expanding guidance to differentiate inspector levels. We propose three levels of professional inspectors based on experience, background, and expertise.

Many but not all certifiers have systems to identify and assign the most qualified inspectors. Due to rapid growth of organic and lack of incentives to retain experienced inspectors, we are over-relying on inexperienced inspectors. This creates inconsistency and risk.

Second, minimum hours of continuing

ed in level-appropriate content.

Question 2, what resources are available? Good resources are available, for example, the ACA annual training. IOIA offers 100, 200, and 300 level webinars and in-person training. Self-directed learning is a focus this year.

We are developing training on natural resource assessment and biodiversity with the Wild Farm Alliance. There is still a need to shift to a more risk-based approach for both certifiers and inspectors and, with that, a need for training.

IOIA and ACA are in close communication about training needs. NOP provides staff to speak at inspector training. Any NOP guidance should require a documented number of hours of level-appropriate continuing ed.

Should there be inspector licensing? Yes, eventually. The documents IOIA created for the NOP included a concept of operations for

licensing inspectors and reviewers.

At this point, requiring licensing or ISO accreditation would add burdensome costs and negligible value. How do you think such a system could work? I refer back to the work that's already been done by IOIA, plus two supplemental papers including a schematic of IOIA's new tiered inspector certification program. I left it right there.

MR. CHAPMAN: Thank you. Scott?

MR. RICE: Thanks, Margaret. In terms of if we don't go down the road of a licensing program now, and to Ashley's earlier point, guidance being only guidance, how do we ensure that certifiers are interpreting guidance or are truly implementing minimum or standard, if you will, qualifications? How do we keep that a strong system?

MS. SCOLES: It is true that when we do things in the private sector, IOIA, ACA can get together. Not all certifiers belong to ACA. Not all inspectors take training, not all

certifiers require training. And so I think some method of licensing is getting pretty important. And it needs to be in the near future.

The problem with licensing or the challenge with licensing, not a problem with it, is that in order for the government to recognize -- the state of Texas, for example, couldn't require IOIA accreditation, because it's not a governmental sanction. And that's if we have a licensing program, it needs to be --- that's where ISO accreditation could be valuable. It could allow NOP to recognize it.

And we see at least three different ways that it could happen. I mean, the NOP could simply put together a licensing program for inspectors. I don't think that's necessary. Or we could get ISO accredited in the private sector. IOIA and ACA could take the work that's been done, and create a system, and have it ISO accredited. And then the NOP could approve it that way.

What we proposed in 2011 was a public/private partnership. I've never been convinced that's the right way, but that is the challenge to make something that fits everybody. It doesn't required membership and allows the government to --- losing the word that I want --- endorse it.

MR. CHAPMAN: Any other questions? Harriet?

MS. BEHAR: So for inspectors, once they pass the IOIA training, and they are taking the webinars or whatever, is there any further testing or proof of competency that occurs as they maybe would move up in those tiers or whatever?

MS. SCOLES: The system that we currently have, we have -- what is new is field training. It used to be that we knew people were not ready for basic training when they came --- or ready to do inspections when they came out of basic training. We knew that. And apprenticeship wasn't always available.

So we created field training which we still consider that entry level, 100 level training. And it does require a pass/fail. And then the 200 level series of webinars, or in-person training like the biodiversity and natural resources, those would be things that would all have a competency test. And they are things that we think every working inspector should have. That's kind of the definition of the 200 level. And they do all have an assessment.

MR. CHAPMAN: Dave?

MR. MORTENSEN: Margaret, during the meeting yesterday, the NOC meeting, you were sitting next to me. And there was a discussion about that not all crops or cropping systems are equal and that certification of livestock on grass pasture-base was challenging and that a number of certifiers were not up to speed to do it well. That was the general --- some of the things that were being said.

Could you speak to, you know, how we

achieve a state where certifiers are, if that is true, where certifiers are equally competent across the systems that they work in, or how we maybe have people that are specialists in a given kind of cropping system, and cover those things?

MS. SCOLES: Dairy is a really --- dairy is problematic. It's not so much of --- I'm the person that reads all the applications and decides if people can take training. And I see people who are --- their references are their cousin, and they went to their grandpa's farm in the summer. And they want to take crop inspection training. And sometimes those people get into crop inspection training.

And I've seen the certifiers send them back to us. They have to have a livestock certificate in order to do livestock inspections. But they don't know --- I've had cows all my life. I don't feel qualified to inspect a raw dairy. I mean, I've done everything you can with a cow but not dairy

cows, particularly.

I think that we have a risk of people that are not qualified being trained and then certifiers maybe being too willing to use some of those people. But that's definitely a problem between certifiers.

Some certifiers are much more careful, and they have a smaller number of dairy inspectors, for example. And some consider their operations low risk. And, you know, well, if they're small dairies, somehow they're not risky, which isn't really true.

MR. CHAPMAN: Thank you. So just a reminder to the Board, we're operating about an hour and ten minutes late at this moment. Up next is Jay Feldman. On the deck is -- I lost my spot -- Jo Ann Baumgartner.

Jay, start with your name and affiliation.

MR. FELDMAN: Hi, good afternoon. I'm Jay Feldman, Executive Director of Beyond Pesticides. I served on the Board from 2010 to

2015. And I'd like to thank you all for your service. I feel your pain.

The work of the NOSB is first and foremost about ensuring the integrity of the USDA organic label, ensuring public trust. This establishes, and protects, and helps to grow the market. To the extent that the NOSB does not embrace this task fully against all attempts to override the Board's authority, the label is damaged.

To that end, strengthening and clarifying the requirements for the use or organic seeds should remain on the agenda to eliminate inconsistencies in the enforcement of NOP's broad exemption that allows the use of conventionally produced seed in certified organic.

Excluded methods, terminology should be maintained on the NOSB agenda to keep up with the fast moving biotechnology industry. Organic regulations prohibit the use of genetic engineering, as you know.

It's critical that we have deadlines for these topics and others so that something on -- we know, as the public, that something on the active list, the active work plan, is moving to closure.

It is important for the NOSB to maintain a focus on the problem of contaminated inputs, another key issue which threatens the quality of organic products and soil on organic farms. The NOSB last addressed this issue in a report in the spring of 2015.

We urge the NOSB to insist that NOP move forward with implementation of the NOSB recommendation on inert ingredients. To that end, I think the Board should reject the petition for sulphur use as a molluscicide for which the petitioner, I believe, has a label with a 99 percent ingredient statement.

In cases where you cannot determine the inert ingredients, which is considered proprietary information or CPI, you should annotate that allowance, or that material, or

substance pending a policy being put in place, given what we heard earlier today that it's not on the agenda or not on the work plan.

The fraud problem extends to both imported and domestically-grown organic food. The topics of inspector qualifications, inspector training, are integral to fraud protection. BPA, and other ingredients, and packaging should be eliminated. And this should be a priority issue of the Handling Subcommittee in a TR of BPA. And its alternative should be commissioned.

We support the CACS proposal on native lands, and that proposal should be approved.

I'd like to talk about polyoxin D zinc salt, which was raised earlier. We are against this petition expressly because of the impact it has on soil and biological systems. The soil ecosystem, as you know, depends on fungi for breaking down organic matter and supplying nutrients to plants. This issue is

basic to the NOSB's charge to ensure material compatibility of organic soil systems. Thank you.

MR. CHAPMAN: Thank you, Jay. Emily?

MS. OAKLEY: Thanks for bringing up polyoxin D. So I have some reservations, because the technical review that was commissioned, which is supplementary, is relying on the petitioner's information regarding the impacts of soil. And I'm wondering if you would elaborate on that.

MR. FELDMAN: Well, I think that's always problematic. If the TR is insufficient then certainly I think that the Board needs to go back and read the sufficiency standard that we typically require of the TRs.

But I think the larger issue in this case is that we found with these materials, other similar ones, that it's really the inactive, well, I shouldn't say inactive, because as you all know, inert ingredients can be biologically and chemically active, and often

more so than the actual active ingredient.

In this case, the active ingredient is sulphur, but the inert ingredients may be ethoxylated compounds. We don't know. But it would very easy for the Board, in the absence of an inerts policy, to annotate an allowance. In this case, I think when there's a petition coming up, it should be rejected for lack of information on the full product formulation.

In the case of a sunset with the material that you know has ethoxylated compounds, or could have ethoxylated compounds, and the manufacturer is unwilling to disclose that information --- and understand that most inert ingredients comprise the majority of the product formulation. This is not unique to polyoxin D.

So I hope that answers the question. But it's something you can do something about. This is a classic example where, you know, you have the authority to annotate. And in the case of a petition, you have the authority to reject

pending complete information on the product formulation.

MR. CHAPMAN: Dan?

DR. SEITZ: A couple of questions. First, on the question of polyoxin D, so I've heard a couple of --- I don't know anything about this as a substance, and I'm a consumer not a pharmacy.

So my understanding, or one of the argument's I've heard, is that there are other substances that are used that do more harm than this. So that by having this, you may actually lessen the accumulative harm of some of the substances that are already on the list. And I'd just be curious to hear how you respond to an argument like that.

MR. FELDMAN: Yes. I mean, I like that argument. If we had the authority to remove materials off the market, I mean, if we had before the Board a petition to remove other more hazardous materials, and we were bringing in a new material, it doesn't necessarily, and

in most cases doesn't have that effect.

But I think that there's a deeper problem here, and that is we don't really know what the full formulation is. We know we're talking about an active ingredient, but we know there's iron in there, but we don't know the full formulation. So how do you make a judgement as to the hazards nature of the material?

And I understand the Board is not listing products, right, the Board is not listing products. But that's why you have annotation authority. To preclude the ingredients that you have not gotten information on has not been fully disclosed.

DR. SEITZ: Then what would be one or two examples of something that is labeled an inert that would be a highly toxic or problematic material, just so that we have that understanding that inerts are not truly inert? I mean, what ---

MR. FELDMAN: Right. Well, you know,

the one I like to use the best, because the reason I use this example is because EPA, you know, has a program in which it identifies green materials, right. So this is the safer chemicals program.

And they have literally identified these surfactancy ethoxylated compounds as materials that should be taken out, and it's not just pesticides. These are in household product shampoos, different materials, because there are alternatives on the market.

So what are these chemicals do? I mean, these are chemicals that are neurotoxic. Some of them are carcinogens or endocrine disrupters, in the case of the ethoxylated compounds, which affects all our organ systems if you adversely affect the endocrine system.

So that's an example where we do have products on the market. The Inerts Task Force, as part of the NOSB with EPA staff assisting the process, was able to identify this as a category, the ethoxylated compound, in a couple

dozen or more products on the national list of allowed and prohibited substances that had these compounds in it.

Those could be pulled out by annotation as part of the sunset review or, in the case of a petition, it could be rejected because of the failure to be able to evaluate these questions.

MR. CHAPMAN: Thank you.

MR. FELDMAN: Thank you.

MR. CHAPMAN: Next we have Jo Anne followed by Ed Maltby. Jo Anne, if you'll start with your name and affiliation.

MS. BAUMGARTNER: Thank you. Jo Anne Baumgartner, Wild Farm Alliance. We urge the NOSB to pass the proposal to eliminate the incentive to convert native ecosystems to organic production. Voting yes is a vote for storing carbon and conserving biodiversity. It's a vote for continual improvement of the standards, and it's a vote for the integrity of the label.

We're not charting new waters. Twenty-four other eco-labels require similar native ecosystem protection. Over 1,200 organic consumer comments support this proposal. They are appalled that they may be paying extra for products that are destroying habitat when already half the world's wildlife has been lost since 1970.

Many native ecosystems can be grazed organically as long as they can still contain dominant and characteristic plant species. I've seen myself how good grazing can improve oak tree and native grass regeneration. Maple sugaring can occur in native ecosystems as long as the requisite plant species are conserved.

Not all abandoned lands are native ecosystems. It takes time for disturbed areas to recover. In New England, about one and a half million acres of land quit being farmed in the last 50 years. What hasn't been developed, may be eligible for organic certification. Many of these wooded areas grew back too tightly with

too few species to contain the required plant composition and structure. Native ecosystem definition says that recovery tends to occur in 50 to 100 years.

The verification process we outline uses state of the art online maps and NatureServe native ecosystems' descriptions and field keys for the US and similarly for much of the America's, Europe, and Australia. Google Earth, Global Forest Watch, and ground truthing can be used elsewhere.

Let's not miss the bigger picture. We are running out of time to save the earth's declining in rare species and ecosystem functions. Specific concerns that have been raised can be dealt with in guidance.

You will not be able to satisfy everyone. You have to choose what is right. Voting for this proposal will protect hundreds of thousands of acres of native ecosystems all around the world.

We need to keep this issue moving

forward. Wendell Berry has said, "Land destruction is easy for it only requires ignorance and violence. But to restore the land and to conserve it requires humanity in its highest, completest sense." Are you for or against biodiversity?

MR. CHAPMAN: Emily?

MS. OAKLEY: Thank you, Jo Anne. I'm going to open up something from the public comments that I wanted to get your perspective on. There was a written comment from someone who works on a ranch in southwestern Missouri or southeastern Missouri.

And he was writing as a private individual. So I just want to stress that. But I wanted to read a couple of the sentences that he wrote in about and get your perspective on them. He talks about this first incentive to convert native ecosystems.

And he said, "We totally did this on our ranch. And I wish we couldn't have. Because we have suffered a lot of soil erosion

from cutting down the trees and not immediately seeding the cover crop.

"Having a hard time growing grass now. We really shot ourselves in the foot by rushing things before we had an adequate plan together. With the passage of this new regulation, the NOSB would incentivize the transition of non-organic farms while minimizing the loss of lands with important habitats from conversion.

"Please help other farmers avoid the mistakes we've made and are paying for dearly."

I wanted to get your perspective on that.

MS. BAUMGARTNER: Yes. Well, as soon as you clear a native ecosystem, you better do something with it right away, because it probably will erode or invasive species are going to come in. And that Farmer obviously wasn't paying attention, and now he has the added problem of trying build soil, I mean, block soil.

And he --- it's really interesting that he is thinking about this twice, and he thinks it was a wrong move in the first place.

MR. CHAPMAN: Ashley?

MS. SWAFFAR: I got a whole bunch of questions for you. In your mind, what does conversion mean?

MS. BAUMGARTNER: Well, conversion is conversion of a native ecosystem. And the definition of a native ecosystem is spelled out in the proposed rule. I think the guidance will explain that more. And that's, you know, the NOP didn't want, as I understood it, didn't want a huge proposal on the subject. They wanted concise language knowing that there was going to be guidance.

And so the guidance can explain that to determine if it's a native ecosystem you have to use dominant and characteristic plant species, and native ecosystem classifications.

Guidance can also explain how to use the USGS maps that map native ecosystems and the

related NatureServe documents that explain what each native ecosystem is and their related field keys. So all of that can go in guidance.

And the thing about NatureServe is they are associated with the Nature Conservancy. They're non-partisan, and they work really closely with government. They keep all of the rare and endangered species data for all the states in the union and for the feds. And because animals know no borders, they are talking internationally to people who are managing the same kinds of ecosystems.

MS. SWAFFAR: Multiple questions for you.

MS. BAUMGARTNER: Okay.

MS. SWAFFAR: So I think what is getting everybody confused is around the semi-natural definition and what that is compared to some of the New England stuff. Can you expand upon what is the semi-natural vegetation? Is there a universal definition for this? Who defined it, that sort of thing.

MS. BAUMGARTNER: Yes. Well, the difference between a natural and semi-natural ecosystem has to do with how much that ecosystem has been used by people, basically. And semi-natural has recovered enough to be called that native ecosystem.

So the native --- there are certainly areas in the northeast where there has been abandoned farmland, and it has not recovered enough to be called a native ecosystem. Likewise, there are areas that haven't been farmed for 50 to 100 years, as our definition says, that are likely a native ecosystem.

But it depends. Like I showed in my slides, right, if you have a forest that's growing back really tight, it's never going to be a native ecosystem. So taking those tools that I described, first you look at the USGS maps, see where you're at, see what kind of native ecosystem might be there, and then look further at the definition that NatureServe has and, if you need to, go out in the field with

that key.

And that key is basically what plants are there. And the thing about it is farmers know plants. For the most part, they do know plants. They may not know the Latin names of them or all of the plants, but it's not out of their purview, their world view. And the same with certifiers. And so using this process can help get to clearly defining the difference between what is non-native and what is a native ecosystem.

MS. SWAFFAR: So my question was the definition of semi-natural vegetation and who defines that?

MS. BAUMGARTNER: Oh. Well, I did mention that the difference between the two --- I mean, yes, the difference between the two is that one has been managed more by people. Both native ecosystems have dominant and characteristic plant species. This definition is coming from NatureServe.

MR. CHAPMAN: Thank you. A-Dae.

MS. ROMERO-BRIONES: Hi, Jo Anne. Thank you so much for all your work on this and particularly for getting into the weeds with NatureServe. So there's tribal communities that own over 100 million acres in this country which is --- they're one of the largest land owners outside of the federal government.

Can you tell me if you talked to any tribal stakeholders? We do have tribal organic stakeholders who are very concerned about this. Did you consult with any of them or talk with any of them in defining some of these terms that are in the proposal?

MS. BAUMGARTNER: Yes. We've talked with a couple of the native communities in the West Coast and then, I'm sorry, I don't remember the names of them, Jamie Simms and Kara Johnson. And they each -- Jamie is an attorney in the mid-west that works on policy all across the country.

And so we made them aware of this issue. We were really outreaching to them to

try and understand where they were at, and you, where Native American peoples are at with this.

What we had heard was that, up in the Northeast, some Native American communities were concerned about the effort to bring back some of the, sorry, some of the wooded --- the abandoned land that now has reverted to native ecosystems. Because as soon as you cut those down, it's going to impact their fisheries.

We also heard about how there's harvesting in native lands without permission. But that's kind of a different issue.

MR. CHAPMAN: I have to stop you there. We going to have to move on. Thank you, though.

MS. BAUMGARTNER: Sure.

MR. CHAPMAN: We're an hour and ten minutes late, or an hour and 20 minutes late at this point. Thank you, Jo Ann. Up next is Ed followed by Garth.

MR. MALTBY: Good afternoon. And my name is Ed Maltby. And I'm with Northeast

Organic Dairy Producers Alliance. I'd first like to thank you all for your service. And I realize more than most exactly what the work entails. And you must disregard anything that the Senate says about this body. Because you do great work. Thank you.

We heard this morning Secretary Ibach talking about some of core tenets of organic certification, organic animal welfare, the OLPP, and the concept that this would be not part of the organic label, but it would be an extra, an add-on, a wraparound, whatever you would like to call it.

I represent organic dairy farmers that went into organic dairy, invested hundreds of thousands of dollars into becoming proficient stewards of the land and organic dairy people. We're now being told that animal welfare is not a tenet of organic certification. I hate to think what they're going to do to me when I go back.

Origin of livestock, we heard this

morning about the NOP meeting the requirements of the Inspector General report, the 2018, '17, on imports. I would like you to meet the requirements of the Inspector General Report 2013 which talked about the origin publication of the origin of livestock being one of the recommended solutions that NOP proposed. At this point, it's not even on the NOP work plan.

And we're seeing widespread fraud, not import fraud, domestic fraud. And I know it's more of a sound-bite to say that import fraud, America First, and I say America First when it comes to the domestic, organic market.

I see the little yellow light is hitting me here.

Access to pasture, qualified inspectors, people to understand bearing, people to understand nutrition, people to understand how a dairy of 4,000 cows can get the access to pasture requirements correct.

If you need to bring in specialists, there are plenty of nutritionists out, plenty of

grazing experts. Don't just rely on your in-house inspectors.

Conversion of native ecosystems, we support the National Organic Coalition position.

It's a long time from yellow to red.

Length of grazing season --- well, I spoke too soon, sorry.

MR. CHAPMAN: Thank you, Ed. Any questions for Ed? Ashley?

MS. SWAFFAR: Thank you for your comments. I didn't see where you commented on glycolic acid as a teat dip. And I was just wondering how are the alternatives working? Do you feel like you need another teat dip?

MR. MALTBY: We didn't comment because we have a divided opinion amongst our members. We obviously need as many materials in the tool box that we can have. And as an organization, we couldn't reach consensus about exactly what a position should be.

MR. CHAPMAN: Emily, then Harriet.

MS. OAKLEY: We've heard from

northeast dairy farmers that they might need to convert native ecosystems to pasture land for productive purposes. And I was wondering, as a northeastern diary farmer, what your thoughts on that were.

MR. MALTBY: For the purpose of producing more milk?

(Laughter)

MR. MALTBY: We're now in an organic milk surplus of skim milk, mostly. The pay price to organic dairy farmers has dropped by $5 per 100 pounds which is roughly 25 percent. If you're into the grass-fed milk, it's dropped by $10 per 100 weights.

So the immediate problem for northeast organic dairy farmers and organic dairy farmers across the country is not converting more land.

It's not looking at the high expense of going into something, whatever ecosystem you have, spending time and money to perhaps log it, to perhaps rid of the stumps, perhaps put down some

cover crops, perhaps do this, perhaps do that. It doesn't affect northeast organic dairy farmers that way.

There is plenty of land that is not used, plenty of land that is available and, right now, what we're looking at, and for the next three or four years, unless some changes are made to the way in which different regulations are interpreted. We won't have an organic dairy industry if we don't.

MR. CHAPMAN: Thank you, Ed.

MR. MALTBY: Thank you.

MR. CHAPMAN: Up next is Garth Kahl followed by Richard Mathews. Garth, you can start with your name and affiliation.

MR. KAHL: All right. My name is Garth Kahl, and I am president of Independent Organic Services, Incorporated, IOS. IOS provides organic consulting to operators, and inspection and review services, to certifying bodies throughout North and Central America.

Since 1996, I have worked as an

organic inspector, reviewer, program manager for a national certifier, and a consultant to both certified operators and certifying bodies. I am an IOIA accredited inspector in all scopes and an IOIA trainer. I have also been a certified organic farmer since 1993, currently producing multiple classes of livestock and crops.

I want to sincerely thank the Board for all of the work and unimaginable hours of work that you put in. You have my written comments on a number of issues before you this week. But right now, I want to concentrate on the CACS inspector qualifications and training proposals, particularly with respect to training for reviewers.

As the standards have become increasingly prescriptive, most notably as regards to the pasture rule, the number of tasks that the inspector is expected to complete onsite has increased dramatically. If the initial reviewer has not ensured that the operator has submitted a complete OSB update, it

can easily add several additional hours to the inspection.

This is time taken away from activities that can only be performed onsite like mass balance exercises or observations of field borders. I cannot tell you how many times I have had to triage items I spent a significant amount of time on during the inspection because I had to spend an inordinate amount of time performing the tasks that the initial reviewer could have completed before I got there.

How do I know this, because I also perform initial and final reviews. In the early days, organic certification, both prior to and after the implementation of the NOP, the general practice was for certifiers to bring their best inspectors onboard as reviewers.

Miles McEvoy, Harriet Behar, Jake Lewin, and many other current directors of North and Central American CBs came up by this route. I contend that this is still the best practice and that the organic industry would benefit from

recommendations that encourage the use of inspector reviewers.

In short, reviewers need to know how to do inspections. And more experienced inspectors should be encouraged, where possible, to perform reviews. More than anything else, performing a final review requires that the reviewer see the gray areas and not just be able to quote the rule, chapter and verse.

I suggest that the Board should consider including some best practices for reviewers which include mandatory cross-training as inspectors and the completion of a minimum number of inspections as part of their training.

Thank you.

MR. CHAPMAN: Thank you. Questions, okay. Harriet?

MS. BEHAR: I agree that that cross training is extremely valuable.

MR. CHAPMAN: Thank you, Garth.

MR. KAHL: Thank you.

MR. CHAPMAN: Up next is Richard

Mathews followed by Kyla Smith. Richard, you can start with your name and affiliation.

MR. MATHEWS: Richard Mathews, Executive Director of the Western Organic Dairy Producers Alliance.

WODPA recommends renewing the 2020 lifestyle substances. Producers need these substances to provide proper animal care. We also make note of the fact that these materials were renewed in 2017 and are actually scheduled for March of 2022, so it's obvious that you're trying to spread out your reviews.

WODPA supports adding glycolic acid as an aid in preventing mastitis. WODPA supports defining emergency but opposes sub-paragraph 4II which is inconsistent with section 205 238A3. Sub-paragraph 4II requires prevention.

Section 205 238A3 requires practices that minimize the occurrence and the spread. WODPA strongly encourages development of a USDA inspector training, testing, and licensing

program that includes continuous education and periodic license renewal. WODPA is willing to help with this for dairy inspections.

I'm really heartened by the fact that the USDA is planning to do, unannounced, their inspections in 2018. We hope this means inspections by NOP. We recommend robust, detailed, in depth, and thorough inspections intent on finding violations. They're out there. We just have to look below the surface, no superficial inspections that are more show than substance.

USDA needs to pursue enforcement actions through the courts if needed. We can't have the USDA rolling over because a violator threatens to take them to court. Anything less will bring more bad press.

Any questions?

MR. CHAPMAN: Thank you, Richard. Questions? Ashley?

MS. SWAFFAR: So you supported adding glycolic acid to the national list. Are you

seeing that some of the other alternatives that your producers are currently using might not be getting the job done on mastitis prevention?

MR. MATHEWS: I think if you look at mastitis nationwide in the organic community, the answer is obvious. It's not being solved. So more tools may bring healthier animals.

MR. CHAPMAN: Thank you, Richard. Despite what I said before, up next will be Jennifer Berkebile followed by Albert Strauss.

MS. BERKEBILE: Good afternoon. My name is Jen Berkebile. I'm the materials program manager at Pennsylvania Certified Organic. I'm also a member of the Accredited Certifiers Association Board of Directors.

PCO certifies over 1,500 organic crop, livestock, and handling operations in the United States. Today, I'll be commenting on the 2020 sunset materials as well as paper chain pots.

First, I'd like to comment on livestock materials. PCO does not currently

inquire about the GMO status of registered vaccines. Allowing only non-genetically modified vaccines may result in our producers losing access to crucial vaccines.

Additionally, allowing only GMO vaccines when non-GMO vaccines are not commercially available may be a burdensome requirement for our producers. If commercial availability is adopted, PCO would request more guidance on how the commercial availability criteria of form, quality, or quantity are applicable to vaccines.

Vaccines are an essential tool that producers rely on, and PCO advocates for their continued allowance.

Regarding mineral oil, organic producers commonly use mineral oil externally as a parasiticide. It may be used as an active or inactive ingredient that the EPA lists for inert. It is often used as a lubricant, applied to administer treatment such as artificial insemination.

The confusion about the allowance of internal uses of mineral oil is likely due to the fact that the term lubricant is commonly used throughout the industry to describe internal uses such as for a laxative or for internal impaction.

So PCO doesn't allow mineral oil for those uses, but clarification from the NOSB regarding the prohibition of these particular uses may be helpful.

Next, I would like to comment on crop materials. The Crops Subcommittee expressed concerns about plastic mulch degradation and about burning of plastic mulch. PCO policy requires the monitoring and removal of plastic mulch prior to degradation. PCO does not permit the burning of plastic on organic operations so therefore would support an annotation to prohibit this practice not just for plastic mulch, but for all plastics.

Finally, I would like to comment of paper pots. Paper chain pots have recently been

prohibited by the NOP. The NOP stated that they had determined that the use of paper chain transplanting pots does not comply with the requirements at section 205 601 of the national list.

This reasoning is somewhat vague and PCO requests a more detailed explanation on why these paper pots are prohibited. The reasoning will likely affect certifiers and material review organization policies, and it will help inform how a petition for this type of product should be structured. Thank you all for your service and for the opportunity to comment here today.

MR. CHAPMAN: Emily?

MS. OAKLEY: Paul, is it possible to ask you to elaborate a little bit further on the decision for paper chain pots, is that something you are ready or able to answer now.

DR. LEWIS: Thank you, Emily. I know we spoke about this previously. I'm going to turn to my colleague, Dev Pattillo, who was

involved directly with this analysis in terms of the position on this issue. Thank you.

MR. PATTILLO: Thanks, Paul. I believe the decision to prohibit it is was based on an interpretation of 601 which allows recycled paper as mulch and as a compost feed stock, so use as a pot in this application wasn't compliant with the regulations.

MS. BERKEBILE: Thank you.

MR. CHAPMAN: Harriet?

MS. BEHAR: So for Devon as well. So it had nothing to do with glues or anything like that?

MR. PATTILLO: They are classified as a synthetic substance, so recycled paper is on 601. And in this application, it would also be classified as synthetic.

MR. CHAPMAN: Thank you. Up next we have Albert Straus ---

MR. MORTENSEN: Tom, could I just ask a question of us here? What is the procedure that would follow for opening the ---

MR. CHAPMAN: A petition, someone would need to petition the ---

MR. MORTENSEN: A petition.

MR. CHAPMAN: Yes.

MR. MORTENSEN: Okay.

MR. CHAPMAN: Up next is Albert Straus followed by Cameron Harsh. Albert, you can start with your name and affiliation.

MR. STRAUS: Hello, I'm Albert Straus, from Straus Family Creamery. We were the first certified organic dairy and creamery west of the Mississippi River, and the first verified non-GMO creamery in North America, as well as being the first to have a carbon farm plan, or regenerative agriculture some people know it as.

There's a lot of challenges in the dairy industry.

(Off the record comments)

Anyway, we've tried to make a model of farming, and working with our eight other family farms besides my own, to kind of make a

farming system that's viable for farmers so they can pay themselves, they can do best management practices on the farm, and invest in infrastructure, and pass it on to the next generation.

We work very closely to manage our supply of milk to keep it in line with our sales. And I think that what we are seeing is that we're --- it's not only the big dairies, it's all organic dairies, for the most part. As an organic farmer, I know that we produce more milk when the price is low, we produce more milk when the price is high.

So one thing I've been trying to talk about in these meetings is how do we get better data to be able to understand what's happening in the market place?

I was able to pull data to look at Sonoma County to see what the average herd size was over the last --- it's grown by 14 percent over the last four years. And organic acreage, pasture acreage, hasn't increased.

So it brings to -- a concern to my mind is that if they had enough organic acreage to meet those cows they had, I don't know if they'll meet it with 14 percent more.

So having the data, collecting the data, and then having --- let me see, what else --- oh, having certifiers understand what dairy farming is, getting metrics to be able to measure and to have farmers actually reporting real data rather than speculation, or calculations, or estimations, and having inspectors actually looking at this data.

Here, we are actually using --- we're working with NASA to quantify our dry matter production per acre on our farm. So it's taken satellite imagery to acuate it dry matter. And this is actually one of our carbon farmed pastures that actually is more resilient after we put the compost and started the grazing practices. But it can also be used as a tool to kind of really show that pastures are productive.

We also are using our farm where we're using floating plate meter to measure before and after grazing and calculate the amount of dry matter that's coming from the pastures.

MR. CHAPMAN: Emily?

MR. STRAUS: I do have one other.

MS. OAKLEY: I just wanted to say thank you for providing such great and detailed information. And were you going to say something else?

MR. STRAUS: I have one other comment I want to bring up if you're allowing it.

MS. OAKLEY: But could I ask what that is? No, yes?

MR. STRAUS: I'll just quickly say the issue we're having in Point Reyes National Seashore is that the six organic dairies and the other livestock farms are being threatened at their organic status because the Park Service doesn't allow them to do best management practices even though they're required by their

lease, they're required by organic certification to improve soil and improve crops.

The park doesn't allow compost application, they don't allow fencing, they don't allow a lot of practices, saying they're for many different reasons. But it's a big issue that I hope that the USDA can put pressure on the Park Service and the Department of Interior saying you have to allow them to be successful in organic practices and organic businesses.

Thank you for letting me do that. And also, I'll pass it around, I have a gold standard.

MR. CHAPMAN: Yes, I have a question for you on this. So I see the litany of additional labels here on the left-hand side. It looks like a Boy Scout merit badge sash.

The Under Secretary recently spoke about the value of these additional labels. And I'm curious to know, as an organic producer, do you see add-on labels as adding value or should

those be encompassed under the USDA organic seal?

MR. STRAUS: My thought is that organic is a work in progress. It needs to be improved. It's the gold standard. All these single label claims are talking about one aspect of what organic is and confusing consumers.

We have employees, we have consumers that think that non-GMO is organic. We have, you know, 100 percent grass-fed. There's all these claims that are confusing consumers. And I resist putting more seals and more certifications on my label. I have far too many already.

MR. CHAPMAN: So your perspective as a business is that the additional labels are creating confusion?

MR. STRAUS: Yes.

MR. CHAPMAN: Thank you, Albert.

MR. STRAUS: Thank you.

MR. CHAPMAN: Up next is Cameron Harsh followed by Sam Welsch. Cameron, you can

start with your name and affiliation.

MR. HARSH: All right. Good afternoon, my name is Cameron Harsh. I'm with Center for Food Safety.

It is imperative that the NOSB have control over its work agenda. We are pleased to hear that the excluded methods terminology chart remains on the active work agenda. The scientific and organic community has participated extensively in this process with the goal of informing and NOP guidance.

As the Board continues reviewing methods, categorizes to be determined, and addresses new terminology or techniques as they emerge, we urge that transposons be corrected so that the term accurately captures a method rather than a genetic element. We suggest the term use of transposons in genetic engineering.

Embryo transfer in animals should also be defined as excluded. The Board must also move forward with its review of packaging substances. This is vital to consumer trust in

the organic label and to protect consumers from harmful chemicals that leach into foods.

This is a complex issue. NOSB must continue consulting with scientists and other experts and take steps to prohibit the most egregious substances as soon as possible. Addressing phthalates should be a top priority.

We appreciate the Livestock Subcommittee using the sunset review of biologics to raise important questions about the availability of vaccines made without excluded methods for the organic producers.

NOSB should add to its work plan developing resources for organic producers to identify and source non-GMO vaccines including a comprehensive list that documents all accrued vaccines, the diseases they treat, and whether or not they are produced using excluded methods.

NOSB should also clarify that use of GMO vaccines is prohibited. It may be the case that exemptions for certain vaccines should be considered. Any proposed exempted products must

go through the rigorous NOSB petition and public input process. It must be demonstrated that non-GMO vaccines and alternative prevention strategies are unavailable.

There is a petition for silver dihydrogen citrate submitted before the NOSB which highlights the limitations of NOP's current policy on nano materials which creates unnecessary work for the Board. It is a nanosilver product. And nano materials are incompatible with organic. Nanosilver displays aquatic toxicity as well as persistent and acute inhalation toxicity.

Given the increasing applications of nano in conventional foods, it is reasonable to assume that similar petitions will continue to be submitted. While CFS is confident that this Board and future boards would vote down any nano material, this undue burden can be prevented by recommending to NOP that nanotechnology be added to the regulations at 205-105-1 as prohibited in organic.

CFS also urges NOSB to add to its work plan the issue of antibiotics using hatcheries, and on the first day of life of chicks. Consumers respect that all organic products are raised without antibiotics. NOSB should work to eliminate this is exception and foster a robust organic hatchery industry.

CFS also looks forward to continuing discussion of container-based production systems for public comment, and we reiterate that systems that completely eliminate soil and rely exclusively on liquid fertility inputs cannot comply with OFPA.

Thank you, and thank you, Board members, for all the time and energy that you dedicate to improving and protecting organic.

MR. CHAPMAN: Thank you, Cameron. Questions? That's some pretty good timing you got there.

(No audible response)

MR. CHAPMAN: I am not seeing any questions. Thank you. Dan?

DR. SEITZ: So my understanding from what you were saying and other reading is that nanotechnology is not yet regulated by the NOP. Is that correct?

MR. HARSH: NOP issued a policy memo stating that nano materials are prohibited in organic and thus they would have to be petitioned for inclusion on the national list in order to be used by organic producers.

And due to the fact that nano materials have unique environmental and human health impacts and significant risks they should be prohibited full stop so you don't have to deal with petitions constantly coming up for nano materials.

DR. SEITZ: And you said that one of the materials before us now is, involves nanotechnology? I didn't quite catch that.

MR. HARSH: Yes. A petition has been submitted to add silver dihydrogen citrate to the national list. And according to the AMS website, there is a TR in development on that

petition. And it will eventually come before you for review. Because that petition is publicly available online. We were able to see it and address it now in our comments.

DR. SEITZ: Great, thank you.

MR. CHAPMAN: Thank you, Cameron. Up next is Sam Welsch followed by Madison Kempner. Sam, if you can start it with your name and affiliation.

MR. WELSCH: Sure.

MR. CHAPMAN: And congratulations on your award on data integrity.

MR. WELSCH: Thank you. My name is Sam Welsch. I'm with OneCert and OneCert International. I also recently became chair of the Accredited Certifiers Association.

I can't talk to you without mentioning that OFPA requires fertility to primarily come from management of organic matter in soil. So whenever you're looking at container growing regulations, that should be kept foremost in mind.

But today I want to talk about certification of excluded operations. That is something that's a problem worldwide, but especially here in the US it's a big problem.

But certification, it sounds like there's a lot of movement towards people wanting to require certification of those who are currently excluded. But such certification must be meaningful. For example, what does it mean for a certified warehouse to be certified when the certifier of that warehouse does not verify that the products they're handling are actually organic.

And we see this a lot. We've asked because we have a lot of uncertified handlers in the supply chain. So we ask is the product organic from the certifier of the supplier. The supplier, well, that's just the warehouse.

Well, what does it mean to be certified as a warehouse if nobody's verifying the products that they're handling. So then you back to who are they getting it from? And

they're uncertified. And you keep going back to the supply chain, and you do not find a certified operation you can verify.

Compliant labeling is very important. What does it mean to get a product that's not labeled as organic, but an invoice says it's organic? That's kind of meaningless. Unless you can connect the product that you receive to a certified operation, you can't verify that it's organic.

So the --- I don't really have enough time to give examples, but maybe people have questions. There's a lot of them out there.

MR. CHAPMAN: Thank you, Sam. Any questions for Sam? Yes?

MR. RICE: Sam, when you talk about not --- certification being meaningless without being able to trace back to what I understood you to say is the last certified operation, so are you then performing kind of what we've been talking about, a full supply chain audit, or what is your practice when you find those

instances?

MR. WELSCH: We're certainly trying. It's been very difficult to accomplish. One example is in some capsules that are used --- pullulan capsules that are claimed to be organic. And they're used by a lot of people who are packaging herbs and other products.

And the box, it arrives in and our operator, it's not labeled as organic other than the sticker that the uncertified supplier has applied to it. And when we try to obtain records that can trace it back to its manufacturer in China, we cannot connect the dots.

And we tried it from both ends of the supply chain. We can't get documentation from the manufacturer about who they're selling it to. That line breaks down, we can't get the documents to verify it. And we can't get the documents to verify from the people receiving the product at the other end. And they make both organic and non-organic forms.

So just one example, you know, there are also examples in fresh produce, mushrooms. You know, the boxes that arrive that are being distributed don't always say that they're organic other than a sticker that might be put on the box. And the product inside is not otherwise labeled.

And there's no certifier identified on some of these boxes. And it's being supplied sometimes by an uncertified distributor, sometimes by a certified distributor. But if we go back to the certifier of that distributor, if it happens to be certified, and ask them to verify it, they haven't verified it because it's a package product. And packaged products are excluded from certification by handlers.

So there are some big loop holes right not in the current practice. Even when you're certified, so getting a certificate from somebody in the supply chain doesn't mean the products they're handling or organic. Because they can handle both.

MR. CHAPMAN: Sam, so I want to follow up on your pullulan example. I think first my question might be for the program. But you say that an uncertified operation is applying an organic label to a product. And, I guess, my question for the program is applying an organic label, does that require a certification under the NOP?

DR. TUCKER: So we would consider the act of labeling to be part of the handling definition.

MR. CHAPMAN: And it requires certification?

DR. TUCKER: Yes.

MR. CHAPMAN: Yes. So, I mean, in that case, have you filed a complaint against the operation who was clearly violating the ---

MR. WELSCH: It's complicated. And I can't say ---

MR. CHAPMAN: Yes.

MR. WELSCH: -- too much about the details. But there are some other parties,

other certifiers in that chain that we need to talk to because of the --- how we learned the information.

MR. CHAPMAN: Okay.

MR. WELSCH: But, yes, it's in the works now.

MR. CHAPMAN: Yes. And, Sam, we have you back tomorrow to discuss this issue of integrity in more detail. I look forward to asking you some more questions about how you envision, say, something like warehouse certification operating, if we were to look to propose rules in that area.

So I'll look forward to talking to you tomorrow about maybe some of your ideas on what a warehouse certification would look like if we wanted to look at proposing rules in that area. So please come prepared tomorrow.

MR. WELSCH: Just to plant the seed, you know, we have a very complex supply chain and oftentimes very simplistic verification. So we need to get those things matching.

MR. CHAPMAN: Yes. Emily, did you have a ---

MS. OAKLEY: I think you got a chance to elaborate on your other examples, is that right? One of the benefits of sitting next to Devon is I can see the timer. And you still have 40 seconds.

MR. WELSCH: That's all right.

MR. CHAPMAN: Okay.

MR. WELSCH: Thanks.

MR. CHAPMAN: Thank you. Up next is Madison followed by Christie Badger. Madison, you can start off with your name and affiliation.

MS. KEMPNER: Sure. My name is Maddi Kempner. And I am Membership and Advocacy coordinator at the Northeast Organic Farming Association of Vermont. Northeast Vermont is one of the oldest organic farming associations in the country with 1,200 members who are both consumers and certified organic farmers.

Our certification program, Vermont

Organic Farmers, is a USDA accredited certifier representing over 700 certified organic farmers and processors.

I appreciate the opportunity to comment on the NOSB's agenda items today. And I sincerely thank you all for the work you do.

First, I want to say that we support the work of the Compliance Accreditation and Certification Subcommittee in recommending that the NOP develop minimum qualifications, training, and continuing education guidelines for inspectors.

Secondly, we appreciate and support the clarification provided in the NOSB's proposal related to what constitutes an emergency for use of synthetic parasiticides and organic livestock production.

We feel the NOB's proposal will assist certifiers in enforcing these regulations consistently, and we support the community's recommendation for an approach that starts with management practices as the first tool to

prevent parasites followed by non-synthetic treatments before turning to the use of approved synthetic parasiticides when the first two approaches are found to be ineffective.

We also support the clarification that changes to the operation must be made and documented in order to prevent similar reoccurrence in the future. This is already in line with the process that Vermont Organic Farmers is using and we appreciate the clarification to improve consistency among certifiers.

We also appreciate the NOSB's commitment to addressing the issue of genetic integrity of seed used in organic systems. We support additional efforts to increase transparency and data collection on seed contamination.

We, as other commentators have mentioned earlier, still lack adequate data that helps us understand the extent of contamination in at-risk organic seed and crops, the sources

of that contamination, and the best strategies for mitigation.

Data currently being collected by seed companies on levels of contamination in at-risk crop seed and crops could be utilized in a way that protects the anonymity of companies, helps us all understand the scope of the problem, and what if any threshold is feasible.

Finally, we request, reiterate the request to NOSB that the advisory role to the USDA to communicate that stronger regulations are needed to ensure manufacturers, patent holders, and users of GE crops share the responsibility of preventing contamination.

This responsibility currently falls solely on organic producers, but the organic sector's comprehensive approach to prevention is only so effective without prevention occurring across the fence.

We request that the issue of hydroponics stay on the Board's work plan moving forward. We want to reiterate, as I'm sure

members of the Board are aware, that this issue has not been resolved and still represents an area of significant disagreement within the organic community.

And lastly, I just want to say that we appreciate the added clarification just now regarding paper pots transplanters, which many of our certified producers strongly wish to continue using after this 2018 growing season.

And I'm happy to answer any questions.

MR. CHAPMAN: Ashley?

MS. SWAFFAR: So I have a question unrelated to vaccines. Are you the one that could speak to that?

MS. KEMPNER: Nicole, our certification director, will be commenting on that later. But I can share that I think our approach differs from some of testimony that's been given earlier in that we do verify whether vaccines are GMO or not. We do have a process in place for that.

MS. SWAFFAR: And she would be the one that I could ask about that stuff or you?

MS. KEMPNER: I can share a little bit with you. So we think it's important to ensure that non-GMO vaccines are used whenever possible. We would support the use of GMO vaccines in the case when the non --- when no non-GMO vaccines are available.

And we currently allow --- we only allow the use of non-GMO vaccines on certified farms. And we require vaccine manufacturers to sign an affidavit stating which vaccines comply with NOP's and the NOSB's working group definition of non-GMO production methods.

MS. SWAFFAR: Right. Which is what you wrote in your comments about ---

MS. KEMPNER: Yes.

MS. SWAFFAR: -- detailed questions about that.

MS. KEMPNER: Okay, yes. I think the detailed questions would be for Nicole. She'll be testifying later today.

MR. CHAPMAN: Harriet?

MS. BEHAR: About how many producers do you have that are currently using the paper pots? And would NOFA-Vermont be willing to put forward a petition to approve it, to add to our recycled paper and have the annotation so it would say pots, and compost, and mulch?

MS. KEMPNER: I don't have those numbers off the top of my head. But I can certainly get them for you and follow-up. And I think we would consider submitting a petition.

MR. CHAPMAN: Thank you.

MS. KEMPNER: Thank you.

MR. CHAPMAN: Up next is Christie followed by Gwendolyn Ward --- Wyard.

MS. BADGER: Hi, my name is Christie Badger. And I'm speaking today on behalf of the National Organic Coalition. Thank you for the opportunity to address the Board and thank you for the important work that you do as volunteers on the NOSB.

Inspector qualifications, NOC agrees

with CACS that fraud impacts all players in the trade. And the need for qualified inspectors, experienced in a broad range of operations, diverse in scope and scale, has never been greater. The topic of inspector qualifications and training is an integral part of fraud prevention and should be recognized as such.

NOC supports the overall proposal presented by the CACS and the supporting documentation from the ACA.

NOC strongly opposes the recommendation of the CACS that the NOP develop minimum qualifications and training, as well as continuing education guidelines to ensure a professional and competent inspector pool, and strongly encourages the NOSB to move forward with a proposal that develops recommendations around accreditation requirements for organizations that license inspectors and reviewers and allows for continued stakeholder input.

Field and greenhouse container

production, the NOSB must have the ability to advance issues of critical importance to organic stakeholders in collaboration with the NOP. The field and greenhouse container production issue is an important issue.

In NOC's recent meeting with Under Secretary Ibach, he expressed his commitment to a consistent standard and a level playing field as well as working with certifiers to ensure fair competition and fair application of the rules.

NOC agrees that clear and consistent standards are paramount, and we urge the NOSB and NOP to advance work on field and greenhouse container production by putting this topic on the agenda for fall 2018. Further action is essential to ensure clarity and consistency in the organic standards and to prevent multiple conflicting requirements across certifiers.

Biologic vaccines, vaccines are an essential tool in the production system of limited treatment options for livestock. We

currently allow vaccines that may have been produced with GMOs for 205-105E but further understand this section indicates they should be on the national list, although this is not currently being addressed.

Inconsistency in implementation of the organic regulations leads to lack of trust in the certification system as well as in the marketplace. To level the playing field, NOC urges the Livestock Subcommittee to add vaccines to its work agenda. Don't ask, don't tell is not a strategy that leads to trust and transparency.

Thank you.

MR. CHAPMAN: Questions for Christie? Scott?

MR. RICE: Thanks, Christie. Do you, on the inspector qualifications, do you see any room for the Board passing that proposal with the idea that the program would come forth with draft guidance or instruction that would continue a participatory process?

MS. BADGER: I'm just not sure it's there yet, Scott. To go ahead and pass it, you're passing it off to the NOP without further stakeholder input. And I know they'll come forward, there'll be a comment period. But we've kind of seen how that goes. And I'm just not sure that it's there yet.

MR. CHAPMAN: Thank you. Up next is Gwendolyn followed by Kenichiro Takei. And if you'll start with your name and affiliation.

MS. WYARD: Okay. Good afternoon, NOSB members, and NOP staff, and ladies and gentlemen of the gallery. My name is Gwendolyn Wyard, and I serve as the vice president of Regulatory and Technical Affairs for the Organic Trade Association. And I'm here commenting on behalf of over 9,500 organic businesses across all 50 states.

We've submitted extensive written comments on all agenda topics. I'll focus my time here today on import oversight, genetic integrity of seed, and evaluation of sanitizers.

Import oversight, in our comments we provided you with the current draft of our best practice guide to preventing organic fraud that was developed by our Global Organic Supply Chain Integrity Task Force. The acronym is a new acronym on the block, that's GOSI.

You'll be hearing more about the guide tomorrow from my colleague, Monique Marez. But for now, I want to quickly share some background on its framework that we did not include in our comments. Essentially, what the guide does is it provides an organic business with a systematic risk-based approach to developing internal mitigation measures for preventing organic fraud that can be integrated into the organic systems plan.

The approach that we've taken is based on a model that was developed by the Food Fraud Prevention think tank out of Michigan State University and then formally adopted by the Global Food Safety Initiative, GFSI.

As of January 2018, any company

operating under the GFSI certification scheme is required to carry out the vulnerability assessment process that's described in our guide and develop a written fraud prevention plan.

Now, our guide is unique, of course, in that the end goal is not food safety but rather organic integrity. I bring this up because food fraud is not new. It's been illegal since 1938 under the FD&C Act, as such there are many developed systems and solutions that we can draw from as we've done with our best practice guide.

The model that we're pulling from will also provide tremendous insights and support as we move into the pilot phase of our project and then into our ultimate goal which is industry wide adoption.

Okay, turning to genetic integrity of seed, we've submitted extensive comments on this topic for six years, this round included. And while we're glad to see such a critical issue remain on NOSB's agenda, we really do need to

pick some low hanging fruit that we can act on now while we continue to work towards the formation of seed purity advisory task force.

In our comments, we've identified three action steps. The first is to prioritize the organic seed usage proposal, bring it back, pass it.

The second is to adopt guiding principles for a seed purity standard. We've recommended seven. Feel free to ask me to read them.

And third is to develop a recommendation to NOP requesting guidance on GMO testing for ACA and industry. This guidance would be an expansion of NOP's existing guidance on pesticide residue testing and would establish clear and consistent sampling and testing protocols that can be followed now with or without a seed purity standard.

And finally on sanitizers, we're encouraged to see the topic of cleaner sanitizers and disinfectants on NOSB's work

plan. It's critical that organic producers and handlers have a tool kit of antimicrobials. And we do recommend that you convene an expert panel to help educate NOSB and the public on the appropriate use of sanitizers in organic production and handling.

Thank you.

MR. CHAPMAN: Thank you, Gwen. I have a question then we'll go to Lisa and --- would you maybe --- okay. So I asked this question of Kim earlier, and then I'll toss it to you as well. As you move your best practices manual for industry into its pilot and implementation stage, what role does the NOSB have in supporting or getting the adoption of this into industry practice.

MS. WYARD: Great. Thanks, Tom. You did ask Kim that, and therefore I should have expected this question. I think that, you know, first and foremost, because I know that you already have done, reviewing the best practice guide. That's step number one. This is an

opportunity for a private/public partnership.

I think that NOSB can be a recommendation, endorse the best practice guide. That could be passed on to the National Organic Program. The National Organic Program could also endorse the best practice guide. There's examples out there that we could look at right now. FDA has been working on a dialogue with further collaboration with GFSI.

I think Monique can probably speak to this a little bit more tomorrow. But there's a Taiwan exporter guide that was endorsed by NOP and FAS. So endorsing the guide would be absolutely fantastic. And I think there are some --- it's a very realistic thing that you can do. So thanks for that question.

MR. CHAPMAN: Yes, thank you. And then you guys in your comments outlay, like, 14 points. Your first point was requiring certification of ports brokers, importers, and online auctions. I notice warehouses weren't on that list. Do you guys have an opinion on the

certification of warehouses?

MS. WYARD: I think that warehouses fall under that as well. And there are certainly a lot of examples that have been brought up, particularly with the produce warehouses where warehouses can be certified as well, yes.

MR. CHAPMAN: Yes.

MS. WYARD: And I think there's a lot of activity that's already occurring in warehouses that requires certification without making any changes to the regulations.

MR. CHAPMAN: Lisa?

MS. DE LIMA: Over here. Hey.

MS. WYARD: Hi, Lisa.

MS. DE LIMA: I have a question about magnesium chloride reclassification and the comments that you submitted. So it seemed like you --- OTA was generally supportive but wanted to see more clarification in the proposal for outlining what processes would be synthetic and prohibited and which would be non-synthetic and

allowed. And I'm wondering if OTA thinks that that could be accomplished during rulemaking?

MS. WYARD: Okay, right. There's several processes that are described in the technical review. Some would be deemed synthetic, and others would be non-synthetic.

It would be most helpful for the recommendation that you pass to provide some examples. That would be ideal, but I don't think that it's necessary if the question is whether or not you could pass the proposal. I think the answer is yes.

There's an opportunity to provide that clarification in rulemaking, also through the classification of materials guidance. Right now, there's guidance for crop materials. The guidance on handling materials has not been developed.

And so analogous to the one that exists for crop materials, it provides a number of different examples on which materials would be synthetic and non-synthetic. So that's an

obvious place to do it. But I think that you could work with the program even through rulemaking and provide some examples there. Thank you for that question.

MR. CHAPMAN: Ashley?

MS. SWAFFAR: So you touched on a little bit about the guiding principles for developing a seed purity standard. Can you briefly talk about those?

MS. WYARD: Thank you, you bit. I put that out there and thank you. So I'm just going to read down them very quickly. Because I think this is something that you can do. There's going to be a lot of time going ahead, I think, in terms of developing a seed purity advisory task force and getting the data that's needed to set appropriate thresholds.

So this is something that you can put out there now. You could put it in a recommendation. So I'm just going to quickly read through the guiding principles that were developed by our task force.

Number one, any seed purity standard needs to incentivize the development of the use of organic seed.

It needs to be established per crop.

It needs to be based on data conducted through feasibility studies for this intended purpose.

It needs to apply to adventitious or unavoidable presence only, so the intentional use or presence of GMOs will continue to be strictly prohibited with a zero tolerance level.

It needs to be acceptable to consumers, seed growers, and users of organic and non-organic seed.

And finally, it needs to avoid inadvertent and negative impact or organic farmers, and organic seed growers, and genetic diversity of organic seed. So those would be guiding principles that you could follow.

Thank you.

MR. CHAPMAN: All right. And I had one last question for you on SDBS. Can you help

me understand OTA's position on SDBS? I got from it that you agree with the work on --- essentiality around sanitizers. But does the OTA have a position on SDBS?

MS. WYARD: We did extensive outreach. We reached out to retailer members, we reached out to a number of our members, as well as retailer organization groups. And we consistently heard back that it wasn't needed.

So I think it would be very difficult to pass a recommendation to put something on the national list that you've received zero comments from industry on saying that you need it. I also definitely see, I hear the comments that have been submitted in terms of having a robust toolbox and a selection of materials to rotate in terms of avoiding any antimicrobial resistance.

One idea is to put it back out for public comment again after you have the panel and further discussion on sanitizers. But again, we did not hear from any of our members

that it's needed. So I think that's a pretty important focus point for you.

MR. CHAPMAN: Thank you. Thank you, Gwen.

MS. WYARD: Thanks, everyone.

MR. CHAPMAN: Up next is Kenichiro, sorry if I said that wrong. And then following is Cynthia Smith. And you can start with your name and affiliation. Correct anything I said wrong.

MR. TAKEI: Good afternoon. I am Mr. Takei, Kaken Pharmaceutical from Japan, the petitioner for polyoxin D zinc salt. Kaken has responded to all the requests and the concerns expressed by the members of the 2013 NOSB meeting, spring meeting in Portland, especially -- specifically, Kaken has demonstrated that polyoxin D zinc salt is compatible with US grower organic agriculture. We have demonstrated that polyoxin D zinc salt is a safe or as one beneficial soil microorganisms, including the beneficial fungi.

Kaken has demonstrated that chronic exposure of larvae and pupae to the polyoxin D zinc salt as the maximum pesticide run rate has no adverse effects on development and emergence of adult lady bugs and honeybees.

We also demonstrated that polyoxin D zinc salt is compatible with and sometimes enhanced the performance of quality used organic pesticides used, microbial activity ingredients, including active norbait, doublelinkle and regalia (phonetic). Kaken has responded to NOSB request for demonstration of US grower needs and support. Kaken has demonstrated that polyoxin D zinc salt works. Kaken has summarized in the petition, the document, 96 efficacy tryouts in the US from eight different crop groups over 42 different crop disease combinations.

Kaken has submitted a detailed organic growers needs analysis based upon the comparison of pesticide statements and the field of efficacy trial data at the US.

Kaken noted that 28 comments were submitted to the docket in the support of polyoxin D zinc salt ONOP list. Kaken has provided additional details regarding that the polyozin D zinc salt unique and non-toxic emotive action with ecological-friendly profile.

Kaken has expanded the US grower crop export over 20 years. Crop treated with polyoxin D zinc salt may be exported without resident concerns to Canada, Mexico, New Zealand, South Korea, and Taiwan. Alternatively, crop export opportunities are pending, including European countries.

Finally, Kaken believes that polyoxin D zinc salt offers hidden benefits with growers. Kaken respectfully request your vote in support of the proposed listing of polyoxin D zinc salt organic --

MR. CHAPMAN: Thank you.

MR. TAKEI: -- plant disease control. Thank you.

MR. CHAPMAN: I had to stop you

there. Thank you. Any questions? Jesse?

MR. BUIE: There have been two presenters today who had concerns about polyoxin D's effect on soil microorganisms. Can you discuss some beneficial effects that polyoxin D has on soil organisms?

MR. TAKEI: We demonstrated that petition, the document detail. So no effect for beneficial soil organism evidence we have.

MR. BUIE: Okay. Say that again. There's ---

MR. TAKEI: Sorry, Chairman. So next speaker is our US partner. So I would like to reply after she presentation, she presents.

MR. CHAPMAN: Thank you. Thank you. He can ask questions from the next presenter. Next up is Cynthia Smith. Following Cynthia we'll have Johanna Mirenda.

MS. SMITH: Thank you. My name is Cynthia Smith. I'm with Conn & Smith. I'm a consultant, and I've been retained by Kaken to help them with their petition. I'm also their

U.S. agent for EPA and their agent for Canada.

I would like -- you've received my prepared remarks. However, I'm going to deviate significantly from those remarks.

Based upon the webinar, there was a question from a member of the board about does polyoxin work. I thought that was an interesting question, because I've submitted literally hundreds of pages of efficacy data that shows that polyoxin D zinc salt works, and then I began to think about it some more, like, well, when you look at the technical report, the authors of the technical report said basically consult your certifiers, they should know, but that's circular reasoning, because the certifiers are not looking at products that aren't yet approved for organic use.

So, I would direct your attention to the public comments. There were 28 public comments involving polyoxin D zinc salt that recommended, came from growers, and they also came from researchers.

Now, I would also just like to comment briefly about how to look at efficacy data, because the technical report did not go into that detail. The real question may really be, "I have the data, but I don't know how to evaluate it."

Well, let me begin by saying that not all efficacy trials are equal. In the ideal case, not that you will have it, but in the ideal case, you have enough disease that your level of disease in the untreated control is economically significant. Now, in one extreme, you don't have enough disease to make statistical comparisons, and your trial is worthless. The other extreme, your disease killed the plant, your untreated control, and so there's nothing to compare it to, because your plant died.

So, what you would like to see in the perfect trial is enough disease that you have economically significant damage to the crop. Now, again, not all trials are equal. There are

trials that we've conducted where the pathogen was inoculated into the plant, and those -- that occurs when the reliability of having disease is in doubt, and so the researcher would actually inoculate the plants. In other cases, the disease is naturally occurring in the area, and assuming they have a typical year, they'll have enough disease to have a good trial.

Now, in the trials, you will see letters.

Be happy to take any questions.

MR. CHAPMAN: Thank you.

Emily, then Jesse, then Dan.

MS. OAKLEY: Could you finish that last sentence?

MS. SMITH: Yes. Yes. When you look at the numbers, you will see a letter after the number. And, for example, the untreated control has an A after it, and in the treated case, you have a letter D after it. That means that A and D are different letters that they are in fact statistically different, so you do want to see

statistical difference between the untreated control and your treatment.

MR. CHAPMAN: Jesse.

MR. BUIE: Can you briefly discuss the beneficial effects of polyoxin D on the, on soil organisms?

MS. SMITH: Yes, I can. There was a study that was conducted using some advanced biological techniques -- these are microbiology techniques where you're looking at the number of microorganisms that survive, and the -- does the colony survive, yes or no, and then if it does survive, how many individuals are there that survived?

And what we saw with polyoxin D zinc salt -- and this is the 5SC formulation -- is that there was no adverse effect on the beneficial fungi, but in addition, there was a slight beneficial effect on the beneficial fungi, and one possible explanation for that is that the formulation includes what could be viewed as food for the microorganism.

MR. CHAPMAN: Dan.

MR. SEITZ: So, my understanding from the technical report on this substance is that it's formulated with some inert ingredients that have not been disclosed. And as a public member on the board, it is concerning to me that any company would come before the board asking for permission to have its product listed, but not be willing to be forthcoming about all of the components of that.

This might not be a question for you, because you're hired by the company, you're not necessarily involved in managing the company, but I'm wondering why all the ingredients haven't been disclosed to us.

MS. SMITH: I'd be very happy to answer that question. And I do know the details of the manufacturing process and the ingredients. We have two items here.

There's polyoxin D zinc salt technical. That is the technical grade active ingredient, and by definition, there are no

intentionally added ingredients. It is the technical grade material, so you'll have the pure substance, and then you will have the impurities that come along with that.

And in a particular case here, we have a fermentation process, and the impurities that come along are what I would best describe it in generic sense is digested food.

Now, secondarily, we have the formulated product. The formulated product will be evaluated by OMRI, and in that application, the details of the inert ingredients will be provided. However, this application is for the technical, and for the formulated material, I can tell you that the primary inert ingredient is an OMRI-approved material.

MR. CHAPMAN: Harriet.

MS. BEHAR: So, I was going to ask about the inerts as well, but it's not only OMRI that reviews. There are -- well, I don't know. Where we at? Eighty-something certifiers, especially if it's used around the world, and

so, I guess, I would ask if all of the inerts are on the Safer Choice list of the EPA.

MS. SMITH: They are. I can confirm that.

MR. CHAPMAN: Thank you.

MS. SMITH: Thank you.

MR. CHAPMAN: Up next is Johanna, followed by Amalie Lipstreu.

I'm just going to take a quick moment to note it's 3:45. We had tentatively scheduled on one of our agendas a break at 3:45, but we are tracking now about an hour behind, and so we will not be taking this break.

If anyone needs to take a break -- well, it made it 10 minutes by cutting 15 minutes out of the agenda. If anyone needs to take a break on the board, I just ask that you get up at your convenience, and we will continue on. Right now, we're tracking to finish up around seven p.m.

So, Johanna, you're up. If you could start with your name and affiliation?

MS. MIRENDA: Good afternoon. My name is Johanna Mirenda. I am the technical director at OMRI, the Organic Materials Review Institute. I will comment on three materials, liquid fish, magnesium chloride, and carrageenan.

First, liquid fish. The crop subcommittee has requested, has requested information to evaluate whether the sourcing of fish for fertilizers complies with OEFFA requirements to not be harmful to the environment.

The subcommittee is considering a possible annotation for liquid fish fertilizers that are approved as synthetic materials under 205.601(j). However, fish is also used to manufacture fertilizers that are approved as nonsynthetic materials, which are not otherwise prohibited or restricted under 205.602, such as fish meal.

As the board continues to work on this issue, please recognize that an annotation

to the listing on 601 would only impose limitations on synthetic fish fertilizers reviewed under that specific listing, and would not affect the nonsynthetic inputs that are approved without regard to that section of the national list, so in order to limit the sources of fish used in nonsynthetic fertilizers, restrictions would also need to appear on 205.602 in order to be enforceable by material reviewers.

Next, magnesium chloride. The handling subcommittee is proposing to move the current listing to 205.605(a). Under the proposal, only nonsynthetic forms would be permitted. Not all forms of magnesium chloride are nonsynthetic; therefore, not all forms of magnesium chloride would be allowed.

To ensure consistent implementation, the board should identify the specific manufacturing processes that are intended to be classified as nonsynthetic and allowed or synthetic and prohibited.

As described in OMRI's written comments, some of these classifications are not very straightforward even with the assistance of NOP guidance. Additional clarification would be helpful either in the final NOSB recommendation or through further guidance from the NOP prior to rulemaking.

Lastly, carrageenan. NOP published final notice to renew the listing of carrageenan on the national list. Now that carrageenan will be listed for another five-year cycle, the NOP should consider reevaluating whether the placement of carrageenan on 605(a) as a nonsynthetic is appropriate.

The 2011 technical report explains that manufacturing of carrageenan utilizes alkali treatments that could be considered synthetic. During the 2013 sunset review of this material, the handling subcommittee expressed intent to move the listing to 605(b) as a synthetic.

Here's a quote from that May 2012

subcommittee proposal. "We also recommend that this listing by revisited once the NOP has finalized the draft guidance. Reevaluation of materials classification should be considered to ensure that the listed material has been properly classified, and thus remove further confusion from their status, thus helping during future reviews."

Now that the NOP guidance on classification of materials is finalized and is actively being used by this board to reclassify other materials, it would be appropriate for the board to reevaluate the classification of carrageenan.

Thank you.

MR. CHAPMAN: Asa.

MR. BRADMAN: I want to thank you for your comments, and also the information you submitted in the written comments about manufacturers of liquid fish products.

Could you elaborate a little bit on any feedback you've gotten on the use of the

source material for the liquid fish? And, I guess, I would extend that a little bit and say, do you have any impressions about the awareness or opinions on whether limitations to -- harvesting fish in a way that doesn't impact wild stocks to produce material, would that be acceptable to some of those manufacturers?

The information you provided was kind of a straight down the line list, but I'd like to get a little bit more of the, perhaps discussion that might have gone behind that. Thanks.

MS. MIRENDA: Sure. OMRI's comments being a straight down the line list is intentional. We just report the facts and the technical information and will not make opinions on the preferences of OMRI listed suppliers or OMRI ourselves as to whether what should or shouldn't be allowed.

MR. BRADMAN: Right. I wasn't asking for an opinion, but I'm just wondering if this prompted any discussion that could help inform

our understanding of the issue?

MS. MIRENDA: Not that I've heard directly.

MR. BRADMAN: Okay.

MR. CHAPMAN: I didn't hear you correctly. Can you clarify your comment on carrageenan?

MS. MIRENDA: Carrageenan is currently listed at 605(a), --

MR. CHAPMAN: Yes.

MS. MIRENDA: -- which is allowed nonsynthetics.

MR. CHAPMAN: Yes.

MS. MIRENDA: During the 2013 sunset review, there was a technical report commission to look at the manufacturing process, and the handling subcommittee looked at that technical report and acknowledged that the commercially available carrageenans were manufactured in a manner that could be considered synthetic, and commented in the proposal that in the future, the committee should take a closer look at that

classification once the guidance was finalized.

MR. CHAPMAN: 605(b), okay. Yes. Thank you.

Sorry. Who else had questions?

Emily.

MS. OAKLEY: I just wanted to thank you for the thorough listing that you provided us, and I just wanted to reiterate that you have 30 OMRI products listed that, in the liquid fish category, that source their materials strictly from wild-caught fish for the exclusive use of fertilizer, and some of those include, sardine, salmon, finfish, tuna, skate, menhaden, pacific anchoveta, redeye herring, pacific herring.

Are there others, or is that do you think a pretty comprehensive list?

MS. MIRENDA: It is a comprehensive list, except that the comprehensive list includes other unknown species. And because identifying the source of the fish isn't a requirement for material review, we haven't been intentionally asking for that information, so

having an unknown source isn't a barrier to OMRI listing.

MR. CHAPMAN: Thank you.

Up next is Amalie, followed by Alesia Bock.

And start with your name and affiliation.

MS. LIPSTREU: Good afternoon. I'm Amalie Lipstreu, the Policy Coordinator for the Ohio Ecological Food and Farm Association.

OEFFA has been providing organic education and certification for close to 40 years now. While you're all inundated with comments and information, please know that we really do value your service and the intention and consideration that you give to all of the issues before you. Know that this board, your autonomy and leadership is critical to the longevity and efficacy of the National Organic Program, and that we, as organic stakeholders, will be vigilant in ensuring the fulfillment of that role.

Secondly, in the two days of webinars held by the board, you had the opportunity to hear from OEFFA staff and many of our OEFFA farmer members, particularly on the issue of import oversight, so I won't speak to that specifically, because I think you've heard a lot from them and can refer to our written comments, but let me just reiterate how important it is that the board has made this issue a priority.

You've heard how fraudulent imports hurt organic integrity, but I think what you also heard from our producers is how it also hurts the profitability of our domestic organic producers as well. This has the downstream effect of limiting our efforts to increase organic supply.

We appreciate the efforts announced this morning by the NOP to proceed and move this issue forward and take concerted action on increasing oversight of imports.

While our organic grain growers feel that they are not competing on a level playing

field due to fraudulent imports, many domestic dairy producers also feel that they are competing with producers that may not be held to consistent application of the standards as well.

We understand that organic regulations are scale neutral, and as such, producers using the economies of scale should be subject to the same rigor as smaller scale producers. We ask the board to act to reenforce the need for NOP oversight of consistent application of the Pasture Rule.

Certifiers across the country are increasingly being confronted with situations where energy and industry infrastructure is impacting organic farms, but they're reticent to address these situations without guidance. The NOP needs to study this issue and offer guidance to certifiers.

There's something incongruous about the fact that we spent years discussing the listing of a single questionable material, and rightly so, but at the same time, we continue to

ignore the real impacts of the unconventional oil and gas drilling, the multitude of synthetic and nonsynthetic substances toxic to humans, animals, and plants, and the related infrastructure that impacts organic farms in proximity to this infrastructure.

MR. CHAPMAN: Thank you.

Questions?

Dan.

MR. SEITZ: On the question of organic farms being impacted by fracking and -- well, other types of oil exploration and so forth, is there any legal recourse for these farms in Ohio, or is there -- has a law been passed that sort of supersedes their rights as farmers and landowners?

MS. LIPSTREU: Some of it depends on the level of infrastructure. Interstate -- for example, an interstate pipeline would be different than an intrastate pipeline. What we've seen, particularly with large pipeline projects, is that, you know, these landowners

are often approached to sign easements for some of this infrastructure on their property.

The point of opportunity that we have is that if we provide information to these producers in advance of signing those easements, they can institute procedures that will protect their farms. We had an organic inspector do a training for our organic inspectors recently, because he's been an overseer of pipeline construction on four organic farms recently.

For example, he discovered the use of foam breakers that our internal material review specialists have found to be incompatible for use with organic. This is something that's been used on pipelines on organic farms for probably decades, but we didn't know about it, so if we, you know, provide both certifiers and producers with the information they need to be proactive, we can prevent a lot of these problems down the road.

MR. CHAPMAN: Emily.

MS. OAKLEY: Thank you for bringing

this to our attention over the course of many meetings. And we've had discussions on the CACS about this issue, and, specifically, how we can craft this as a work agenda item request, and I was wondering if you had any specific thoughts that you could share with us now?

MS. LIPSTREU: Sure. Sure. I think, just even beginning to discuss this issue looking at, you know, bringing in, for example, a panel of people, people like organic inspectors, people who work on pipelines, for example, and others just to hear about what's happening across the landscape of the United States, how this is impacting producers and looking at some of the tools that are out there.

I know I've mentioned in previous meetings that we've developed this -- actually, adapted an organic agriculture impact litigation plan that was developed by an attorney in Minnesota that's been adopted by the Federal Energy Regulatory Commission and many pipeline operators, so there are tools such as this that

can be used if the NOSB just studies the issue, hears from people, and maybe puts forth some proposed guidance to certifiers.

MR. CHAPMAN: Sue.

MS. BAIRD: I was wondering, have you monitored water sources that, especially water that might be used to irrigate horticulture crops and things, and are you finding a lot of the prohibited chemicals in those water sources as a result of fracking?

MS. LIPSTREU: Sure. Sure. You know, it really depends on the farm and the farm operation. I know that one of our longest certified operations is a vegetable producer that has monitored the water on his land and found contamination.

The difficulty in that is is that some of these chemicals used in the process are proprietary chemicals and have trade secret protection, so you don't even know what you're testing for, but I think even some of the things that you can test for are some of the heavy

metals, the technically enhanced naturally occurring radioactive material that comes up in that water.

MS. BAIRD: Can I follow up on that?

MR. CHAPMAN: Briefly.

MS. BAIRD: Okay.

Well, I did do some inspections in Ohio, and we did require water testing, and there were really high levels of heavy metal. What -- if you found that, what would your action be for that farmer?

MS. LIPSTREU: Yes, I think that's a really good question. Yes, I mean, without any kind of guidance or standards, it's really difficult for certifiers to know. I mean, you know, I think that our agency's been doing a really good job of dealing with things on a case-by-case basis and just looking at the evidence we have and trying to make those individualized decisions.

Thank you.

MR. CHAPMAN: Thank you.

Up next is Alesia Bock, followed by Kendra Klein.

Can you start with your name and affiliation?

MS. BOCK: Hi. My name is Alesia Bock with AgriSystems International, and I'm here representing Ecolab, my clients, and myself.

I've been in the food industry for 30 years, and the last ten have been solely focused on supporting organic food systems, because I believe in it. I hoped I could make a difference, but lately this process seems a bit frustrating.

In light of today's opening statements regarding efficiency and innovation, I'm going to give you a few examples of where I think we need process improvement.

Acidified sodium chlorite for livestock. We first helped Ecolab petition this material in 2012 to be added to 205.603 for organic dairy production as a teat dip to

prevent mastitis and alleviate animal welfare issues. It took three years before the NOSB recommended that NOP add it to the list. We're now in April of 2018, and it is still in proposed rule phase.

Farmers across the country, especially on the west coast, have been trying to get approval from their certifiers to use this product, but their hands are tied, because it's not on the list.

Why does this process have to take six years, and how long will it take to add it?

Second, SDBS is on today's agenda as a petition material for food safety and organic handling. The original petition was submitted in 2015, but it took three years for additional information to be submitted.

I understand and appreciate all the diligence by all parties involved. For the record, I'm in favor of adding this material to the list, because I think we need more options in the toolbox for safe produce handling, and so

that not one particular sanitizer becomes, not immune, but you know what I mean, so that you don't have resistance.

And SDBS may be ahead of its time, because no one has commented on the efficacy and the essentiality of it, but I think we're going to have to deal with this more.

My bigger question, it is already on the EPA Safer Choice list, and if we can't provide encouragement for companies to innovate and develop materials that are safer for the environment and human health, then what are we doing?

I'm disappointed to hear that the EPA/NOP collaboration to evaluate List 4 inerts is off the agenda for this year. Industry needs a clear and expected time frame on petition process so that innovation can continue. Consumer confidence in our food supply is paramount.

Finally, just a comment regarding the decision from USDA to withdraw the organic

livestock practices final rule. Organic certification is a voluntary labeling program for people who choose to have their food system certified.

So many of us in this room have spent years providing feedback to NOSB committees to get this right. The majority of public comments across all sectors of the industry were in favor of implementation. Now it feels like our time has been wasted, and we're back to where we were ten years ago.

In closing, I very much appreciate the work that NOSB and NOP do. Even though we all as varied stakeholders have different priorities for organic, the bigger picture should be how to promote the continued growth of this $49 billion industry. Converting more conventional farmland to organic is better for soil health, animal health, and human health, not to mention the U.S. rural economy, so let's not stifle process.

MR. CHAPMAN: Thank you.

Questions?

(No audible response.)

MR. CHAPMAN: So, you mentioned it briefly, and -- I mean, you talked about the time it takes to list materials, and I hear that critique that it can take a long time to list materials. I was happy to see the January 2018 proposed rule that moved a lot of materials out of a holding pattern into a proposed rule, and I heard today that there's a couple more on its way as well, but in relation to SDBS, I mean, some of the delays have been, have been because we've been trying to find if there is a demand for this material to satisfy the essentiality criteria.

And from the -- I mean, how would you suggest that the NOSB addresses that mandated criteria in the absence of demand from --

MS. BOCK: Actually, from SDBS standpoint, I think you guys are doing everything you can, and I think it's up to industry to come forward with people who

actually need it, so I don't discount the fact that you've asked us for more input, --

MR. CHAPMAN: Yes.

MS. BOCK: -- and I appreciate that. My bigger concern was the acidified sodium chlorite for livestock, because quite honestly, because it is an animal welfare issue, because of mastitis, that to me dragged its feet a little bit too much, and I feel like we should have had certifiers pushing to get the NOP to push that through the final rule quicker.

MR. CHAPMAN: Yes. Thank you.

Up next is Kendra, followed by Alan Lewis.

Is there no Kendra Klein? Kendra Klein, going once, Kendra Klein going twice.

Alan Lewis, sorry to put you on the spot, but you are up next.

Alan is next, and then after Alan is Thomas Harding.

Alan, if you could start with your name and affiliation for the record?

MR. LEWIS: Thank you, Tom.

Alan Lewis, Natural Grocers.

There's not much to talk about in the organic world, so I want to talk about a different issue for me near and dear to my heart, which is the issue of integrity at retail.

And as many of you know, we're 145 stores, 19 states west of the Mississippi. We only sell organic produce, and we have all of our stores certified as processors handlers, and I'm going to tell you it's really hard for us not to be, not to get a noncompliance from our certifier.

I don't know how we're going to end up in 2018, but it's possible that we'll be at 50 percent minor or major noncompliance. Now, why is that? Well, we've got 18-year-old receivers a little bit hungover at 5:30 in the morning, but we only buy from certified distributors, so what's coming off that truck that makes it noncompliant? Well, these are

mixed operations, and sometimes things get on the truck or they're not properly labeled or labeled on the invoice, and our certifier draconian, as he is, and that's why we chose him, will call us out on that.

Now, if that's the problem we have, imagine -- and we're doing six million dollars average per store, a million dollars retail in produce, five hundred thousand at wholesale through the farmer. And imagine our competitors that are 120 billion with thousands of locations and tens of thousands of employees and ten to fifteen, twenty billion dollars of retail sales and produce.

So, here's the things that I've seen, because when I go on vacation, I go to farms and grocery stores.

Sound familiar, anybody?

(No audible response.)

MR. LEWIS: Herbs repacked by the retailers somewhere with organic on there with no certification, bulk bins refilled with quinoa

or other products not knowing whether it's organic or not even though the bulk bin is labeled organic, stacking organic underneath open conventional produce, commingling on shelves, down the street in Tucson this is happening, so I'd like to suggest some fixes here.

We need to eliminate the generic cases. If there's a case that says organic on it, it needs to say what's in the case and who certified it. Retail placards on any product need to be backed up by recordkeeping. Bulk bins need a complete label as well. If you're saying it's organic, say who made it, where it came from, who certified it. Invoice line items need to say whether it's organic or not to provide that traceability. And stickers applied by anybody have to be applied by a certified operator processor handler.

Now, that sticker over there, the USDA Organic ought to be outlawed unless it contains a certifier statement and who certified

it. That to us is the number one red flag that there's fraud happening.

Thank you.

MR. CHAPMAN: Thank you, Alan.

Questions for Alan.

Harriet.

MS. BEHAR: So, you are certified I'm imagining, because it gives you a leg up in the marketplace and trust from the consumers that shop in your stores. Is that correct?

MR. LEWIS: That's correct. Not so much the leg up, but it's not necessarily competitive advantage, because Target, Walmart, anybody else looks the same as we are without good practices and the accountability that we pay for and undertake.

MS. BEHAR: Would you recommend that all retailers get certified?

MR. LEWIS: I think that we are producing fairly good organic food on the farm, and I think by the time the consumers buy it at retail, it's no longer organic, and it's a time

bomb waiting to explode.

MR. CHAPMAN: Asa.

MR. BRADMAN: Could you clarify a little bit more about what you said about a generic case? And were you implying that display cases should be only organic versus only conventional if you have mixed produce?

MR. LEWIS: This is -- no, not a display case. This is the typical waxed cardboard case that'll say organic on it. It won't tell you where the case came from, what's in it, who possibly certified what's in it, so in addition, when we see those cases, there has to be a label on each individual fruit that says whose product is it, what product is it, and who certified it, otherwise, another big red flag.

MR. BRADMAN: You were suggesting that the bin should have a sticker, some sort of certificate essentially.

MR. LEWIS: It's the idea of the retail placard, which is a most general legal term we have for that, but just putting that

sticker on the front of a bulk bin or a bulk bin of potatoes in a non-certified retail environment of any kind, it's a recipe for commingling, it's a recipe for just outright selling conventional in a bin that happens to have an organic label on it.

MR. CHAPMAN: Steve.

MR. ELA: Just based on that, commingling various things, I mean, what we're really trying to get at is transparency to the consumer and integrity. I mean, this morning, we heard about wraparound labels, you know, we've heard about the gold standard.

What's your take on -- from -- I mean, you, obviously, are very in touch with your consumers. What's your take on those wraparounds and the organic label at this point?

MR. LEWIS: Well, I like the term wraparound label as opposed to add on. I think that brown ring there signifies a wraparound. It's the things that might be missing or our consumers are looking for.

For me, if I can take 30 seconds, you know, the people in this room are part of the current wave of American agrarian populists that our American Revolution was founded on. 1990, the OFPA was farmers saying, "We want a level playing field, the system is rigged, give us a label that allows us to compete fairly in the marketplace with consumers."

And like clockwork, larger entities have taken that over. And if you read your history, you know -- you knew that was going to happen.

The wraparounds are the next wave, right? The next generation of farmers that are on the dirt now need their own competitive fair space to grow their food and sell it, and that's the wave that we're feeling right now.

MR. CHAPMAN: Emily.

MS. OAKLEY: This is back to your comment. I was trying to clarify. Do you not think that all retailers should be certified given the potential for mistakes or fraud or

whatever may occur, but misrepresentation of organic product?

MR. LEWIS: So, there are two million retail food outlets in the United States. When it comes to the organic checkoff, for instance, in order to do that math, it's four quadrillion transactions that would have to be tracked. We'd have to recreate an IRS to do the checkoff at retail and to have two thousand more certification inspections, so waving a wand, yes, we have a big problem that may blow up, but if we just move up the supply chain, as many other speakers have said today, and make sure that every product coming into my place and a competitor's place or a cafeteria, is properly labeled on the invoice, on the unit, on the case, then we will -- by that measure as a proxy start eliminating laziness and fraud and just the lack of systems of the retailers putting into place.

MR. CHAPMAN: Thank you.

MR. LEWIS: Thanks.

MR. CHAPMAN: Next is Thomas Harding, followed by Alexis Randolph. Thomas Harding.

MR. HARDING: Good job, Alan.

MR. CHAPMAN: Oh, sorry, there you are.

MR. HARDING: Tom Harding. I'm representing Green Ag Supply. And the first part of my comments are about the last time when we were at one of these important meetings here.

As many of you will recall, Green Ag Supply petition the material fatty alcohols for the use on organic crops and organic crop production. This petition was defeated. We immediately challenged, especially the process in vote, requested an appeal to the NOP when we were informed that there is no appeals process for materials. Well, we took the recommendation of the NOSB and the NOP, and we're preparing now a new petition.

My concern here is, is I think it's really important that materials, national materials have an appeals process. Since there

are all kinds of other rules that governs us here, the lack of appeals is a lack of transparency.

I think it's really important we develop a protocol, and that it put on your agenda. I'm sure you have nothing else to do. I'm joking about that.

On another issue, I think it's really important -- this is a very important board. You do an awful lot of work. The NOP is a very important process. It's really important that this gold standard we've accepted here and established for well over 20 years now continue to be the gold standard.

I'm very concerned about what I see out in the marketplace. You name it. We've got a certification of organic, but then we have a product verification or another product scheme and another seal and another seal and another seal.

What does all that do? It dilutes the term organic. Certified organic is the only

legal system we have. The non-GMO project is not, the new ones coming down the stream, none of those are legal schemes.

It's really important that we protect this scheme. It's really important that we protect the work that all of you are doing. In the years that have gone -- I've been in this business for 40 years, and I can tell you there's a lot of work, a lot of regurgitation sometimes for sure, but this work is so critically important that we must do everything we can that continue the gold standard and be broad-minded when it comes to agriculture innovation and what I call organic all the time is stepping back into the future.

Use good technology, use good innovation, but make sure it meets the standards, make sure that the process and the materials meet the standards, but also recognize we need tools, and those tools must qualify. We must give them a fair and equitable evaluation all the way through the process.

I really encourage you all to continue this work. Discipline yourself not to be swayed by a lot of rhetoric, but value the work that you're doing, because it's critically important to the future of the organic industry, about $150 around the world. When I first started in this business, I couldn't find a count for that number.

I could make one more statement. You're here in one of the most important agriculture areas in the world. If you were to go up to Casa Grande Ruins, you would find out what the natives were doing in agriculture, in canals, and irrigation systems. I encourage you if you have some time to drive up an hour and 15 minutes. And if you haven't gone through the Arizona Sonora Desert Museum, you're really missing something.

MR. CHAPMAN: Thank you, Tom.

MR. HARDING: Thank you very much.

MR. CHAPMAN: Questions for Tom.

(No audible response.)

MR. CHAPMAN: Tom, I wanted to clarify your statement about appeals. Are you saying you think there should be a method to add materials to the national list that does not require the NOSB approval?

MR. HARDING: Not at all. Continue the process that you're on. What I say is it's important -- I didn't know, Tom, until you guys told me that if a subcommittee vote took place, it had to go to the full board.

Our request was simply to move it to this board. That didn't happen, and we lost the vote. Then, I learned through the challenge process that we really don't have an appeals process, so -- like we do in other parts of the organic monopoly.

So, I'm only suggesting that you think about this, and put it on the work plan, and that maybe materials, which are defeated for one reason or another, with good protocol can meet the required protocol that there be an appeals process considered.

MR. CHAPMAN: Yes. While we don't have an appeals process like you stated, we do have -- you do have the ability to repetition items and address the shortcomings that were cited. And, you know, we have materials on our agenda today that meet that exact criteria.

MR. HARDING: Well, of course, we took your advice, so we're in that process too. Thank you, Tom.

MR. CHAPMAN: Thank you.

MR. HARDING: Thank you all very much. Keep up the good work.

MR. CHAPMAN: Up next is Alexis, followed by Melody Meyer.

MS. RANDOLPH: Hi. Good afternoon. My name is Alexis Randolph. I'm the senior technical manager for QAI. We're an organic certification agency in San Diego operating in the U.S. and internationally.

We submitted written public comments across multiple topics at the time. However, we had not finished analyzing the sunset materials

up for review.

QAI historically provides the NOSB with a number of operators using a material on the national list, and as applicable, the category of products those materials are used in.

Today, I have provided this chart to the NOSB as part of my comments. Hopefully, you have or will receive this list from Michelle.

I'd like to ask the NOSB to recognize that the number of operators using the material does not reflect the necessity of the material. Every five years, I have the opportunity to use tragacanth gum as a perfect example. We have one operator using this material. However, very importantly, it is this material, and only this material, that makes his product unique from his competitors.

Having a variety of materials on the national list has proven essential to promote innovation and growth of the organic industry.

I would also like to draw your

attention to our comments about natural flavors. QAI has over 300 operators currently using organic flavors. However, it is necessary for non-organic natural flavors to remain on the list, because most certified organic flavors use non-organic natural flavors as part of their formulation process. Without non-organic natural flavors, there would not be the significant number of organic flavors currently available.

Lastly, QAI submitted comments addressing the questions of the CACS regarding inspector qualifications. Specifically, we feel that the widely accepted ISO 19011 guidelines for auditing management systems are an excellent foundation for conducting inspections and determining qualifications.

There is no need for NOSB and NOP to reinvent the wheel. However, we support the NOSB focusing on specific qualifications necessary for demonstrating competency to the organic standards.

I would like to express our appreciation and support for this committee's work to ensure consistency in the industry. Thank you.

MR. CHAPMAN: Questions.

(No audible response.)

MR. CHAPMAN: So, just to clarify. When -- is it QAI's position that we're evaluating the essentiality criteria even one user of a substance meets that criteria?

MS. RANDOLPH: Yes, it's essential to that one user.

MR. CHAPMAN: Thank you.

MS. RANDOLPH: Thanks.

MR. CHAPMAN: Up next is Melody, followed by Anne Ross.

You can start with your name and affiliation.

MS. MEYER: Hello. Melody Meyer, VP of Policy Industry at UNFI. Thank you for all your hard work. I'm happy to be here commenting.

Regarding the import oversight discussion document, I applaud you all for asking for industry input to document and verify product movement throughout the supply chain in a manner that ensures organic integrity. Everyone has a role in organic fraud production.

So, I served on the OTA's Organic Supply Chain Integrity Task Force since May of 2017, and I would refer you back to that best practice guide that the task force has completed and submitted. It provides businesses with a risk-based approach for developing and implementing a written organic fraud prevention plan to ensure the authenticity of organic products.

The guide's recommended practices are intended to establish an industry-wide standard for businesses to create continuously improving internal programs and processes for achieving organic integrity throughout their associated supply chain.

The task force is also developing

procedures on what to do when you suspect or detect fraud, along with a detailed template that can be used to effectively file an actionable complaint to the NOP or ACA.

Regarding ethylene production, production and handling. UNFI strongly supports relisting of ethylene for post-harvest ripening of tropical fruits and the degreening of citrus. These material -- this material is essential for those products.

The greatest need for ethylene by all organic businesses is for ripening bananas. Ethylene is important for bananas, and bananas are important for organic.

Albert's Organics, a division of UNFI, ripens almost 18 million pounds of bananas every year. They're shipped from Latin America, and need ethylene to ripen properly.

Removal of ethylene, as a post harvest treatment, would create a major disruption in the supply chain, and it would have disastrous economic impacts to growers in

the global south.

Ethylene is critically important to commercial pineapple production as well, and we support the relisting of that for regulating pineapple flowering, because it's impossible to produce pineapples at a commercial scale without this material.

Eliminating the incentives for native ecosystems. We're in support of adding the proposed language, and also recommend that a guidance document be written in the future that includes better OSP examples.

Finally, excluded methods in synthetic biology. Please ensure that organic certification truly addresses these emerging biotechnologies and new techniques being applied all too fast in agriculture.

We strongly urge the NOSB to finish the work to exclude new gene editing and synthetic biology techniques by updating the list of excluded methods. The list of techniques that are, that are excluded methods

is currently incomplete.

Thank you all for your hard work, and thank you, NOP.

MR. CHAPMAN: Thank you.

Any questions for Melody?

(No audible response.)

MR. CHAPMAN: Thank you.

MS. MEYER: Thank you.

MR. CHAPMAN: Up next is Anne Ross, followed by Hans Dramm.

And, Anne, you could start with your name an affiliation.

MS. ROSS: Good afternoon. My name is Anne Ross, and I'm a Foreign Policy Analyst for the Cornucopia Institute. One of my main duties at Cornucopia has been to address the fraudulent imports' issue.

We recently reported that a shipment of 25,000 metric tons of what is purportedly organic corn was rejected by U.S. Customs. It was determined that the corn originated in Russia, Moldova, and Kazakhstan.

Importing whole organic corn seed from these countries is not allowed. This vessel is now moving off the coast of California. I'm tracking this vessel. I hope the USDA is tracking this vessel too.

It's clear that the board appreciates the gravity of what has been a catastrophic problem for our domestic producers, so I'd like to offer some solutions for change that are summed up in three categories.

Point one. Certification. Every entity in the organic supply chain must be certified. We've submitted language in a citizen's petition that we submitted last July that we believe would accomplish these goals. Importers must be certified. Grain brokers must be certified.

The regulations must be amended to require certification of any entity that ships, transports, manages, directs the movement, or receives at any point in the supply chain shipments of organic grain for importation into

the United States.

Point two. Documentation. Certified operations must be required to collect full audit trace, trace back documentation back to the origin of production. Importers must be required to use organic harmonized codes for incoming shipments of organic commodities. Certifiers must collect organic acreage and yield data from certified operations.

If you look at organic acreage data and export/import data from high-risk regions, the numbers just don't add up. How could the U.S. import from a particular country more than that country is capable of producing? The NOP must report organic acreage data and yields from exporting countries in the integrity database.

Finally, verification. We must develop cross boarder documentation and alert systems. If an organic shipment is coming in from a high-risk region, the NOP ought to be alerted and immediately coordinate increased scrutiny with U.S. Customs and APHIS.

There must be testing and other verification by an independent party of incoming shipments, both at the load port and in the U.S. Importers should be required to verify shipments or tested at these load ports and when they arrive in the U.S.

As I mentioned, last July, we submitted a citizen petition. I have copies here again for your review. Please take a look at those and ask me any questions that you may have.

And thank you very much for your service and dedication of this issue.

MR. CHAPMAN: Questions? Harriet.

MS. BEHAR: Do you know where that ship is now?

MS. ROSS: That ship is headed to the Panama Canal. This is publically available information. We should be tracking the shipment, and we need to make sure that the shipment does not go to Canada, and then that corn assuming -- I do not know if this corn is

legitimately organic or not. I'm not suggesting that it isn't, but I'm suggesting that we should be looking at it, and if that corn is then shipped across the U.S. border, we need to have it checked for every shipment.

MR. CHAPMAN: Thank you.

Up next is Hans, followed by Jake Lewin.

MR. DRAMM: Good afternoon. Thank you for the opportunity to address the board. Specifically, I'm addressing the questions posed by the Crops Subcommittee regarding assessing the proper amount of acid used by liquid fish fertilizers.

I'm sorry. I'm the President of Dramm Corporation based in Manitowoc, Wisconsin. We produce the fish fertilizer.

Regarding the reactive nature of hydrolysates. Hydrolysate liquid fish fertilizers typically remove no components from the fish scraps used in the production process. That is no compounds, proteins, microbiology,

etc., is removed for other food or industrial processes.

This creates a more active or living solution that requires the addition of allowed acids for stability. Without acid, the product is quickly rendered unstable and no longer an efficacious fertilizer.

An upward drift in the pH level occurs as part of the normal production process of fish hydrolysates, which do not strip out physical ingredients, such as bones or oils.

We have conducted trials which indicate that the amount of total acid required to maintain a pH level greater than or equal to 3.5 throughout the production process is 90 percent greater than what would be needed to maintain stability and yield the final product for the pH of greater than or equal to 3.5 if that pH is allowed to drop below that threshold at earlier stages in the production process.

Specifically, if a greater dose of acid is added to a fish offal slurry at the

initial stage of production, such as pH level drops below 3.5, it'll eventually rise to a level greater than or equal to 3.5 as the solution ages and evolves throughout the production process. It also maintains a more stable character and consistency throughout that process.

Regarding crop and food safety considerations. Dramm has engaged a third party laboratory to conduct inoculation analyses to assess the viability of harmful bacteria surviving introduction from outside sources during and after the production process at different pH levels.

These tests have included that at a pH level of 3.5, the fertilizer blend was effective in achieving a greater than six log reduction of E. coli, salmonella, and other harmful bacteria after 48 hours. It concluded that a minimum of 72 hours hold time was required to eliminate the survival of these harmful bacteria.

At the much higher pH level of 4.9, it took much longer for the bacteria kill stage to be affected concluding an eight-day hold time was required to eliminate the survival of these harmful bacteria. That's 8 days versus 72 hours.

MR. CHAPMAN: Thank you. Questions?

Harriet.

MS. BEHAR: Are you aware that FSMA, the Food Safety Modernization Act, also requires that growers have information, not just on E. coli and salmonella, but also on listeria?

MR. DRAMM: Yes. That's included, and we're happy to add those details. That was knocked out much earlier in each process.

MR. CHAPMAN: Asa, and then Steve.

MR. BRADMAN: I just had some questions related to your source material. In your comments, you talked about most of the material can come from wild caught or other sources, but it's byproduct materials collected, harvested for human consumption. I wonder if

you could elaborate that a little bit more.

Another commenter further down said that the manufacturers of liquid fertilizers will guarantee sustainability of the source, and I'm wondering if you do that, or if there's an association among liquid fish product manufacturers that have taken on these issues, discussed them, and set any standards or any guidelines?

MR. DRAMM: Right. There's no collective effort as far as I'm aware. No one's contacted us about that. We certainly do our best. We have required our suppliers to certify that they aren't getting any fish from farm fish. We know for a fact that none of them are catching fish purposely for the production of fertilizers or any non-human or animal consumption.

We are, at least a step away from them. Unlike some other fish fertilizer producers, we don't -- we are not actively in the fishing business. We just collect scraps

from fisheries and the fish processors.

MR. CHAPMAN: Steve.

MR. ELA: I guess, kind of two questions. One is -- I mean, it follows up on Asa's in the sense that we had another public comment that said that there were -- any -- I know your comment and several other manufacturers only use scraps, but then we had another public comment that were a number of manufacturers actually using fish primarily caught for fertilizer or fish products for the organic industry.

Do you feel like that puts you at a disadvantage to have somebody out there maybe using just wild-caught fish, you know, in their entirety versus you having to collect scraps?

MR. DRAMM: I'm not sure if it would put us at a disadvantage. I really couldn't say. I'll say that, personally, I don't like the idea. I don't like our fisheries being depleted for that reason.

I will also comment that while this

is pure hearsay, I'm not aware of any producers doing that specifically. I knew of one that supposedly was doing that in the past. I think they are still producing things like fish meal, but not fish fertilizers. It's not to defend the industry or anything. That's just what I've heard.

MR. ELA: Okay. I'd like to ask the NOP -- I know we've had this discussion about the acid from the pH level whether it's pH 3.5 throughout production or at the final product. You've -- with guidance, do you feel like you're getting information through the public comment period that will help with guidance or health? What do we need to do to clarify that further?

MR. PATTILLO: I think that getting the information is a great start for that, and I think there's something we can do to address through guidance or you could possibly address in comments to your proposal, recommendation for the sunset.

MR. CHAPMAN: Can I ask a followup

questions?

MR. DRAMM: Of course.

MR. CHAPMAN: And feel free not to answer it, because it's somewhat probably business confidential information, but why do you source from byproducts? Is it more economically advantageous for your company, or as opposed to just wild-caught fish, or is it another reason?

MR. DRAMM: When you say byproduct --

MR. CHAPMAN: Fish byproducts.

MR. DRAMM: As opposed to whole fish?

MR. CHAPMAN: Yes, or wild-caught fish, whatever.

MR. DRAMM: To be honest, it's just been our history throughout. That's how we -- the business was started before we got into it. It was a way to deal with fish scraps or dead fish that would float up on the shores of Lake Michigan.

Back in the day, there was a lot of alewife in Lake Michigan, and they would die

off, and they would die off on the beaches, and it was unpleasant for the communities, so that's how the precursor to our product got started.

And, today, it's probably just more economical. We wouldn't want to go and buy whole fish for that process when we can get all the scraps, the good gut materials is really what's helpful to our product, the enzymes that help break down everything, so it's really what we want to be honest.

MR. CHAPMAN: Thank you.

MR. DRAMM: If I may? Could I just respectfully ask the board consider lowering the pH level guidance to a value closer to 3 in order to allow for a highly variable nature of the premature fish hydrolysate solution? Just -- it's something that's very difficult to work with. It has nothing to do with wanting to add acid, but rather keep a stable product.

Thank you for your work.

MR. CHAPMAN: Thank you for your comments.

Up next is Jake Lewin, followed by Julie Weisman. Jake, if you can start with your name and affiliation?

MS. LEWIN: Hi, everybody. It's a pleasure to be here. Thank you all for your service, both the board and staff.

I want to talk to you about the, protecting the genetic integrity of seed. CCOF believes that we can collectively -- we can provide measurable, actionable improvements immediately by adopting a simple practice.

Currently, we all require buffers or other standard documentation or contamination avoidance strategies, things like harvest logs or farmers market load sheets, various things that are required in the system generally that aren't spelled out in the standard specific tools or documents.

Where growers do not or cannot get documentation or labeling detailing the known presence of GMOs in non-organic seed they use, they should be expected to simply retain a

sample of each lot of planted seed. This would be a recordkeeping practice.

These samples could then be subsequently be tested by certifiers or under our existing residue testing program or they could be part of a research program to get the data we've been talking about today.

Currently, when investigating GMO contamination in feed or other supplies, the trail invariably leads to a farm. Because it is nearly always after the harvest, identifying the starting or background level of GMO presence is nearly impossible once we get to a farm.

This makes investigations a dead end and understanding how to improve or where there may be problems very hard to identify. If samples were retained, certifiers could test them under our existing mandate without added cost to the growers.

Adoption of this basic practice as a physical recordkeeping element would have extremely low expense, not place new burdens on

growers while improving the quality of organic certification and integrity, so I ask you to integrate this into anything you move forward, and to encourage the community to adopt the practice. New things have to come from someplace.

Next, I want to talk a little bit about ecommerce, and encourage the CACC to consider this area for your work plan. The NOP regulations were undoubtedly written on a computer, but before the iPhone, Wikipedia, or ecommerce generally.

Ecommerce has grown. It's getting more complicated. They're participating in organic, but how you apply the standards and labeling and marketing information to businesses that only exist online, make custom products, or somewhere between a processor and a retailer, it would be very, very helpful for us to start working on this, so that we can figure out how they fit into the community well and can be a part of bringing organic to more people, but at

the same time, we're finding it's increasingly complicated, and we'd strongly encourage you to really look at fully ecommerce and brick and mortar, because we're -- there are a variety of reasons we're seeing it to be complicated.

They just don't have the physical product. Their only label is sometimes a website. They advertise via social media.

MR. CHAPMAN: Dave.

MR. MORTENSEN: Jake, could you give us an idea of how many of the samples that farmers have held back have actually been analyzed, and could you share with us what you found from those samples? This is seed out of the bag, planted by the farmer. Has that been analyzed, or is this a recommendation that you're just implementing now?

MR. LEWIN: It's a recommendation I'm asking you to implement.

MR. MORTENSEN: Didn't I hear you say that you're implementing it in your system?

MR. LEWIN: We currently do GMO

testing within the supply chain. Most typically, at a feed mill or a feed or some other product somewhere past the farm. Really, you have a pretty small window to get to a farm to actually get seed.

So what I'm saying is the things we test -- as a general rule, in the supply chain, we have found some GMO from time to time, not in high percentages. But whenever we either hand those to other certifiers or track them to the farms ourselves, you get to that farm and there's nowhere else to go because it's all in the past, and you can't figure out causation in any way. If you could test the seed, you would have some link between the result you're seeing, the audit trail you did, and what the starting point was.

MR. CHAPMAN: Harriet.

MS. BEHAR: I 100 percent agree with you about the ecommerce. I recently purchased some organic onion seeds online. It was a variety I couldn't find from my usual suppliers.

I thought when I got the packages that it would have a certifier or something. I couldn't. I tried doing a lot of sleuthing.

It came to somebody who lived in some little town in Idaho. Whatever. I don't know who these people are, but they're saying it's organic. There's a lot -- Jackie and I were at the Denver airport together. There was somebody there selling products that are organic.

There's no certifier. Love is the main ingredient, and it's organic. We have a lot of things out there, a lot of it in ecommerce, too. If you look, that's where a lot of people are buying everything, from food to clothes to anything -- furniture. Not that we sell organic furniture, but -- anyway, I don't know where to go with that, but we need more oversight.

MR. LEWIN: Throw it to Scott. Make Scott do the work.

MR. CHAPMAN: I think Scott has a question now.

MR. RICE: Do you see any importance in making a distinction between possession and ownership? When we start diving into ecommerce, we see -- similar to Harriet saying she ordered something. She ordered it from Iowa, but it comes from South Florida. Clearly, not everyone's taking possession, but is there an important distinction there? Is that something we need to address?

MR. LEWIN: Our experience has been that there's a wide degree of -- as we all know, the Internet's a widely varied place. There are a lot of different businesses everywhere between just resellers, marketplaces, all the way through to people who make and sell things or package them or package them for further consumption. I think that there's room to clarify things for all of them. We see a lot of people who make a well-meaning mistake. In Harriet's situation, I've seen that often be a well-meaning mistake, and other times, ignorance is bliss. On the other hand, the other kind of

things we're starting to see is more custom-formulated products.

You've got a situation where this is a company that has organic ingredients and non-organic ingredients, and they want to make something where you order it custom on their website. There is no label. There is no PDP. There's no ingredient statement.

Or you're going to get one, but the label's the thing you make the choice on, that's on the Internet, really, but in a store, you have a label. How to communicate with that and how -- for all of us to do it fairly, we're kind of seeing it as an emerging area. At the same time, these people are driving -- they're pulling organic into their businesses, which is good.

MR. CHAPMAN: Thank you, Jake. The Supreme Court is currently wrestling with the matter of online sales and taxes. It seems like a doozie, so thanks for tossing us an easy one.

MR. LEWIN: Always a pleasure.

MR. CHAPMAN: With that, we have Julie Weisman next, followed by Michael Sligh.

MS. WEISMAN: Good afternoon. My name is Julie Weisman. I thank you, the NOP and the NOSB, for the opportunity to provide comments today. I also sincerely thank all the Board Members in this room, past and present, but especially you before me here, for your continuing service and hard work -- oh, I know -- to organic agriculture and to the organic industry.

I'm here to support two things, the proposed rule change regarding the listing of flavors on the national list, and the relisting of those flavors to that listing, flavors non-synthetic, in the 2020 sunset. A previous commenter from QAI already described, very aptly, why the relisting in 2020 is important, so I won't spend my time on that.

I represent two companies, Elan Vanilla and Flavorganics, that have been instrumental in developing and bringing to

market organic flavor ingredients, especially vanilla, for use by organic food companies and organic consumers, for the past 20 years. In addition, I served on the NOSB from 2005 to 2010, during which time, I chaired the Handling Committee, I served as both vice chair, and then Secretary of the Board, during which time commercial availability was my passion.

I stand here today to strongly support the proposed rule for the addition of language requiring the use of organic flavors to the listing of flavors non-synthetic on 205605(a) of the national list in products labeled and sold as organic -- that's one thing -- and two, when such flavors are commercially available.

I want to emphasize that Elan and Flavorganics, and our customers who already use organic flavor in their products, fully support the change in annotation that was proposed in the OTA's 2014 petition, which we signed on to, as it applies to products labeled and sold as

organic.

But I also want to emphasize that it was never the intention of the companies I represent, or the original OTA petition, to require the use of organic flavors in products made with organic ingredients. I would like to see the final rule make that clear. I also want to let the program know that I anticipate that many companies who have never sought to use organic flavors in their organic products will loudly object to this change. The flavor companies in my industry who supply them -- and I do supply non-organic vanilla -- but the flavor companies who supply them their NOP compliant non-synthetic flavors and each of their respective trade organizations will also likely object, perhaps strongly, to this change.

They will say that it is an onerous, if not impossible bar to meet, but they don't do organic. I know different, and so do dozens of flavor companies who do supply and develop organic flavors. I remind those objectors that

the requirements to use organic flavors is in effect if, and only if, they're a certified organic commercially available flavor in sufficient form, quality, and quantity --

MR. CHAPMAN: Thank you, Julie.

MS. WEISMAN: -- to meet the need.

MR. CHAPMAN: Thank you.

MS. WEISMAN: There was a recommendation in 2006 that you should also --

MR. CHAPMAN: I have to stop you there.

MS. WEISMAN: -- make guidance. Thank you.

MR. CHAPMAN: Any questions? Harriet.

MS. BEHAR: The commercial availability clause would address any issues of shortages due to bad weather in certain -- Madagascar, for instance, in vanilla and things like that? Because sometimes, people say that the organic, because it's such a small part, it's very fragile, the supply.

MS. WEISMAN: But it becomes less and less fragile the more people use it. Yes, it would cover a crisis in Madagascar, which we're in the middle of right now. But it also covers people who have to have the strawberry -- you have to taste the green in the strawberry. No organic flavor right now gives me that. That's a form issue.

Yes, I also think that people kind of game the system that way, too, but in terms of the objections of the non-organic flavor suppliers who only supply compliant and are not interested in doing organic, they will still have -- they don't understand that they will still have a market for their ingredients and organic products. Meanwhile, 606 makes organic availability grow. We know this. Thanks.

MR. CHAPMAN: In that example, though -- and this product right here has organic vanilla extract, so it helps me make this example. These guys are using an organic vanilla flavor. They have packaging printed.

It states that the product's organic, but we have this market issue and organic vanilla's no longer available. They actually call it Tahitian organic vanilla.

MS. WEISMAN: Who says organic vanilla's not available right now.

MR. CHAPMAN: I'm just hypothetically speaking.

MS. WEISMAN: Okay, I'll back down.

MR. CHAPMAN: That was a hypothetical example of Harriet's. Now, while they have that commercial availability, they also have all this packaging that states that it's an organic flavor. If they were to switch and use a commercial availability, they now have a packaging non-compliance. How do you deal with that? How do you suggest we deal with that?

MS. WEISMAN: That's a good question. That is actually exactly what happened in the vanilla crisis 15 years ago. Lots of people did have to change their packaging. Yes, that is real.

MR. CHAPMAN: Thank you, Julie. Michael Sligh, followed by Marisol Oviedo. Michael, start with your name and affiliation.

MR. SLIGH: Yes, I'm Michael Sligh, with RAFI. We support the comments of NOC and OFARM and OFA. I was recently asked why has organic become so successful? I would say it's because the law created checks and balances between the NOP and the NOSB and because we promised farmers a common set of high standards, based on a level playing field, both domestically and internationally.

The consumers can trust this as being consistent, meaningful, and representing the highest ideals of organic integrity, based on transparent and process-based approach. I'm very heartened by the bipartisan and USDA attention on the organic import fraud. I support this as a high priority. However, these very keys to success are now in jeopardy. These import frauds are systematic of a larger trend of inconsistency across our whole system, from

top to bottom, without which our program will continue to wander across many of our historical lines in the sand and will have both defined us and our collective success today. All unique organic systems must be governed by a consistent set of standards, and we must regain our checks and balances, in order to have a program that meets predictability.

Yes, we must respond decisively to the current threat to organic integrity, but we must regain our ability to be more proactive to address potential future crises, without having to deal with messes once they become too big. New genetic techniques are a prime example of one where we need continued USDA and NOP action. These techniques are rolling out in the marketplace without full benefit of guidance or NOP oversight.

It is incumbent on all of us to rally together to defend and regain our vision of organic's true potential. The rise of add-on labels is directly linked to where we have yet

to be inclusive, clear, or consistent. Now is your turn. What will be your legacy? Where will you stand on the critical issues of our day? During my time on the NOSB, we had to choose among varying confrontational issues that divided our community, but we must never forget to protect both the spirit and the letter of the law. It has never been easy, and never more critical. The soul of organic has always been at stake, from the very beginning, but what will be our collective response now? Thank you.

MR. CHAPMAN: Thank you, Michael. Harriet.

MS. BEHAR: Michael, I have two questions for you. Do you believe that the definition of bioengineering in the GMO labeling law that was passed about two years ago has relevancy for the national organic program? Then I'll ask my second when you're done.

MR. SLIGH: I think in terms of international point of reference in any kind of trade dispute, or in terms of equivalency with

other countries, we would all turn to the Codex Alimentarius, which U.S. is a member of; 120 countries are a member of that. They have established long-standing definitions and protocols related to foods from modern biotechnology. That's where I would turn for your reference.

MS. BEHAR: Then I understand that you're part of the International Organic Accreditation Service, and that they have been working with European certifiers on import fraud. Is there anything that's relevant for the NOP that you could bring from that work?

MR. SLIGH: Yes, I'm the current chair of the International Organic Accreditation Service. We provide evaluation for both the EU and the Canadian governments for their decisions about accreditation of their certifiers.

We believe we were the first to bring these issues to both of those governments several years ago, and they were able to immediately respond with high-risk protocols and

to begin to deal with this issue proactively. We would welcome a relationship with the NOP and other governments around the world, in order to bring a more expedited and quick closure to these things before they get so far out of hand.

MR. CHAPMAN: Thank you. Questions? Thank you, Michael.

MR. SLIGH: Thank you. Keep up the good work.

MR. CHAPMAN: Up next is Marisol, followed by Linley Dixon. If you could start with your name and affiliation.

MS. OVIEDO: Hi. I'm Marisol Oviedo with the Northwest Horticultural Council, out of Yakima, Washington. First of all, I would like to thank the Board and the NOP staff for their dedicated work in organics.

The Northwest Horticultural Council represents growers, packers, and shippers of apples, pears, and cherries in Idaho, Oregon, and Washington, on federal and international policy and regulatory issues. While the NHC

submitted written comments on a number of materials of importance to tree fruit growers, I will be focusing my oral comments on the need to allow the continued use of elemental sulfur and sulfurous acid in the National Organic Program.

In many ways, the Pacific Northwest is the epicenter for organic comb fruit and cherry production. Washington State is the national leader in the production of organic apples, pears, and cherries. Over 7 million boxes of organic apples are now harvested from over 14,000 acres, amounting to over 90 percent of the entire organic apple crop in the United States. If you grab an apple out of the hallway there, those are organic apples from Washington. Elemental sulfur is a critical tool for the tree fruit industry in the orchard setting. It is a vital insecticide that is used to control rust mites in organic apples and pears and has been used by our growers for over 100 years.

In particular, elemental sulfur is one of the few options available to treat

powdery mildew. It is an essential material that our growers depend on. There are no alternatives to elemental sulfur that provide the same level of control, or that are compatible with other materials used during the growing season. Elemental sulfur is also used to adjust soil pH, which ensures better nutrient uptake, improves water penetration, and enhances overall plant health.

This, in turn, provides soil environments for beneficial insects and microbial activity. Sulfur is also one of the six macronutrients, meaning that the plant needs a relatively large amount to survive. It is a necessary tool for organic production. Sulfurous acid is used as a plant and soil amendment. It is generated on site by burning 99 percent elemental sulfur in a sulfur burner, which irrigation water passes through. This allows the organic growers to take water with a high pH and reduce it to a level of about 6.5.

This makes the water more conducive

to plant and soil health and improves water absorption. Irrigation water with a high pH, if left untreated, causes calcium buildup on the leaf and the fruit surface.

Lowering the pH, through the use of sulfurous acid, reduces the calcium carbonate buildup, resulting in better nutrient uptake, improving crop yield and reducing soil degradation, which improves soil health for beneficial microbes and bacteria.

On behalf of the growers and packers that we represent, the NHC strongly supports the continued use of these vital tools for insect control and plant and soil health. We ask that the Members of the Board support the continued listing of sulfurous acid and elemental sulfur. These products are of critical importance to the continued production of organic products, which include tree fruit.

MR. CHAPMAN: Good timing. Any questions? Asa.

MR. BRADMAN: I just want to get at

the question we talked a little bit about earlier, as you brought up in the sulfur sunset review about the use of dust versus wettable formulations. I wonder how your farmers apply the material.

MS. OVIEDO: Our farmers have not used the dust for about 15 years now. We're using it in the wettable formulation.

MR. CHAPMAN: Steve.

MR. ELA: It's not part of your comments today, but do you have any thoughts on the polyoxin D salt for mildew control on tree fruits?

MS. OVIEDO: I don't at this moment.

MR. CHAPMAN: Dave.

MR. MORTENSEN: I was just curious; how do the conventional apple growers deal with the pH problem in the water?

MS. OVIEDO: How do they deal with it?

MR. MORTENSEN: Yes.

MS. OVIEDO: I can get that answer

for you. I couldn't answer it for you right now.

MR. CHAPMAN: Thank you. Up next is Linley Dixon, followed by Jackie DeMinter. Linley, if you can start with your name and affiliation.

MS. DIXON: Dave, I think they add sulfuric acid. I'm Linley Dixon, senior scientist with the Cornucopia Institute. I own a five-acre farm in Durango, Colorado, with my husband and brother, who both farm full time. In Southwest Colorado, there is a young farmer movement.

We have a local chapter of the National Young Farmers Coalition and Rocky Mountain Farmers Union. The farmers are marketing and distributing together through a farmer-owned cooperative. But organics has a problem. Some of our farmers and ranchers don't want to get certified, even though their practices are in line with the standards.

They say organic has lost its

meaning. The standards don't represent the way they farm. The organic label currently provides little added value. The wholesale prices for organic crops are so low that there is little market incentive for farmers to become certified. Industrial hydroponic operations have flooded the organic market for our highest value crops, tomatoes, cucumbers, peppers, basil, greens. Real organic poultry producers have already left organic for pasture-based labels.

Real organic dairy farmers are failing, as we speak, because of the lack of enforcement of pasture requirements and the origin of livestock. History has shown that during farm crises, industrial operations actually increase production, so they will control the market after the crisis.

Aurora is currently building another facility in Colorado and a processing facility in Missouri, while Horizon is lowering prices and dropping contracts with family-scale dairies

in several states. Fraudulent organic grain imports are directly related to the quick rise of domestic organic factory farms that are thriving on large amounts of cheap organic grain.

But for the first time, there is a ray of hope. The Real Organic Project is a fervent effort to keep soil and pasture-centric farms part of the organic label before industrial operations have squeezed them out. The aim is to rebuild trust in organic, to inspire new farmers and consumers into the marketplace, to bring transparency back to the organic label, to bring production practices back into compliance with OFPA and fill gaps where the organic standards have failed us.

This label wouldn't be necessary if farmers felt the current NOSB process of continuous improvement was working, if the NOP assurance of a level playing field was enforced. There is a deep feeling of frustration and earnestness to save the family farm that the

organic label brought back to life in the first place.

I see the Real Organic Project as an opportunity to tell our organic story again, to remind consumers that organic was built by family farms, that they are still overseeing the success of the label to inspire the next generation of farmers and eaters to be part of organic.

After all, the people leading the Real Organic Project are the same people who built the organic movement the first time around. These are farmers that welcome unannounced visits to their farm and full transparency in their practices. It's time to insist on these real organic ideals again together.

MR. CHAPMAN: Thank you. Questions? Dave.

MR. MORTENSEN: Linley, in the Under Secretary's words, a wrap-around label of the kind that you're suggesting, how would that

impact the number of farmers joining the organic seal with the wrap-around? Would it remain flat, increase, decrease?

MS. DIXON: We agree that there is going to be confusion, and we don't see an alternative to that. I think it's unfortunate, but this is where we are. My own experience with the farmers in my region is very frustrating. They want nothing to do with organics, so I see it as a way to bring growers back into the label.

MR. CHAPMAN: Thank you, Linley. Up next is Jackie DeMinter, followed by Nate Lewis. Jackie, can you start with your name and affiliation?

MS. DEMINTER: Good afternoon. My name is Jackie DeMinter. I am the certification policy manager at MOSA. We certify approximately 2,000 operations throughout the United States. I was going to comment on parasiticides and ecosystems, but instead, I'm going to use my time to talk about paper pots

and bailing twine. I hope you've read and considered all of our written comments. Parasiticides included a minor revision that we hope you take up.

The Japanese paper pot system is a topic of interest for us. If you haven't heard of it, just Google Japanese paper pots. At MOSA, we'd approved the pots years ago, based on what we thought was very solid rationale.

Paper is on the national list for use as a mulching compost feed stock, so it's not a stretch to consider paper pots acceptable, which I think most certifiers in OMRI do. The added resins are included in other allowed paper products, as covered in the technical review on paper.

Certifiers didn't agree on the allowance of the added resin, so a dispute was submitted to the NOP for their review and ruling. We understood, from the NOP's response, that the reason for prohibition was the added resins, but now the NOP has clarified verbally

that paper transplanting pots, in general, are not an approved application of paper. That's big and definitely needs written clarification. We feel the organic vegetable industry, at least in our area, will be disrupted to disallow the use of all paper pots as soon as next season, which is the timeline for the discontinuance the NOP required.

We think paper pots, in general, should continue to be allowed, and we also think the widely discussed paper chain pot system should be allowed, too, and we hope this topic finds its way to your docket for the fall meeting.

That said, even if it is on the agenda, and assuming the NOSB would vote affirmatively, the rulemaking process takes time, as well, so we ask the NOP to consider a longer phase-out period. I'll also mention bailing twine, something you wouldn't likely think of as an issue.

The problem is that most twine in use

is treated, which has triggered positive residue test results on silage and hay for a material that has no tolerance level, so its mere presence requires the harvested crop to be removed from certification. The plain folk community harvest corn into shocks bound with twine that are then fed into the silage chopper, twine and all. While we expect the twine is removed and disposed of, this isn't the case for corn shocks, as we've learned due to this residue testing.

We hear that removing it from shocks creates a human safety issue. Baled hay has also tested positive, so the issue isn't limited to situations where the twine is being ground into the feed. This is now an issue for us.

Untreated twine isn't widely available in quantities, so we think treated twine should be considered for the national list. It seems incredibly unfair to suspend a corn or hay crop based on a positive residue when all the neighbors are doing the same thing.

We prefer to spend our time on bigger issues, like pasture compliance.

I'll end by stating our support for NOSB process and the work you do. We find it incredibly disheartening to see your hard work dismissed and hope that the trend doesn't continue. We do not want to see your work plan restricted, so as to stifle the development of the organic standards. Thank you.

MR. CHAPMAN: I have a question, then we'll go to Harriet and Emily. We've heard from a lot of people on the paper pots. The twine is new, as well. There's a process to petition to add materials. I hear the need. Why are people not petitioning? Why are we not using --

MS. DEMINTER: I think that's coming.

MR. CHAPMAN: -- the established process?

MS. DEMINTER: I do think that's coming. This is all very new. We just got the answer from the NOP. This just started brewing over the last -- since September, actually, is

when the dispute was submitted to the NOP. I believe that was the date, so it's been brewing.

I think my purpose for bringing this to you today is awareness, awareness that these issues are coming. I hope they find their way to your agendas. These are serious things that are impacting our organic community.

MR. CHAPMAN: Twine, is someone looking into petitioning that one?

MS. DEMINTER: I don't know if they are petitioning that. We have just been dealing with these residue test results as part of our required 5 percent levels. As a certifier, we wouldn't be knowledgeable enough to submit a petition on the manufacturing process of twine, but it's something that we definitely think should happen and should be considered. Just as awareness, we're experiencing these problems, and we're required to do this residue testing.

If other certifiers back here are doing that same residue testing, go test some silage on an Amish farm and see what happens.

You might find the same problems. I think this is just becoming an issue, and we're going to hear a lot more about it.

MR. CHAPMAN: Okay. Harriet, then Emily.

MS. BEHAR: Have they looked at using plastic?

MS. DEMINTER: That would be not allowed, as well, because the twine is chopped into the silage. It's chopped into the feed, and you can't have plastic in the feed. Can't really have the twine in the feed, either, but there's got to be some kind of level of practicality that we can apply to this issue.

MR. CHAPMAN: Emily.

MS. OAKLEY: I was wondering if the Program could speak to the issue of a longer phase out. I think we have a unique situation here, in which we have growers who were told by their certifiers that they could use a product, and they are often smaller-scale growers.

They had made investments in

technology or tools, in order to utilize these systems. I think a quick turnout could lose certification for some of these smaller-scale growers, which I would really hate to see. Is there a way that we could enact a longer phase out while a petition put through the process?

MR. PATTILLO: Yes, I think we'll have to discuss our options.

MR. CHAPMAN: Harriet.

MS. BEHAR: Maybe organic hemp for the twine.

MS. DEMINTER: That would be great if it was readily available in quantity.

MR. CHAPMAN: Asa.

MR. BRADMAN: Forgive my ignorance. What is the chemical that's treated on the twine that's getting into --

MS. DEMINTER: O-phenylphenol. It's a fungicide that prevents it from rotting and from mice eating it and stuff like that.

MR. BRADMAN: Is that ortho-phenylphenol?

MS. DEMINTER: I think that's what it is. I just know it as o-phenylphenol.

MR. BRADMAN: Okay, thanks.

MS. DEMINTER: They say it is.

MR. CHAPMAN: Thank you very much.

MS. DEMINTER: Thank you.

MR. CHAPMAN: Next is Nate Lewis, followed by Patricia Mayer. Name and affiliation.

MR. LEWIS: Good evening, I think we can say now. Nate Lewis. I'm farm policy director with the Organic Trade Association. I'm a certified organic producer from Washington State and serve on the Washington State Department of Agriculture's Organic Advisory Board.

I'm going to try to thread a farmer metaphor throughout here, the metaphor of tools, so bear with me a little bit. I believe that you need to have the right tool on the farm. That tool needs to be well honed. As my wife reminds me on a nearly daily basis, you need to

wash it and put it away when you're done with it. In terms of native ecosystems, I think we're all in alignment that we don't want organic premiums to be fueling the destruction of our rain forests and our native ecosystems.

What we're talking about is is this the right tool to accomplish that goal? We believe it is. We think you should pass the recommendation, but we need to focus on honing that tool to make sure that it doesn't bring along with it too many unnecessary casualties, particularly in livestock and poultry grazing.

I recommend focusing on encouraging the National Ag Statistic Service to add a question into the next organic producer survey to see how much this is actually occurring domestically, consider a research priority on grazing native ecosystems and whether grazing can have compatible goals with conservation, which I believe it can, so really focus on honing that tool.

One of the most important tools in

integrity is our inspection process, our boots on the ground. That tool needs to be well honed. We strongly support a full licensing program for inspectors. I don't think that we're quite ready to do that. Just like everyone wants the green and white -- I'm sorry, the green and yellow shiny tractor, sometimes we have to go with the beat up old Troy-Bilt rototiller to get the job done this season.

Let's look at ways we can use our organic integrity database to register inspectors, to get a group -- to get some background on what these inspectors have already accomplished, what their qualifications are, based on scope and scale, so that certifiers can make good decisions.

When you're reading the comments on the polyoxin D zinc salt, I'm reading a lot of farmers talking about major fungal issues, detritus, mummy berry, cottonball, things I've never even heard about. It seems like they're trying to dig a hole with a rake here because

they don't have the right tool for the job.

I encourage you to give them that right tool, give them a shovel, and pass that product. I don't believe you need to take something off to add a less toxic, more effective alternative. Then on paper pots, again, our members are concerned about this, as well, but I want to push back on the position that we need to petition this. Micronutrients were up for sunset review in 2015. A parallel recommendation came along with it, based on public comments, to modify the annotation. I don't understand why that can't happen in this case.

MR. CHAPMAN: Steve.

MR. ELA: Let's follow up on that. What kind of modifications to the annotation would you propose that would bring paper pots under the current listing? I think it could be sort of argued that they're mulched because they're planted in place.

MR. LEWIS: Before I came to the

Trade Association, I managed the Washington State Department of Agriculture's brand name material list, so I'm not particularly supportive of creative interpretations of the national list. That's not a good place to start from. I think strict, conservative interpretations of the national list is the way to go, and I completely understand why some certifiers might have allowed it, but why NOP came in with their decision. It's not listed for paper pots. It's listed for compost and mulch. In this case, the substance is paper. That's on the national list. We have an annotation, which I believe you're reviewing on whether you still need to have the glossy paper and no colors, that restriction.

That's a separate conversation, but I think paper pots should be part of that. What would need to come forward is a parallel recommendation to increase its use pattern, so that it would be out of the 205.601. You would create a new section on transplant aids, and

then production aids.

We can spitball what the right thing is, but that's your job. I'm saying that the substance is there. You're just adding a new use pattern. I don't understand why we need to burden the industry with a petition for something that has already been used. You know it needs to be used.

It's undergoing a sunset review, and we have a precedent for micronutrients, where the public comments said this is an overly restrictive and outdated annotation; we think you should change that. The Board brought forward a parallel recommendation, passed it, and we just saw rulemaking go forward that brought that into fruition.

MR. ELA: But that's not really an annotation change. You're talking about listing it in a different section. For example, today we have -- at this meeting, we have sulfur as a molluscicide.

Sulfur's widely listed across the

list, but here's a specific use that has to be petitioned. I guess if you're a strict lister, so to speak, which I agree with, I can see annotating the current listing, but when you add it to a different section, then it becomes a little different.

MR. LEWIS: I'm not a lawyer. I'm a regulatory wonk. I look to the program on why the statement has always been it needs a petition, when micronutrients -- I recognize there's a difference between changing an annotation and a use pattern, but that is unclear to me why we need to burden the industry with a petition, when you know you will likely get that and be reviewing it and making a determination on it.

MR. CHAPMAN: Thank you.

MR. LEWIS: Thank you.

MR. CHAPMAN: Up next is Patricia. Following Patricia is Jessica Walden. Start with your name and affiliation.

MS. MAYER: Good day. Thank you for

this opportunity to speak to you today. My name is Pat Mayer, and I'm an organic consumer. I think I might be the only consumer you've heard from today, but -- you'll probably hear a lot of the same thing that you've already heard.

I believe when most people think of farmers' market, they think of one where stalls or trucks are lined up and sell produce straight from the farm, maybe the farm right outside of town. Maybe it also has some vendors of homemade soaps and breads and knitwear and so forth. This is the spirit of a farmers' market, local seasonal produce from growers one can talk with and get to know.

There's a grocery chain with stores in several states, and here, in fact, called Sprouts Farmers Market. I like Sprouts. I shop there. But it is no more a farmers' market than we have here in this room, and I've been to so-called farmers' markets that if they even have produce, it's obvious it wasn't grown by the farmers selling it, since the stickers might

indicate Argentina or China. These, too, are farmers' markets in name only.

I believe that most consumers understand that organic production is about more than just avoiding synthetic pesticides and fertilizers; that it's about being good stewards of the land, managing farms to produce better soil, and thus better crops, about caring for animals and allowing them to live with their natural behaviors, and about working with nature.

This is the spirit of organics. It is captured in the law that created the National Organic Program, this standards Board, and the green-and-white label that means something to those of us who believe organically raised food is just better for the earth, for animals, for growers, and for families.

People want organically raised food more than ever, and they want to trust that little sticker means what they believe it means. But there are those producers who want to use

organic production in name only, who want to cash in on the movement, while cutting corners, who don't care about the spirit of organics and what people fought for in getting the organic law passed and in setting up standards. These producers want to use the sticker, but have the standards fit their methods, their agendas.

They bend and break rules and hope that you, the NOSB, will see it their way and allow degraded standards. I want to say that I appreciate what you do for organics and think you must be at least as, if not more so, frustrated than we consumers when the agency with authority over the NOP overrules your recommendations.

In spite of that, I encourage you to stick with the spirit of what organics means to ordinary consumers and to those who helped create the NOP and to vote for policy and materials that reflect this spirit, to oppose what works in name only, materials and practices that do not follow the intent of the organic

law, nor the spirit that drove creation of the law. Thank you for your time.

MR. CHAPMAN: Harriet and Emily.

MS. BEHAR: Are you aware of other labels -- if you see an organic label, and then a grass fed on there, or an organic label and non-GMO, do you find that useful or confusing?

MS. MAYER: I study the issues a lot, so I understand the meaning behind some of those labels, but I don't necessarily equate them with organic. I think that most people probably get confused about them more than I, myself, would. People that I talk with get confused.

MR. CHAPMAN: Emily.

MS. OAKLEY: This is a comment. If I had another life, I would take up the issue of farmers' markets. I just want to thank you for bringing that up because I think it is an unregulated term that is, unfortunately, misused many times. Thank you.

MS. MAYER: A lot of those, yes, right.

MR. CHAPMAN: A-dae.

MS. ROMERO-BRIONES: You referred to growers and producers cutting corners. Can you be more specific about what you're referencing?

MS. MAYER: I think there have been some references to some of the questionable, extremely large dairy farms, people putting organic labels when they may not necessarily be following practices. I don't have specifics, nor would I feel comfortable laying them out, but certainly, we've heard of and I've talked with -- because I do go to a farmers' market every week. I talk with some of those producers. They have stories, anecdotal, probably.

MR. CHAPMAN: Thank you.

MS. MAYER: Thank you.

MR. CHAPMAN: Up next is Jessica Walden, followed by Ruth Watts.

MS. WALDEN: Hello. My name is Jessica Walden, and I'm a senior technical reviewer with QAI. We are an organic certifier,

and we certify over 1,700 operations around the U.S. and beyond. Today, I'll be commenting on the import oversight discussion document. Thanks so much for taking on this issue and for asking way too many, but extremely important questions.

The complexity of the questions asked in your discussion document highlights just how complex of an issue this is and how important it is that we all work together, as an industry, to resolve these issues related to the maintenance of organic integrity. From this morning's discussion, as well, it sounds like there's a lot of movement in this direction, which is really heartening. QAI was a part of the OTA task force for global organic supply chain integrity, GOSI is the official acronym, and contributed to the comments submitted by OTA.

In addition, we submitted our own comments and provided examples of our audit trail forms, which capture a trace back and mass balance exercise conducted at inspections. We

require every inspector to carry out these audits when they are inspecting every organic operation.

We carry out thorough inspector trainings on how to do these often complex audits and match organic inspectors with high-level audit skills with those operations that are most complex. We also require that our certified operators provide a full disclosure of all their suppliers, including non-certified brokers and warehouses, and documentation that links organic goods back to the last certified supplier.

The difficulty is that supply chains can be extremely complex. Phytosanitary paperwork is not uniform and not always available. Transaction certificate processes are inconsistent, and there's still an overall ignorance out there about which handling processes are required to be certified. There's just way too many places where organic integrity can be lost. While QAI is doing its part to

prevent fraudulent activities and identify risks, we feel that the best approach to mitigating these issues is to require, through rulemaking, that all handlers in the supply chain be certified.

We know that's not even going to be the thing that solves it. It'll certainly make it more manageable. We ask, also, that the NOSB focus their efforts on identifying who truly does and does not need to be certified, so that there remains little room for fraud to occur in the supply chain.

We also support the industry endorsement and adoption of the GOSI Best Practices guide, consistency between the labeling of organic, non-retail goods with the accompanying paperwork, more practice of cross-checking with other certifiers, and the reporting of organic crop and acreage information and clarification that any activity where a product is exposed should be certified, any part along the chain where a product is

exposed needs to be certified. Thank you.

MR. CHAPMAN: I've got a couple, and then we'll go this way, and then back that way. What type of operations, in your opinion, that are not required to be certified right now, should be certified, or vice versa, which ones should be exempt?

MS. WALDEN: I'm not exactly sure who should be exempt, to be honest. But I know that there's distributors, warehouses, transloading sites, the use of augers to move product from shipping containers into vessels. There's quite a lot of activity that happens, and we're actually still learning, exactly, all of these different places.

As we learned earlier, as well, where you've got produces that is basically in open containers that are in warehouses, all of these places where there is exposed product or impermeable packaging needs to be certified. Even coffee in hessian sacks, really, in warehouses, it's pretty widespread.

MR. CHAPMAN: What about the transit of those open products?

MS. WALDEN: Transportation's a little more tricky, but there needs to be some oversight. Right now, the transportation is exempt. However, there is control by the -- generally, like a milk tanker, there's control at the farm level, with clean truck affidavits, and then there's also control at the receiving, at the processor.

I guess it's a study of the whole chain. There needs to be some level of control. It may be that some of these activities can be covered under the certification of operations, but certainly not in every instance.

MR. CHAPMAN: Harriet.

MS. BEHAR: You said that you go through your inspectors and choose them to fit the type of operation. Do you have a system of categorizing them, as far as lower skills, medium skills, high skilled? In what categories, then, do you put them, and if you

do, can you share that with us?

MS. WALDEN: I would have to talk with our inspections person, but we do have -- we have these robust audit exercises. All of our inspectors go through the training, but they're also subjected to -- every single inspection they do, they get feedback from the reviewers. All of those scores are calculated. We know who not to send to certain places. We're constantly -- it's constantly process improvement. We're constantly trying to fine tune who we send to various operations.

MS. BEHAR: I just have a quick follow up. Can we put you in Michelle's suitcase and kidnap you and bring you back to D.C. for us?

MS. WALDEN: I heard no back there.

MR. CHAPMAN: Emily.

MS. OAKLEY: I just wanted to thank you for your comments in support of the native ecosystem document. Thank you.

MS. WALDEN: You're welcome.

MR. CHAPMAN: Thank you.

MS. WALDEN: Thanks very much.

MR. CHAPMAN: Next up is Ruth Watts, followed by Bill Wolf. Ruth, you can start with your name and affiliation.

MS. WATTS: Good afternoon. My name is Ruth Watts, and I am the business development manager for BASF Corporation's biopolymers group. I wanted to thank you for your willingness to serve on the Board, and also recognize you for the sacrifice that you make for ensuring the integrity of the organic industry. I would like to comment on the sunset review of polyethylene mulch film and the value of the alternative, soil biodegradable mulch films.

We have heard for years that the PE mulch film provides for the organic farmer. We also have heard many farmers address the end-of-life issues that they have. PE mulch film continues to plague them. Many questions about what to do with the film and why are we

putting our waste in somebody else's backyard?

The organic industry professes not only stewardship of the soil, but as we all should, be stewards of the planet and its valuable resources. Let's look at this in a holistic approach and not create problems for another group of stakeholders or our planet.

Landfills and recyclers do not want polyethylene mulch film due to soil and plant residue. Therefore, if a farmer cannot dispose of it by these means, then the plastic mulch film is either stockpiled on a farm or it's burned. Please note that over time, polyethylene mulch film will degrade, due to heat and UV, which can leave fragments in the ground, resulting in a potential harmful product, such as aldehydes and ketones. Burning of mulch film can also result in airborne pollutants, along with other undesirable environmental impacts.

There has been a very healthy discussion on the value of soil biodegradable

mulch films and how the use of these products, though which are commercially available today and not 100 percent bio-based, can provide a safe, sustainable solution to the disposal challenges of polyethylene mulch film.

The topic of bio-based content has taken us way off course here. The composition of currently commercially available products was disclosed in our petition, as was the origin of the carbon. We discussed the origin in the carbon does not impact the performance or the safety of the film in any way.

We are simply advocating for the materials that we originally petitioned. We understand that there is a desire to have these products made from bio-based sources, despite the fact that it provides no additional value to the farmer and only increases his or her costs. Nature doesn't make molecules that can simply be harvested to create new products. In the case of polymers, monomers have to be created, and the vehicle for this is genetically modified

organisms used as a processing aid to yield quality monomers of sufficient quality and quantity.

These organisms do not survive the production process, and are not in the final product, so they are not a farm input. But this is the only way to make bio-based monomers. As we know, GMOs are not allowed. We simply want to move this conversation forward and ask the NOSB to recommend the NOP to remove the Memo 15-1 and allow farmers to assess and use the currently available products today that meet the performance and standards listed in the 7 CFR 205.601.

MR. CHAPMAN: Thank you. Harriet.

MS. BEHAR: Hi, Ruth.

MS. WATTS: Hey, Harriet.

MS. BEHAR: If we ever get this one solved, you're going to miss going to all these places around the United States. I understand that the European Union has been developing a new standard for biodegradable plastic mulch

films, and I'm wondering if the film that you sell meets their new standard, which has to do with the amount of -- the biodegradability, which I believe probably it does, but a thorough ecotoxicity requirement, as well. Are you aware of this?

MS. WATTS: That's correct, yes. There is a new standard. They haven't developed one. There is a new standard, and our product does meet that performance. In fact, I would say all of the products that meet the performance of the CFR currently on the books meet that same standard.

The only additional requirement that I believe Dr. Andreas Kunkel talked about was the mechanical properties that is also added to that particular standard. Everything listed in the new EU standard is reflected in the CFR for the biodegradable mulch films, so it is available.

MR. CHAPMAN: Dave.

MR. MORTENSEN: Ruth, I wasn't sure

if I was going to ask this question or not, but I'm going to go ahead and ask it. It's late in the day. I was driving back from Washington, D.C., last week when one of your colleagues called in. I was coming back from the dicamba drift discussion, closed-door discussion, where I heard multiple organic farmers say that they're on the verge of not being able to grow their crops because of dicamba drift, which is manufactured by BASF.

I guess I'm trying to reconcile a corporate ethic that wants to sell a product for organic production on the one hand, and is selling a product that's being used on about -- will be, this summer, 50 million acres of crop land on the other hand. Could you just help me see the corporate ethic where there's consistency here?

MS. WATTS: First off, that's a totally different division. We're the largest chemical division in the world. I'm not even familiar with that product, to be honest with

you. We're a separate business unit, and our focus and toxicity studies that are done, these are requirements by the EPA and any European Standard nation. The tests are usually done by a third party. To address those issues and say are we ethical in our testing methodology, I would say because it's done by a third party, that's out of our hands. We follow the law and do what is asked of us to do for our products.

I don't even know what this product is that you've been talking about, but I know what we've done, as a very small business unit within BASF. I know BASF's commitment to the environment, again, not knowing the product that you're talking about. But I know, from our stewardship standpoint, we do whatever's required of the law. Again, third-party testing is usually validated and done. I hope that answers, and I wish I knew more.

MR. MORTENSEN: Just to be clear, dicamba is the herbicide. It will be used because Monsanto and BASF are working together

to have 50 million acres treated this coming summer. It would be worth discussing.

MR. CHAPMAN: Dave, can we keep the questions germane to the subjects --

MR. MORTENSEN: Yes. I was just answering her question. Thanks.

MS. WATTS: Sure. If I could just -- one more thing. If you want to talk about twine on the side, there is work being developed on using the same material for mulch film for twine. I just thought I'd share that with you.

MR. CHAPMAN: Thank you.

MS. WATTS: Thank you.

MR. CHAPMAN: Up next is Michael Menes -- sorry, up next is Bill Wolf, followed by Michael Menes. Bill, if you can start with your name and affiliation.

MR. WOLF: Hi. I'm Bill Wolf, with Wolf, DiMatteo & Associates. First, I want to thank all of you for volunteering your precious time and hard work. I'd like to cover three

topics today, quickly: 1) a suggestion for working smarter, focusing on organic issues and getting more help from USDA; 2) unfinished business that is holding organic back; and 3) making the national list a better toolbox for growing organic.

Organic is the most open standard in the world, so folks bring their important issues here because of our transparency, but you need to be screening these issues vigilantly and focusing on those that improve organic methods. Organic can't take on every worthwhile cause. Focus on what is most important to organic, please. Second, delegate. NOSB members are not appointed to craft regulatory language. Get help drafting the recommendations to the USDA, or they won't be able to implement them.

USDA staff should be taking your concepts and building technically accurate documents for final vote. Now, I'd like to quickly go over a few issues that we've submitted over the years, all unfinished

business, a few listed here, on this slide: inerts, sodium nitrate, mulch film, and requiring organic when available, applying commercial availability to other sections of the national list.

The national list is a toolbox. It's a toolbox for growth, and we need choices. Farmers in the U.S. are not embracing organic, and that's why we're importing more and more ingredients. These comments are rooted in a philosophy of continuous improvement, that organic is seeking the gentlest ways to produce food and fiber and provide healthy products for animals and humans. It's a tough choice you face every day when you're facing all these issues. I'm going to provide an old adage that was presented 26 years ago to the NOSB at one of its first meetings. That was think like an earthworm. Imagine what promotes our biotic living systems to help with materials decisions. Ask yourself --

MR. CHAPMAN: Thank you, Bill.

Questions for Bill? A-dae.

MS. ROMERO-BRIONES: Hi. Can you just finish that last sentence?

MR. WOLF: Sorry?

MS. ROMERO-BRIONES: Can you just finish your last thought?

MR. WOLF: Sure. I'd be glad to. I wanted to simply say don't shrink the national list toolbox as a specific goal. We need choices, not just one solution for a problem. Be open to innovation and creativity that fits the organic philosophy. The precautionary principle cuts both ways, so ask yourselves will your vote increase organic acreage and the earthworm population. Thank you. Any questions?

MR. CHAPMAN: Thank you, Bill. Up next, we have Michael Menes, followed by Brian Baker. Michael, if you can start with your name and affiliation.

MR. MENES: Good afternoon, and thank you for the time as we go down into the stretch.

My name is Mike Menes. I'm VP of food safety and technology over at True Organic Products. I'd like to bring greetings from sunny California and the employees at True Organic Products.

I'd like to thank the NOSB and the entire National Organic Program for their commitment to the organic industry. We appreciate your attention to detail as you wade through all these comments, the sea of paperwork, truly appreciate that. Tell you a little bit about our company. True Organic Products is the nation's largest organic fertilizer manufacturer.

We are family owned since 2005. We manufacture our liquid and pelleted fertilizers out of two locations, in Helm, California, just outside of Fresno, and also in eastern Oregon, our newest place there in Boardman. I'm here today to comment on the tools for organic fertility. True Organic Products supports liquid fish remaining on the NOP's list of

approved materials for use in organic production. Some of the organic farmers don't need off-farm soil amendments; however, most need a robust fertility program. The availability of approved materials for growing an organic crop is critical. One input that we use is liquid fish to formulate our liquid fertilizers, which is a large part of our business.

It's a growing segment, for sure. It's a unique tool that many of our customers currently use as a liquid fertilizer. The unique thing about this is that it can be used in irrigation and fertigation. Sunsetting liquid fish from the NOP list would reduce the amount of organic produce available to the public.

Liquid fish is a proven tool that meets the criteria for the organic inputs, and we ask the Board to retain the liquid fish for use in organic farming. There's another fertilizer input that the NOSB recommended to

prohibit in 2011, but has not been acted on by the NOP in AMS.

Sodium nitrate is a risk to the integrity of the organic agriculture, and we call on the NOP to implement this prohibition. In 2012, the NOP issue NOP Memo 12-1, regarding the status of the sodium nitrate, stating that the rulemaking was forthcoming, but no action has been taken on the NOSB's recommendation from seven years ago. NOP Memo 12-1 issued instead created some confusion with operators, where people may be starting to go outside of that 20 percent rule.

Interestingly, sodium nitrate was not discussed in the 2017 sunset review. Now, independent testing shows that there may be some harmful levels of the contaminant called perchlorate. In the midst of all the talk of organic fraud, it is important that we maintain the construct of the National Organic Program, and thus protect the integrity of the USDA organic seal. Thank you.

MR. CHAPMAN: Thank you. Emily.

MS. OAKLEY: I didn't see, in your written comments, if the fish that you use in your products comes from byproduct for other purposes, or if it's fish that's harvested from wild sources solely for the purpose of fertilizer. Could you elaborate on that?

MR. MENES: Sure. Ours is all from byproducts, is my understanding. I think the driving force there is going to be fish meal, as mentioned earlier, fish meal and fish oil, and then the carcasses outside of the filet. So yes, we're all motivated to using the stuff that's going to be -- could be going into the waste stream already anyway.

MR. CHAPMAN: Harriet.

MS. BEHAR: Have you shared the information about the detection of perchlorate, have you shared that information with the National Organic Program? Because they do have something about compost feed stocks cannot contain prohibited materials, so I'm wondering

if --

MR. MENES: I haven't shared that information at this time.

MS. BEHAR: -- you could share that information with the NOP, and they can look that over?

MR. MENES: Yes, I'd be happy to do that. I can do that at a later time, but yes, I would be happy to do that.

MR. CHAPMAN: Asa.

MR. BRADMAN: Could you clarify a little bit. You said that -- was it perchlorate that you were detecting in soy-based fertilizers?

MR. MENES: Yes. It's perchlorate. Perchlorate, as per the technical review that was done several years ago, perchlorate's a strong oxidizing agent. It was detected in there, initially.

MR. BRADMAN: There's a long history, of course, with Colorado River water being contaminated with it in many areas.

MR. MENES: My understanding is that it was commercially available in sodium nitrate, send it in for perchlorate testing and found significant levels in there.

MR. BRADMAN: There's a long history with the sodium nitrate.

MR. MENES: Yes, be happy to share the things that we've found recently.

MR. CHAPMAN: Thank you.

MR. MENES: Thank you.

MR. CHAPMAN: Up next is Brian Baker, followed by Jerry Tyler. Brian, if you can start with your name and affiliation.

MR. BAKER: Brian Baker, IFOAM North America. Esteemed members of the National Organic Standards Board, thank you for the opportunity to comment. IFOAM Organics International has led, united, and assisted the organic world since the 1970s. It has been influential in setting organic standards throughout the world. IFOAM North America is a newly formed organization that includes IFOAM

members in the U.S. and Canada.

Our purposes are to educate the public, serve as a forum to exchange ideas, and engage in activities that advance organic agriculture and its four principles, health, ecology, fairness, and care. I want to speak today on three subjects, import oversight, organic livestock and poultry practices, and excluded methods.

USDA's expanded enforcement efforts are welcome. IFOAM has helped to protect international organic integrity since before there were national standards and government enforcement.

Fraud and efforts to subvert organic markets has required vigilance from the beginning and is a global problem. International collaboration through a public/private partnership is essential. Transparency and data sharing are needed to help the market to respond to those who are not acting in good faith. We can't just wait for

criminal prosecution. Fair Trade goes beyond simply following the letter of the law. Investigators should pay attention to the incentives and opportunities to create an environment conducive to that fraud.

Second, the withdrawal of organic livestock and poultry practice rule puts the USDA program out of step with Canada, the European Union, and the whole rest of the world. It violates every principle of organic agriculture, and IFOAM standards require that livestock and crops be connected to the earth.

Finally, IFOAM supports the efforts to protect the integrity of organic seed and wants to see a seed purity task force. IFOAM has published a position paper on excluded methods. This was approved by the membership last November.

We support a precautionary approach to novel techniques of genetic engineering. Plants, animals, micro-organisms genetically modified by gene editing and CRISPR-Cas have no

place in organic farming and food systems and are excluded methods. NOSB has a vital role to represent the interests of the entire organic community. We wish you well on your assigned task. Thank you.

MR. CHAPMAN: Thank you, Brian. Dan.

DR. SEITZ: When you say that the decision not to implement the OLPP rule puts us out of sync with Europe and Canada and so forth, on a practical level, does that have, then, an adverse impact on the organic industry in this country?

MR. BAKER: That remains to be seen. What the repercussions will be, I cannot predict. However, I will say the world is watching. What we do hear does not go unnoticed. Just remember, we're looking at a much larger organic world than just what goes on within U.S. borders. If we're seen as acting not consistent with the principles of organic, that reflects badly on America's organic producers.

MR. CHAPMAN: Thank you. Thank you, Brian.

MR. BAKER: Thank you.

MR. CHAPMAN: Up next is Jerry Tyler, followed by Gerald Robertson. Jerry, if you can start with your name and affiliation.

MR. TYLER: Good day. My name is Jerry Tyler, and I'm the president of a company called the Heart of Nature. I've also been appointed, by the current and previous secretaries of commerce, to the District Export Council, which is a private industry panel that works with the U.S. trade department in promoting U.S. exports.

We export our natural sulfur around the world. I'm here to share with the Board the fact that there are many global sources of natural sulfur in abundant amounts, such as naturally mined sulfur, naturally extracted sulfur from geothermal wells, and naturally mined micronutrients that also contain sulfur in sulfate forms beneficial to plants.

I'm specifically speaking on behalf of natural sulfur companies that have spent millions of dollars in order to properly secure sulfur for the organic crop production markets, so that the organic food consumer can have confidence that their fruit or vegetable that contains the organic label has been grown in a fashion that meets all standards that are in the spirit of natural inputs going into the soil that was used to grow their food. It is my position that by continuing to allow oil refining companies to use and sell the refined sulfur that is a waste byproduct from the oil and diesel fuel refining operations, as an input to the soil where their organic labeled food has been grown, is a dramatic and blatant violation of the organic consumer's trust.

This is also a poor reflection on the National Organic Program to put diesel fuel byproduct into organic soils. Let's no longer by the elemental sulfur industry's argument saying they must be approved because there are

no other alternatives. There are other alternatives.

Many companies just like ours have spent millions of dollars per year to comply with your organic laws, in the spirit of the rules that should allow organic farmers to use only naturally mined or extracted sulfur products that can give confidence to the consumer.

I'm also very happy to let you know that naturally mined sulfur is now getting very popular in the conventional farming industry, as it's immediately plant available, versus refined elemental sulfur, which is not plant available. Elemental sulfur has also been found to sit in soils for several seasons before it can begin to work. As any of us natural sulfur conventional crop production -- sulfur companies continue to market our products, growers of both organic and conventional production are seeing quicker and better results with regards to yields, flavor, sugaring and more, so we are a better

alternative, in any case, yet the organic industry is certainly well served by having naturally mined sulfur suppliers.

There is simply no need or justification for the chemically refined sulfur to be used in organic farming. There is no advantage to it, and it risks consumer confidence. Thank you.

MR. CHAPMAN: Thank you, Jerry. Emily.

MS. OAKLEY: Could you provide us with some figures demonstrating that the supply is sufficient for the demand?

MR. TYLER: Yes, that's a tough one. There's been some figures named earlier about what percentage of crops are organic in the United States. I'll look further into tonnages that are needed, but I know that there's been more and more natural sources that have come up. The news about this has been kind of quashed by the oil companies that produce the elemental sulfur. We're working on that. I'll get you

some data.

MR. CHAPMAN: A-dae.

MS. ROMERO-BRIONES: Forgive my question. I'm not a scientist. Elemental sulfur and natural mined sulfur, they're not the same thing? Can you explain the differences?

MR. TYLER: Yes. Thank you. It's a great question. Elemental sulfur is not plant available. Elemental sulfur has to go through a file sulfate process to become SO4 from elemental S. The elemental sulfur industry is showing and ranking that their sulfur is 90 to 99 percent pure elemental sulfur.

All that's telling the agronomists and the organic consumers is they're 90 to 99 percent guaranteed that it's not going to work for a long time. SO4 is the form of sulfur that is plant available, that promotes amino acid production, sugaring, gets you better flavor, sweeter fruit, better flavored vegetables. Only naturally mined sulfur contains that SO4. There's other elements to naturally mined sulfur

that's from a volcanic source that helps the bio-sulfate process along. Natural sulfur is found to work better, and the fruits and vegetables taste better. It also reduces pH faster, natural sulfur does, versus elemental sulfur.

MR. CHAPMAN: Steve.

MR. ELA: In terms of fungicidal and insecticidal qualities, elemental sulfur is kind of the -- that's the gold standard, in some ways. Does sulfur sulfate act in the same way?

MR. TYLER: We're the fastest growing antifungal insecticidal in Latin America and East Asia. We do pretty well as an antifungal and insecticidal here, but I can't say it on the Internet or on my brochures or anything until the EPA gives me that clearance. If anyone here can help me with the EPA to expedite that, it would be great.

We're flying our sulfur onto sugarcane in Guatemala and the Dominican Republic. We're using our sulfur all over the

world. It's why we've been recognized as an exporter. Because once we're proven to be natural and accepted and we're EU approved, Japanese approved, USDA, we're working on the ability to be able to say and advertise that we're an antifungal, but anyone that has used, say, in onions and garlic, they've just used our regular naturally mined sulfur, just magically this fungal problem is gone and they get beautiful onions and garlic.

It's because of the way the deposit was made, the way Mother Nature made it, and it's naturally mined, with nothing synthetic in it. It's just done the way Mother Nature wanted it.

MR. CHAPMAN: Thank you, Jerry. Thank you.

MR. TYLER: Thank you.

MR. CHAPMAN: Up next is Gerald Robertson, followed by Isaura Andaluz. If you can start with your name and affiliation.

MR. ROBERTSON: Good afternoon. My

name is Gerry Robertson, and I'm the director of supply at Reiter Affiliated Companies in Oxnard, California. I have one more go-around on elemental sulfur for you all, and then it'll be time for an elemental beer, I think. I want to amplify on the information that I gave in the written comments, and then endeavor to answer the Subcomittee's questions from a producer's point of view a little more thoroughly. Our operations include over 1,300 acres of organic strawberries along coastal California and northern Baha, from Watsonville to San Quintin. The warm days and cool nights that are so favorable to strawberry production are also conducive to the development of powdery mildew.

As this pest pressure is largely a function of the local environment and there are no other mechanical or physical methods of control, we are reliant on sulfur for control of mildew, with elemental sulfur being the material of clear preference.

There are two reasons for this

preference. As sulfur works solely through direct contact with the mildew spores, maximum and thorough coverage is essential.

The air-assisted dust applicators we use ensure thorough penetration of the plant canopy, especially on the undersides of the leaves, where mildew is likely, given its shade, and provide far superior coverage and, therefore, control, as compared to wettable sulfur formulations. The other disadvantage of wettable sulfur is that it leaves a visible residue on the berries, which can often be the cause for rejection of the product by our QA inspectors. Wettable sulfur is useful in the early season in strawberries, when there is no fruit yet and we're trying to build our populations of beneficial predatory mites, which are more susceptible to damage from elemental sulfur.

Application rates and frequency vary by region, time of year, and day-to-day environmental conditions at any given location.

Rates of five to ten pounds per acre are typical, with frequency from two to ten applications per season. Farm managers are judicious in their use of sulfur, as frequent applications can cause stress on the plant.

Our own company pesticide application policy stipulates that no pesticide applications will be made while other employees, for example, harvesters, are on the farm, and that we will maintain at least 100-foot residential buffer. Furthermore, the elemental sulfur label has specific California drift restrictions, which spell out wind speed and inversion factors that would restrict applications, and new California law prohibits any pesticide applications within a quarter mile of a public K-12 school or licensed daycare facility between the hours of 6:00 a.m. and 6:00 p.m. Finally, we have had no internal incidents of exposure, illness, or other adverse human impacts related to these sulfur applications. Based on all that, we encourage the Board to recommend the continued

allowable status of this important tool.

MR. CHAPMAN: Thank you. Emily.

MR. ROBERTSON: Got any questions?

MS. OAKLEY: I have one. Are you familiar with our petition before us for polyoxin D zinc salt, by any chance?

MR. ROBERTSON: I'm sorry, what?

MS. OAKLEY: Are you familiar with our petition before us for polyoxin D zinc salt?

MR. ROBERTSON: No.

MS. OAKLEY: Okay, thanks.

MR. CHAPMAN: Thank you.

MR. ROBERTSON: Thank you.

MR. CHAPMAN: We've got to move on. Sorry. Up next is Isaura --

PARTICIPANT: Do you want to take it later?

MR. CHAPMAN: We've got to keep moving. Sorry, Asa. We're done. Thank you, Gerald.

MR. ROBERTSON: False alarm?

MR. CHAPMAN: False alarm. Is Isaura

here? Isaura, you're up. Following Isaura is Jean Halloran. Isaura, if you could start with your name and affiliation.

MS. ANDALUZ: Isaura Andaluz with OSGATA and Cuatro Puertas. Good afternoon. Thank you for all your work because I could not do it. Thank you. So why are we here? I'm talking about organic seed. Kathleen Merrigan explained this at the North American Biotechnology Council Meeting in 2015.

She said that the first proposed organic rule in 1997 did not include a prohibition on biotech, even though the majority of existing private and state organic standards in the country included such a prohibition.

Quote, it did not take brilliant minds to look into the future and realize there may be the same sorts of threshold issues that consumers with demand for an organic product around GM in the same way as it is for pesticides. It was a really big decision, and it actually went to President Clinton. We are

here facing the situation with contamination. I sat on two rounds of AC-21, and I can tell you, really, that nothing's changed except the situation has become worse.

For example, the one thing that gets me is that a lot of the crops, with all the increased pesticides, like dicamba and 24D, is to kill off the palmer amaranth. The palmer amaranth has become resistant to all of these herbicides. Why? Because it is a force of life.

It is a plant that can reproduce itself very quickly. It has a huge range of temperatures that it can germinate at. It needs very little water. It grows very rapidly. It's also a food crop, a forage crop, and the seeds are highly nutritious.

I think these are things -- a lot of the seeds that are land-raised seeds or seeds that are regional, they have characteristics like this that need to be preserved. Any time you have contamination -- first of all, that

contamination is patented. Legally, you cannot do research on your plants. Once it's in the plant, you can't take it out. It's gone. For example, we have a huge collection of native drought tolerant seeds, and some that we only have very small quantities of that we're working to get them out there again. We had a situation. We had this very rare corn. We planted it.

I went out to check in the field a few weeks later, bam, across the road, someone had planted GE corn. We're sitting on this corn. We don't have the money to test it, and also, too, the quantity. We don't have sufficient quantity to test this corn.

What happens is when you have a crop, it takes seven years to ten years when you're trying to grow a crop out. It keeps adapting as you go along the way. What's happened, for example, people like Percy Schmeiser, when he had his canola crop, that he went to court and everything else, what happened to him was his

crop was taken away.

That was 50 years of genetics that he had developed over the process that he lost. This is happening to some of the people, too, that when you find this contamination in your field, your seeds get taken away. For us, and especially for smaller farmers, it's just too expensive to do testing. No one's going to tell you that they got contaminated because they don't want to lost their markets. For seed growers, a lot of the seed production has been exported out of the country, since as far back as 2006, when Pioneer moved all their corn production to other countries because of contamination.

MR. CHAPMAN: Thank you for your comments.

MS. ANDALUZ: Thanks.

MR. CHAPMAN: Up next is Jean, followed by Richard Conn. Jean, you can start with your name and affiliation.

MS. HALLORAN: Hi. I'm Jean

Halloran, and I'm director of food policy initiatives with Consumers Union, the advocacy arm of Consumer Reports. Thank you for your time and your commitment at this very late hour.

Consumer Reports is an independent, non-profit organization that has more than 7 million subscribers to its print and online publications. We advocated publishing many areas, including how to create a safe and sustainable food system, and we believe the organic label, to a major degree, embodies our vision of a sustainable food system. But the organic label must take care to make sure it remains aligned with consumers' very high expectations for it, the expectations that underlie their willingness to pay a premium for organic products.

In that regard, although it's not on the agenda, I feel compelled to express our deep dismay at USDA's decision to withdraw the animal welfare rule. It's most unfortunate that a few producers may now continue to sell eggs, milk,

meat, and poultry as USDA organic, without meeting the sound animal welfare standards that consumers expect and most producers already meet.

One livestock issue that still can and should be addressed is the use of antibiotics in chicks. Eliminating use of routine use of antibiotics in healthy food animals is a top priority for Consumer Reports, given the connection between overuse of antibiotics in animals and antibiotic resistance.

While the organic standards prohibit routine use of antibiotics, there is currently an exception because the OFPA of 1990 exempts day-old chicks from organic management. This is creating a bizarre anomaly in the organic standard. Organic poultry can now meet a lower standard for antibiotics than conventional poultry sold under a no antibiotics ever label. This is not what consumers expect from organic.

In a 2015 poll that we conducted, 82

percent said they think that federal organic standards should mean no antibiotics or other drugs at all in poultry. We have repeatedly requested that the NOSB recommend a consistent prohibition on antibiotics in poultry in all stages of life, and we urge you to take up this issue now.

I also just have a couple of words to say about GMO seeds. We agree there should be an effort to quantify the extent of GMO contamination, and that this could be accomplished by testing seeds sold to organic farmers.

There should also be a seed purity threshold for organic seed, a 0.1 percent threshold for detected GMO traits may be appropriate. We support creating an approved list of test laboratories and test methods. Thank you very much.

MR. CHAPMAN: Thank you. Questions?

MS. OAKLEY: I just want to say thank you for advocating over the years for us to take

up the issue of antibiotics in day-old chicks. We've started some of that conversation on the Subcommittee level.

MS. HALLORAN: Great, thank you.

MR. CHAPMAN: Thank you. Up next is Richard Conn. After Richard is Daniel Martens. Richard, if you can start with your name and affiliation.

MR. CONN: Good afternoon. I'm Richard Conn, of Conn & Smith, a consulting firm. I'm here on behalf of Kaken, the petitioner, to speak in support of the proposed listing of polyoxin D zinc salt in 7 CFR, Section 205.601(i), to permit the use for organic plant disease control.

Specifically, I would like to provide an overview of the written public comments that were submitted to the docket regarding polyoxin D zinc salt in advance of the April 4 deadline. There were a total of 33 written comments that included comments on polyoxin D zinc salt; 28 of those were in support; 5 were opposed; so that's

85 percent in support and 15 percent in opposition. Polyoxin D zinc salt enjoys wide support. Written comments in support of it were submitted by growers, grower groups, and a grower cooperative, university researchers and agricultural extension agents, a crop consultant, an organic food producer, an organic wholesaler, an organic trade association, a former NOSB member, the USDA IR4 Project, and the petitioner.

The crops discussed in those written comments include apples, basil, blackberries, blueberries, cherries, cranberries, cucurbits, grapes, hops, leafy vegetables, pears, raspberries, spinach, strawberries, and tomatoes.

The diseases that were discussed in the written comments include alternaria, anthracnose, black rot, botrytis, cedar apple rust, cottonball, cranberry fruit rot complex, downy mildew, early blight, flyspeck, gummy stem blight, late blight, phomopsis, powdery mildew,

scab, sooty blotch, southern blight, and target spot. I respectfully request your vote in support of the proposed listing of polyoxin D zinc salt for organic plant disease control.

MR. CHAPMAN: Thank you. Questions? Jesse.

MR. BUIE: The TR talks about this unique non-toxic mode of action for polyoxin D that no other compound has. Can you briefly discuss how that works?

MR. CONN: I'm not the expert on that, but it does have a non-toxic mode of action, meaning that it doesn't actually kill the target pest. It just reduces its impact so much that it's not affecting the crop. There is a technical explanation, but I'm not the expert to talk about that.

MR. CHAPMAN: Thank you. Up next is Daniel Martens. After Daniel is Zen Honeycutt, and after Zen is Nicole Dehne. Daniel, if you can start with your name and affiliation.

MR. MARTENS: Thank you for the

opportunity to present comments. I'm Dan Martens with Novamont North America. Mulch films are positive tools for farmers, but positive end of life scenarios do not exist for the millions of pounds that are pulled off fields every season. Plastic mulch films cannot be burned or recycled, and this year, China banned the importation of our sullied refuse. But plastic mulch can be landfilled to one day be someone's problem, but not ours. Environmentally conscious farmers are conflicted, in this age of the circular dialogue. How can we not worry about what comes before, what becomes after, as long as it satisfies our self-interest?

The EU has approved a standard for the use of soil-degradable mulch films, EN-17033. Years of multinational study is now legislation, and these guidelines provide for safe products and their use. These products look like plastic, they feel like plastic, they act like plastic, but are not.

They do not melt or fragment into the soil, out of sight, but still there. These are simple, carbon-based material that is consumed by soil microbes as food. This has been studied and tested. After 15 years' use, no negative soil or plant contamination is found.

Some compostable materials can be made from plants, using plant-based components, lower carbon footprints, directed at stemming global warming. How much plant-based content is helpful? Any is better than none, but what is practical plant-based content available today? From the OMRI study five years ago, it said 10 percent was the max, but today, 30 percent is doable. The state of the art for compostable material is 50 percent, although this would be quite a stretch for mulch films.

France and Italy compostable bag legislation has a step approach, starting with 30 percent plant based for the first year, 40 percent for the second, then moving towards 50. Current requirements require 40 percent

plant-based content.

There is only one way to increase plant content, and that's to remove the no GMO process clause from certification. Sustainable plant-based chemistry is not possible with the old technology. This does not mean allow GMO crops. It does not. But the process to turn plants into chemicals that replace fossil counterparts means flexibility.

New pieces of the puzzle are now in place, and not allowing certified degradable mulch film to those farmers as an alternative to plastic is supporting the plastics problem that literally will not go away. I ask this Board to please remove 15-1, the memo, or amend with achievable plant step goals and remove the non-GMO process clause. Organic farming can take leadership in sustainable mulching practices, grow the non-GMO agriculture market, and curb landfilling. Thank you.

MR. CHAPMAN: Thank you. Questions? Asa.

MR. BRADMAN: Could you just clarify very briefly the process of using GMO to produce the -- I guess the monomers? Is it a bacteria? Is it a yeast?

MR. MARTENS: Yes, it's a fermentation. There's several different ways. One of the chemicals that we now have does not use a fermentation process. It comes right from seeds. However, other more advanced chemicals have to go through a fermentation process. Basically, you can use non-GMO feed stocks with sugars or seeds, like we do, but some of the processes, you must use the microbes which have been specifically grown to create the chemicals that we need to use.

MR. BRADMAN: Is the microbes -- is it a yeast or a bacteria?

MR. MARTENS: Yes, it's bacterias of some kind.

MR. BRADMAN: Can you use cellulose as the feed stock, or is it usually a sugar or something like that?

MR. MARTENS: We use sugars for our process. We use sugars that are locally grown in the area where the plant is.

MR. BRADMAN: Are you making PLA?

MR. MARTENS: No. PLA is made in a similar fermentation process. We do not make PLA. We're a green chemistry company. We make monomers. We're the first ever to make azelaic acid from seeds, from thistle seeds. We were the first ever to make 1,4-butanediol from sugars.

We built plants to do this, the first of its kind in the world. We're not trying to propagate using GMO crops; it's just that sometimes the processes in new technologies, they didn't exist two years ago, but now we can get these products to do a lot of really good things by using plant-based materials.

MR. CHAPMAN: Thank you. Up next is Zen Honeycutt, followed by Nicole Dehne. Zen, if you can start with your name and affiliation.

MS. HONEYCUTT: Good evening. I'm

Zen Honeycutt, from Moms Across America, and I want to thank you very much for your service. We are a national coalition of unstoppable moms, committed to creating healthy communities, a nonprofit.

I speak to you today on behalf of moms who are exhausted and struggling with children who are mentally imbalanced, learning disabled, developmentally delayed, or chronically ill. My son, for example, suffered for years for exposure to carrageenan.

We do not know what it is like to sit on a board and have to determine what chemical to allow in organic or to be pressured by various entities who want you to be lenient. Our reality is that we do know what it is like to watch our child's body burst out in a rash, their eyes roll back in their heads, and see them almost die from an allergic reaction.

Some of us have buried our children. We do know what it is like to see our children bang their heads against a refrigerator until

they bleed because their bodies crave the very food that hurts them. We do know what it is like to look into the eyes of our children, who are in a fit of rage, saying that they will kill us, and see in their eyes that they are begging for help. In short, we know the effects of food contaminated with synthetic chemicals. Contaminated food makes our lives a living hell.

Organic food is the primary source of recovery for our children. We see them suddenly start to sleep better, to stop hitting, to focus, to be calm, to be loving, and to smile. We need uncontaminated organic food for our children. We need it for them to have productive futures, for our sanity and, frankly, for our marriages to stay intact.

We need you to eliminate chemicals like BPA, glyphosate, harmful inerts, and synthetic flavors in organic. We need stricter regulations and for you to lobby to revoke the license of glyphosate. I am particularly here today to discuss the decision making of the very

core of integrity of organic.

Let's be clear. The only explanation of why you would allow synthetic chemicals and any compromise of the integrity of organic is to put the request of the food manufacturers and farmers before the health of our children. You are better than that, and I remind you that the end goal of farming and producing organic food is not higher salaries for CEOs. It is to nourish and support the growth of our children and our families.

Lives of fetuses, infants, children, your children, depend on your decisions, so I ask you not to dismiss the requests of many here today, like Beyond Pesticides, OCA, and Cornucopia. Don't just justify a decision to allow synthetic flavors, GMO contamination, GMO vaccines, nanomaterials, carrageenan, or synthetical chemicals in organic or CRISPR.

Just don't allow them in the first place. Rather than petition to allow residues of toxins in organic, why not demand the

manufacturers stop using these toxic chemicals? I ask you today, I say today that today is the day when organic can have heroes, a day that millions of children and mothers and fathers will have reason to thank you, but probably never will because they will not know what rash or illness their child did not get --

MR. CHAPMAN: Thank you, Zen.

MS. HONEYCUTT: -- because the food they ate was safe, organic, and toxic and synthetic chemical free because you said so.

MR. CHAPMAN: Thank you, Zen.

MS. HONEYCUTT: Thank you.

MR. CHAPMAN: Questions? Thank you, Zen.

MS. HONEYCUTT: Can I just say one thing about vegan? He asked a question about a practical effect on meat and poultry. There is an effect. When consumers cannot trust that organic chicken is organic, they go vegan.

MR. CHAPMAN: We have to move on, thank you.

MS. HONEYCUTT: There's a growing rise in that.

MR. CHAPMAN: Thank you for your comments. Up next is Nicole Dehne, followed by Laura Batcha. Nicole, if you can start with your name and affiliation.

MS. DEHNE: Good evening. I'm Nicole Dehne. I'm the certification director for Vermont Organic Farmers. We're the USDA accredited certification program of NOFA Vermont. We certify over 700 organic producers in the State of Vermont. I'd like to thank the NOSB members for all of your hard work and for giving me the opportunity to comment today on a number of agenda items. First, I'd like to talk about the incentive to eliminate -- or to eliminate the incentive to convert native ecosystems. We support this proposal.

In Vermont, the organic maple syrup industry is strong and growing. In fact, organic maple producers now make up the majority of the producers that we certify, which

translates to over 200 organic maple producers.

It's important to Vermont that this proposal clarifies that woodlands, which would be considered native ecosystems, could still be converted to organic sugar bushes, as long as the operation minimizes negative impact to the environment, so mitigating erosion, preserving biodiversity, etc.

We would like to see any new regulation in this area accompanied with guidance that helps certifiers both define native ecosystems in their area and specifically identifies the example of converting woodlands to sugar bushes as an approved practice. Second, as the NOSB considers whether to renew plastic mulch as a material for use in organic farms, it's relevant to discuss an alternative to this plastic mulch that is biodegradable, bio-based mulch. BOF's organic vegetable farmers are very vocal to us in their desire to use this biodegradable mulch as an alternative to plastic mulch.

It is our understanding that at this time, the industry can produce, as Dan was saying, a mulch film that is 50 percent bio-based, or they're close to it, and we strongly urge the NOSB to consider clarifying that 50 percent bio-based content is sufficient for biodegradable mulches used on organic farms.

This content could be required to be increased over a number of years, until we reach the 100 percent bio-based. But allowing it now would encourage manufacturers to invest in the market.

In addition, there's a long-term study that ends in August of 2019, titled SCRI Biodegradable Mulch Project. This project's studying the long-term effects of biodegradable mulch on soil ecosystems. We recommend that the NOSB use this study to address those concerns that have been raised. Thirdly, we support the NOSB's recommendation to strengthen the NOP's existing seed guidance, but we do not support the additional recordkeeping requirements that

ask producers to document the reason for use of non-organic seed for each variety that they grow.

It's not uncommon for organic veggie producers in Vermont to grow hundreds of varieties, and often at least half are organic. We agree that producers should be able to explain their reasonings for each non-organic seed purchased, but documenting those reasons why 50 to 75 varieties were purchases as non-organic would be too prescriptive and burdensome.

Then finally, as the NOSB considers the use of vaccines as a tool for organic livestock producers, it's important to ensure non-GMO vaccines are used whenever possible. We would, however, support the use of GMO vaccines in the case where no non-GMO vaccines are available.

MR. CHAPMAN: Thank you. Questions? Dave, briefly.

MR. MORTENSEN: Very quickly, could

you briefly tell us what sugar bush planting is?

MS. DEHNE: If you have a woodland -- a forest in Vermont, converting it to sugar bush would just be thinning and choosing for sugar maples, so that you're having a primarily sugar maple stand. It's an appropriate time to point out that there aren't any national standards for organic maple production.

It's a growing industry in our region. Different certifiers have different guidelines for what it means to be an organic maple producer. Our guidelines do include a certain diversity requirement.

MR. CHAPMAN: Ashley, briefly.

MS. SWAFFAR: In your comments, you said that VOF only allows the use of non-GMO vaccines on your certified farms, so a couple questions on that. Do you have poultry farms over flocks of 1,000 or 2,000 that you certify? Do they want to use GMO vaccines? Have you been successful with manufacturers, even wanting to

fill out your paperwork?

MS. DEHNE: Yes, we have. We're not in OMRI, so we're only interested in reviewing the materials that our producers use. I was going to mention that we mainly certify -- as far as our livestock producers, we're mainly certifying dairy producers, so we don't have a long list of poultry vaccines. What we've found is standard in the industry -- because it's our understanding that GMO vaccines are not allowed unless they're specifically listed on the national list, and there are none.

So as is common in the industry, we created an affidavit, based on the NOP definition of excluded methods, as well as the NOSB Task Force and their definitions of GMO vaccines. We've been successful in getting manufacturers to sign that. That has changed. We've seen vaccines go off our approved list and become genetically modified vaccines.

Back in 2014, I gave a report to the NOSB on this issue. Because I heard that you

were going to ask that question, actually, I did print out my report. I have a list of manufacturers that we've found to be -- have vaccines that are non-GMO.

This one's from 2014 because it was all that I had on my computer, but I could get you a list of what we've already approved. It's primarily dairy, but there are some poultry ones. I'll give that to Michelle, and she can pass it up.

MS. SWAFFAR: Give that to Michelle, yes.

MR. CHAPMAN: Thank you. Up next is Laura, followed by Emily Musgrave. Laura, if you could start with your name and affiliation.

MS. BATCHA: Laura Batcha, with the Organic Trade Association. You all have heard from Gwendolyn and Nate already on a number of topics, and you'll hear from Monique on the panel tomorrow, so I'll try to keep my comments short in the interest of the late time we're at here.

I just want to start by saying our view, as a trade association, is that we do strongly disagree with the current narrow, and what we see as an unprecedented, view of the authority of the NOP under the Organic Foods Production Act.

We heard Under Secretary Ibach, today, suggest that the organic industry should look towards as a process verified program as an alternative to advancing standards within the National Organic Program. This would be the place to utilize wraparound labels. I think it's important for the Board to understand that there has been one attempt to utilize PVP to do this, and it's been met with refusal from USDA to move forward with that proposal. It was based on an NOSB recommendation from 2002, when NOSB passed a recommendation on the principles of transitional certification and labeling.

After years of engaging with USDA on how to move this forward, after consultation with lawyers at USDA, they identified that, in

fact, transitional certification was outside the scope of the National Organic Program and, therefore, couldn't be carried forward by them.

They suggested, at the time, that we look to PVP as the appropriate place to advance these types of standards that exist outside of their current authority. 2016, the Trade Association submitted an application for a national certified transitional program.

In January of 2017, USDA released the program and began accepting applications from accredited certifiers to be recognized to certify to the program. In March of the same year, they stalled the rollout of the program, and it has since been on suspended animation, I'll say, at USDA. This comes with two written assessments from USDA's lawyers saying the program we submitted was compliant with the law, governing PVP didn't conflict with NOP. I'm not saying this to you all to recommend action on this particular transitional certification, although we thought that it did add value to

compliance and encouraging transition of acres.

It's to say that I think we need to be careful about being distracted by suggestions that we might go other places to advance the organic standards. You guys are doing important work to build those recommendations. I think regardless of what your views are on the merits of add-on labels, this industry is striving for continuous improvement, and we need to not walk away from NOP as the place where we see that needing to happen, fundamentally.

I wanted to share that history with you all. On import oversight, you've heard a lot from folks. I've been really impressed by the quality of the conversation, but you are hearing some comments from producers about the unique challenges in fresh produce. I just wanted to let you all know that we do have a Mexico task force at the Trade Association, and we've done a lot of work on this, so you can ask me questions about it.

MR. CHAPMAN: What work have you

done, briefly?

MS. BATCHA: The task force has been working in the context of trying to provide some good proactive counsel to USDA in thinking about compliance with Mexico across the border transactions, as well as preparing what could potentially be an equivalence arrangement with Mexico in the future.

I think it's an interesting topic because I think there are some good arguments from government that equivalence arrangements offer unique abilities for government- to-government collaboration on enforcement that I think provides the industry with unique benefits.

In thinking about this with Mexico, our task forces have identified a number of things that we think are critical to compliance within trade and what a successful arrangement might look like with Mexico. I think, first and foremost, paper won't work for documenting transactions at the border with fresh produce

with Mexico. You've heard that from other folks. I think there's been a lot of good work done at the program. It was great to see the report this morning and rolling out some demos on the technology, but that's critical to have that in place.

I think some of the other things that our task force has recommended are the establishment of joint compliance working groups between governments because there are unique compliance issues. You hear a lot about positive residue samples, and there needs to be clear, established pathways for what to do when positives are found and how the two governments could support each other across the borders.

One of the other things that I think is important that our task force has identified is unlike our arrangement with Canada, where when we sign an equivalence arrangement with Canada, the U.S. based NOP accredited certifiers relinquish their right to certify to NOP within the Canadian boundaries. We've identified that

model wouldn't work in an arrangement with Mexico, that producers that work north/south throughout the season strongly want to retain their right to use their U.S. certifiers with their compliance programs, no matter where they're producing, things like that.

MR. CHAPMAN: Thank you. Harriet.

MS. BEHAR: Do you believe the definition of bioengineering in the GMO labeling law is relevant to the NOP?

MS. BATCHA: Thanks for that, Harriet. Yes. I think you guys have done good work on the recommendation on excluded methods, have some work to do. We supported it being passed, so I think that's excellent. The disclosure law on bioengineering does include some language that I think is relevant to be thinking about.

In terms of their definition of GMO and the disclosure law, there is a provision in there that says the definition for bioengineering, under this law, should not

affect the definition, program rule, or regulation elsewhere in the federal government. That law was written to however those disclosure laws come out. It cabins that definition to really be applicable to disclosure only, and it doesn't force conformity across other federal programs. Shortly after the law was passed, AMS did issue a policy memo that said wherever they go there, it doesn't require a change to how USDA defines excluded methods. I think there's agreement, general agreement that the current definition of excluded methods is solid and broad enough to accommodate some of the discussions you guys have been having.

MR. CHAPMAN: Scott.

MR. RICE: Laura, you, I understand, were part of the group that went over to eastern Europe to better understand what was going on with import fraud. Do you have any takeaways for us to learn from that or highlights that you learned that could be helpful in our deliberations here?

MS. BATCHA: We were there for just about a week. Again, there's only so much you can learn. You spend a lot of time with the folks on the bus and visiting operations. I think the biggest thing that I learned up here is that in talking to our counterparts in the EU and in the Ukraine, we were coming trying to solve the problem that we knew we were solving for. How is the grain coming into the country? What countries is it coming from? Is there acreage there to substantiate it? The folks there from Europe were focused on what was an entirely different problem that they were solving for around fraud.

It took us quite some time to understand that the reason we were looking at different things and asking different questions is we were solving for different problems. I say that to not assume when we talk about the European Union is doing X, Y, and Z, don't assume they're solving the same problems that we are.

It took us a week to realize their big issue, like we had the Washington Post, was an issue with sunflower seed that was used in livestock feed that came through with a residue level that exceeded safety standards for feeding -- that came through even in the livestock derivative products for human consumption.

When they went back through, their investigations led them to believe that it was comingling and substitution with actual treated planting stock seed into the organic stream that had these incredibly high levels of pesticides. Their whole approach that they've taken is dual batch transaction testings on pesticides at every border crossing, essentially, because they're solving something different than we may be. I share that with you. It was really interesting learning for me.

It's driven them down the road of heavy reliance on residue testing as their primary tool. I will say that one of the things

that they are envious of us in regards to is the integrity database. It's viewed as world class and other areas wish that they had a data repository like we do.

MR. CHAPMAN: Thank you. Thank you, Laura. Up next is Emily, followed by Sarah Leibowitz. Emily, if you can start with your name and affiliation.

MS. MUSGRAVE: Good evening. My name is Emily Musgrave. I am the organic program manager at Driscoll's. I would like to thank the NOSB for their commitment to protect the integrity of the organic program and uphold the vital regulatory processes of the NOP. My comments focus on the continued allowance of the following materials: elemental sulfur, lime sulfur, liquid fish products, and sulfurous acid. Driscoll's support the continued listed of elemental sulfur for use in organic production on the national list. Elemental sulfur is a critical amendment for organic strawberry growers to decrease pH in alkaline

soils and control powdery mildew.

Organic strawberry growers commonly use both dusting sulfur and wettable sulfur in rotation with each other. Notably, strawberry growers have invested in specialized equipment that is only used to apply dusting sulfur, which ranges in cost from $12,000 to $16,000.

Our growers are aware they must follow all label instructions, and dusting sulfur also needs special attention to wind patterns to prevent drift. Our organic strawberry growers rely heavily on dusting sulfur and do not believe that the sole use of wettable sulfur could be a viable alternative for control of powdery mildew in organic production.

Growers have found the two formulations to have different efficacies, and rotating the products limits plant stress and reduces the risk of phytotoxicity. Dusting sulfur is preferred over wettable sulfur, particularly when environmental pressure of

powdery mildew is high because it gets more thorough coverage during application. Driscoll's supports the continued listing of lime sulfur and liquid fish products for use in organic production, as they are both important tools across all four berry crops.

Driscoll's supports the continued listed of sulfurous acid on the national list. It is an important practice for controlling and adjusting the pH in irrigation water across all four berry types.

However, Driscoll's would like further clarification from the NOP rule on sulfurous acid. We respectfully ask for a change in the wording of on farm in the rule.

An organic producer who has two certified organic business entities cannot, under the current interpretation of the regulation, use the sulfurous acid produced from that sulfur burner on their other organic entity, even though they own both companies. We understand that sulfurous acid may not be sold,

but requiring an organic grower to purchase a separate sulfur burner for each organic entity is a burdensome cost, with no perceivable benefit to organic integrity. We would like to ask for a change in the interpretation of on farm, as stated in the rule. If the intention is to avoid manufacture and sale, is there other wording that can be used? I thank the National Organic Standards Board for your service and for consideration of my comments.

MR. CHAPMAN: Steve, briefly.

MS. MUSGRAVE: Any questions?

MR. ELA: Yes, that last part in your public comments confused me because my sense of sulfur burners, you have it with your irrigation system. You inject it directly into the water, so how are you using -- do you have interconnected water systems? Is that what you're saying? How are you --

MS. MUSGRAVE: No, we have, for example, an organic grower who owns two separate certified organic entities. He has a sulfur

burner at one of his entities and produces sulfurous acid at that entity. What he wants to do is -- not through his irrigation lines, but he would like to truck the sulfurous acid to his other certified organic entity. We've been told that no, he has to purchase a separate sulfur burner for his other entity, even though he owns both. We find that a little bit burdensome, quite burdensome for the grower.

MR. ELA: But then you actually are transporting sulfuric acid. It's a whole --

MS. MUSGRAVE: Sulfurous acid.

MR. ELA: Sulfurous, but it's kind of a whole different process than directly injecting it into the irrigation water.

MS. MUSGRAVE: It's just something to consider because our growers have brought it up that they find that burdensome, if they own both entities, that they have to purchase a new sulfur burner at the other entity, just for consideration.

MR. CHAPMAN: Emily.

MS. OAKLEY: In terms of liquid fish, do you have a position, or do the growers that you work with have a position, on using liquid fish derived from fish harvested exclusively for use in fertilizer, or would you have a preference for byproducts harvested for other purposes?

MS. MUSGRAVE: That's a great question. We work with a multitude of contracted growers, but we would say that our growers would be very receptive to ensuring that the liquid fish products they buy are used from bycatch or waste products. Actually, there's a site that I was just looking up, I think took a note on it here.

It's called -- the Department of Ecology, State of Washington, has a website where you can look up all -- it doesn't have all liquid fish products, but it has the majority of them. You can actually see whether it's waste derived or bycatch. I'm happy to report that a lot of our growers are using those products. As

long as the cost per unit of nitrogen doesn't go up significantly, I would say that our growers would support that overall.

MR. CHAPMAN: Thank you.

MS. MUSGRAVE: Thank you.

MR. CHAPMAN: Up next is Sarah Leibowitz, followed by Mike Dill.

MS. LEIBOWITZ: Hi. I'm Sarah Leibowitz with DeLaval. I'm a senior research scientist, and I'm here to support the certification for glycolic acid being organic in livestock use. DeLaval put forward the presentation. I also want to say thank you for letting be the very last scheduled speaker. With a quick caveat, my experience with glycolic acid has been exclusively with DeLaval, so I will be speaking from that perspective.

I ate glycolic acid for breakfast this morning, and I bet all of you did, too. It's in fruits, vegetables, meats, especially bacon, coffee, tea, and my favorite, milk. But it's not there at a level by orders of magnitude

where you could use it as a disinfectant or good udder hygiene. Why do we need to dip teats?

For the animal welfare, especially, good udder health, to ensure quality milk, and to have healthy cows. The Subcommittee asked a few questions, and I'd like to try to answer those. The first question was is this product, called OceanBlu, used in rotation with currently allowed pre and post-milking teat dips?

The short answer is yes, if you want to. DeLaval actually doesn't recommend rotating products. That's because ours have been very well tested to kill mastitis causing pathogens. That's both in the lab and field studies that are following National Mastitis Council guidelines. Those are clinical efficacy trials out there. Also, our organic producers are asking for it. We've heard a little bit about that today. The next two questions, are there alternatives available for pre and post-milk teat dips, and do the alternatives work?

I'd like to answer those questions

rather together. Yes, there are other actives out there, and they all come with their advantages and their challenges. The first one is iodine. Iodine teat dips are used in about 70 percent of all dairies.

It's a great oxidizer. It kills bacteria wonderfully. But, on the flip side, whether true or not, there is a perception in some areas that iodine residue is becoming a problem in milk. Studies have shown no, but there it is. Also, there are only two global sources of iodine, in Chile and in Japan.

A few years back when there was a tsunami in Japan, the world iodine supply plummeted. Chlorhexidine. The only good thing we can say about it is it's old and we know that it's been used a long time. Chlorine dioxide, very good, again, at killing bacteria, but it's not stable, and it's not easy to use. Hydrogen peroxide, wonderful environmental palette, breaks down to water, but it's an inhalant problem, and it's harsh on skin. Glycolic

doesn't have these things, gentle on skin, as effective as iodine, great biodegradation.

It's very good for winter application. Because the skin conditioning is so good, cows' teats are able to better winter with it. It's non-toxic to both humans and mammals, and it's gentle.

MR. CHAPMAN: Thank you. Any questions? Thank you for your testimony.

MS. LEIBOWITZ: Okay, thanks.

MR. CHAPMAN: Up next is Mike Dill. We're probably going to run through the wait list.

MR. DILL: I'm Mike Dill, and I'm presenting comments on behalf of OPWC, the Organic Produce Wholesalers Coalition. We're a coalition comprised of seven certified handlers that distribute fresh organic produce to retailers, restaurants, institutions and manufacturers. In 2017, our combined sales of certified organic produce totaled over $400 million. OPWC strongly supports the relisting

of ethylene gas for regulation of pineapple flowering and ethylene for post-harvest ripening of tropical fruit and degreening of citrus. Growing pineapple is a 15-month process from planting to harvest.

Ethylene is applied just one time, seven months into the growing cycle. It is applied to provide uniformity in maturation at harvest, which occurs eight months later, so that a single harvest can occur and can be predicted, and also so that sales and exports can be planned.

Without ethylene, there is no way to induce flowering and produce pineapple with any measure of control. Ethylene for post-harvest ripening is also very important to us. In 2017, OPWC members distributed 39 million pounds of organic bananas, every pound of which needed to be ripened upon arrival.

Bananas must be harvested and shipped before they begin ripening, before they actually begin to release their own ethylene. If they

were shipped after ripening began, the fruit would spoil, over-ripen, or become damaged during its journey from Ecuador or Mexico. Upon arrival, full palettes of bananas enter ripening rooms, usually 21 palettes per room. The temperature in the room is slowly raised, over 24 hours, until the pulp temperature of the fruit reaches 61 degrees.

Then a small amount of ethylene is diffused into the room and circulated with fans to induce the fruit's own production of ethylene. After 24 hours, the room is then ventilated, and the temperature is slowly dropped, so that the bananas do not over-ripen, and so that they're not shocked when they're loaded onto a refrigerated truck.

That would turn them gray. Synthetic ethylene is an analog of the ethylene naturally produced by plants. It's a necessary material, as there are no alternative materials or processes that result in anything other than pale, mushy bananas or rock hard green bananas.

Then I was going to comment on uncertified handlers, but there have been plenty of comments on that today, and OPWC shares all the concerns that we've heard today. But I will answer any questions that you might have about uncertified handlers because I have quite a bit of experience in dealing with them. Instead of talking on uncertified handlers, I thought that I would share an excerpt from some news today about the romaine lettuce outbreak, as I feel it's relevant to the discussion of integrity in the supply chain.

I saw this this morning. The title of the article reads, outbreak investigation hampered by lack of business records. The main quote in there is, public warning continues as government officials struggle with intertwined distribution networks, incomplete or unavailable shipping and receiving records, and virtually no product labeling or coding to lead them back to a specific source.

MR. CHAPMAN: Thank you.

MR. DILL: I ask if a team of FDA officials cannot trace lettuce back to a distributor, a grower, or anything other than a city, how is a certified handler or an uncertified handler supposed to verify the products in their supply chain.

MR. CHAPMAN: Thank you, Mike. Questions for Mike? Mike's on our panel, so if it's related to import, you've got that time.

MR. ELA: No. Just quickly, it sounds like you would support certification of all handlers in the system?

MR. DILL: That's correct.

MR. CHAPMAN: Thank you, Mike. We're going to briefly run through the wait list. We have, I think, up to six people. I don't know if they're all present, or if any of them are present, but we will -- if you suffered through this long, then you'll probably get a chance to speak. Is John Bobbe still here?

Is John Schumacher here? Is Javier Zamora here? Is Dale Woods here? All right,

just to give other people a heads up, is Marty Mesh still here? Is Luis Monge here? All right, Luis, you'll be last. Dale, you're up right now, if you can start with your name and affiliation.

MR. WOODS: Sure. My name is Dale Woods. I'm a program manager for the California Department of Food and Agriculture, the Fertilizer Program. Specifically, I manage the Organic Input Material Program, and we're a NOP recognized MRO. Right now, on our list, if you were to check it, you would find anywhere between 1,600 and 2,200 listed products that we go through every two years and register and make that list available for certifiers. Specifically, I want to talk about liquid fish, because there was some questions, and how we actually do our reviews of liquid fish.

As noticed in the document that you guys produced, liquid fish are often stabilized with acids, and one of the most significant acids that is used is phosphoric acid.

Manufacturers like phosphoric acid because it fits within their mode of manufacturing.

They're comfortable with it. They also like it because using it will actually fortify your product with a significant amount of phosphorus, which is a major nutrient for plants. That's the real reason that there's an NOP annotation about the 3.5 pH being a limit for those products is to avoid any sort of adulteration or fortification of these products.

Manufacturers do this use of phosphoric acid in many different ways. You can't really say that this manufacturer is representative of all of them. Some of them put a lot of phosphoric acid in quick. Some of them do it gradually. Some of them go back and forth. The ultimate issue is that there is this standard of 3.5. And it's kind of unclear, in the standards, how people are supposed to interpret that. Does that mean 3.5 in the marketplace or 3.5 in a production cycle?

What we did was we were taking the

approach that it is -- it will go never below 3.5. This, then, becomes the reason that this subject has come up right now. We were doing that, and we were quarantining stuff that shows up at 3.5.

We'd go out and watch the manufacturing. If it goes below 3.5, we would tell them it's non-compliant. We've talked to OMRI and a couple of the other certifiers and WSDA. Then eventually, by talking with Lisa, we asked to have this put as a topic for the Board to consider whether that -- which approach should be taken, whether we should be watching it during the process or only at the end of the process. Some people feel like it during the process, they want to let --- they feel they have to let their product go down to very much of an acidic thing and then it, drift back up to 3.5. Anyway, we're the reason that's been particularly raised as a question for the Committee.

MR. CHAPMAN: Thank you. Questions?

Asa, and then Steve.

MR. BRADMAN: What is the source of the phosphorous in the phosphoric acid?

MR. WOODS: It's a synthetic. It's a synthetic allowed specifically within the NOP standards.

MR. BRADMAN: And the 3.5, in some of the literature I've seen, the 3.5 was almost related to plant health, in terms of the impact on -- it sounds like you know what I'm talking about, so I'm curious about what your thoughts are.

MR. WOODS: When I tried to find out where the 3.5 came, some of these very old people who were associated with producing fish products at that time, they were asked so, how low do you have to get it to go to stabilize it. They said I don't know, about 3.5.

That became the standard. Since then, there's a lot of people trying to find reasons to justify the 3.5 one way or another, but the reality is it is an effective pH most of

the time to keep a product stable once it's at that pH. Some manufacturers believe that with the particular type of fish they have, with their processing, they have to go lower. We told a lot of the people that were concerned about it to come and present. We did at least have one of the people come today, so you got to hear from him.

MR. BRADMAN: So essentially, it's a convention and may not have any specific value?

MR. WOODS: Well, I mean ultimately, if you're going to go lower than 3.5, you're really, seriously fortifying that fish. You're taking this opportunity to throw a synthetic into a natural product for the benefit of producing phosphorous that's not from a very synthetic process. The question is, does going below 3.5 and back up to 3.5, is that okay or not?

MR. CHAPMAN: Steve.

MR. ELA: At least reading some of the public comments, it looked like the comment

was that they could use less phosphoric acid if the goal was just the final product being 3.5, and not having to fortify it all the way through. It sounds to me you're just looking for guidance of which way to go on it so --

MR. WOODS: We are because we've asked those people to come here because we've had those conversations with them. When we go to look at their place and you find out what they're doing and you realize the diversity of approaches that are taken, we realized that the guidance that's there, not being entirely clear, has created a problem for people.

If it's going to be never below 3.5, that's fine. If it's going to be the final product only can't be below 3.5, that's fine, too. It's just that it really should be clarified for those of us who deal with it.

MR. ELA: And do you agree with the sense that it will reduce the overall use of phosphoric acid just to have the final product be 3.5?

MR. WOODS: No.

MR. BRADMAN: Just a related question to follow up. If the ultimate goal is 3.5, whether it's never below 3.5 before the final product is stabilized versus it goes below 3.5 at some point, given that the final product is 3.5, do we have the same level of synthetic phosphorus fortification?

MR. WOODS: No, these guys have very, very different manufacturing processes. You'll have some people that will have a product that will never go below 3.5, and they found a really nice way to get a lot of phosphorous in there, but it has to do with the type of fish they have and some of their manufacturing details.

Other people feel like hey, my concept is to get the stuff stable, so I'm going to slam it down really, really low, let it drift up to 3.5. Sometimes, their phosphorus level is even lower, so there's no general rule. It's just that the 3.5 works for fish for the final product, and it also is a reasonable indicator

of unlikely excessive fortification.

MR. CHAPMAN: Emily.

MS. OAKLEY: I just want to say thank you so much. This has been extremely helpful.

MR. CHAPMAN: Thank you, Dale. And last is Luis, if you could start with your name and affiliation.

MR. MONGE: Hi. My name is Luis Monge. I work for Transastra. It's a trading company. We trade organic bananas out of Peru. I work with organic coffee, bananas, and pineapples since 1996. The last four years, I run my company with my business partner, Frans Wielemaker. We both work for more than ten years in the organic program of Dole Fresh Fruit International in Latin America. I appreciate the opportunity to speak in favor of the continuation of ethylene in the National List.

I want to address some extra comments on the previous comments regarding the ethylene. All the organic pineapple growers in Latin America, especially in Costa Rica, which I

believe represents the main source of organic pineapples to the U.S. market, are currently using ethylene application for pineapple flowering.

All of them, despite the size of their farm, are using the ethylene. It is not rocket science. I don't know where the concerns of the economic feasibility of the ethylene application is coming from, but certainly not from the pineapple growers in Latin America.

The reason why ethylene application in pineapple, as well as for bananas ripening, has been explained several times in the past, and those reasons haven't changed. This is not the first time that I step in front of the NOSB explaining why it is so important to keep the ethylene on the National List. Ethylene is a natural occurring molecule and has no substitute. It is the natural way the pineapple blooms and the pineapple got ripe.

Finally, I want to thank the time and dedication of all Board members to protect the

organic rule. Please remember that when you rule for America, you're also ruling for the entire world.

In Latin America, as well as the other organic farmers from around the world, we have to comply with the same rules, even that we have different weather, different soils, different crops, and different cultures. Again, thank you for your time and dedication in serving in the NOSB. Muchas gracias.

MR. CHAPMAN: Thank you, Luis. Questions? Thank you very much, Luis.

MR. MONGE: You're welcome.

MR. CHAPMAN: That ends our public comment session, a lot of information shared, questions asked, and I really appreciate the focus and insight of the Board and the time and comments from the public. We will now stand in recess and convene tomorrow at 8:30 in the morning.

(Whereupon, the above-entitled matter went off the record at 7:07 p.m.)

UNITED STATES DEPARTMENT OF AGRICULTURE

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NATIONAL ORGANIC STANDARDS BOARD

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SPRING 2018 MEETING

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THURSDAY,
APRIL 26, 2018

The Board met in the Sabino and Pima Rooms of the Tucson University Park Hotel, 880 East 2nd Street, Tucson, Arizona at 8:30 a.m., Tom Chapman, Chairman, presiding.

PRESENT:

TOM CHAPMAN, Chair
HARRIET BEHAR, Vice Chair
SCOTT RICE, Secretary
SUE BAIRD
ASA BRADMAN
JESSE BUIE
LISA DE LIMA
STEVE ELA

DAVE MORTENSEN

EMILY OAKLEY

A-DAE ROMERO-BRIONES

DAN SEITZ

ASHLEY SWAFFAR

STAFF PRESENT:

MICHELLE ARSENAULT, NOSB Advisory Board Specialist, National Organic Program
DR. RUIHONG GUO, Acting Deputy Administrator, National Organic Program, Agricultural Marketing Service
DR. JENNIFER TUCKER, Associate Deputy Administrator, National Organic Program; Designated Federal Official
DR. PAUL LEWIS, Director, Standards Division, National Organic Program
DEVON PATTILLO, Materials Specialist, National Organic Program

ALSO PRESENT:

ALBRECHT BENZING, CERES Certification

JOHN BOBBE, OEFFARM

PETER CARLSON, Terra Ingredients, LLC

MIKE DILL, Organically Grown Company

SILKE FUCHSHOFEN, Organic Insights, Inc.

ERIN HEITKAMP, Pipeline Foods

JAKE LEWIN, CCOF Certification Services, LLC

MONIQUE MAREZ, Organic Trade Association

SAM WELSCH, OneCert, Inc.

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

8:32 a.m.

MR. CHAPMAN: All right. Good morning everybody. We'll be coming to order now. Looking around the room, we have all Board members present, so we have a quorum. Starting out this morning, we will be starting with our import panel of experts. We have nine individuals here, traveled all across the country and one as far away as Germany.

We'll start with a panel on certifiers and importers, break, move to a panel on handlers, break and then a panel -- both panels combined. And before I take all of Scott's thunder in explaining what's going to happen, I am now going to hand it over to Scott Rice, chair of the CACS Committee.

MR. RICE: Thanks, Tom. Good morning, everyone. We're fortunate to have with us, as Tom mentioned, a number of individuals to move this conversation forward on strengthening organic integrity across the supply chain,

particularly when it comes to import of organic products.

We heard from a number of public commenters yesterday who shared their challenges and ideas for improvement, and we look forward to building on that with our two panels this morning. You'll recall we initiated this discussion with a panel of professionals from federal agencies, who gave us some background on their respective roles in oversight of products entering the country.

This morning, we'll hear first from a panel representing the certification and inspection part of the community, followed by a panel of industry and trade representatives. Excuse me. To close, we're going to bring all of our panelists together for a shared discussion, and these issues that we've been working on span across all their roles, and we see a lot of opportunity to work together.

We appreciate our panelists making the journey, as Tom said, some from quite far, and

with that I'll introduce our certifier and inspector panel. We're going to offer each an opportunity to share with us their thoughts on greatest challenges, greatest opportunities for strengthening the organic supply chain, and then open it up for discussion and further questions from the Board.

With us today we have Sam Welsch, who is the president of OneCert Certification, Inc. Sam has been proponent of organic agriculture for over 40 years, and has been a leader in organic certification since the NOP was implemented in 2001. He is the founder of OneCert, OneCert Asia and OneCert International, and he serves as the current chair of the accredited certifier's association.

He values integrity and inconsistency in organic certification. Also with us, with the inspector hat on is Silke Fuchshofen of Organic Insights, Inc. Silke holds a B.S. and Masters of Science in International Agriculture from the University of Cassel. She has been an

independent organic processing inspector in the U.S. for almost ten years, and still has working relationships with European certifiers.

Recently, Silke developed a risk-based methodology to address uncertified vendor issues in the framework of an organic handler inspection, and now offers inspector and certifier trainings through the independent, or excuse me, International Organic Inspectors Association.

Next we have Albrecht Benzing. He's a managing partners with CERES Certification. Albrecht is an agronomist by training who has been involved in organic farming for 40 years. He worked as a farm advisor in South America and in 2004 started CERES as an international certification body.

Today, CERES is a USDA-accredited certifying agent that operates a number of certification programs with clients in 70 countries.

Next we've got Jake Lewin. Jake is

the president of CCOF Certification Services, LLC, the largest national organic program accredited certifying agency founded in California over 40 years ago. Lewin's experience includes all aspects of organic certification, from farm production to organic inspection and certification, as well as teaching seminars and training events on organic certification worldwide.

Jake also has extensive experience with international organic certification issues and trade promotion, including serving as an appointee by former U.S. Secretary of Ag Tom Vilsack to the Agricultural Trade Advisory Committee for Fruit and Vegetables, which advises the Foreign Agricultural Service and the U.S. Trade Representative.

So a very big welcome to each of you, and a great appreciation for being here, and with that we'll open it with some opening remarks and we'll start with Sam Welsch.

MR. WELSCH: Good morning. Today I

wanted to focus my comments on the contrast between the complexity of the supply chain and the often simplistic verification methods that we still have in use. I'll also include some suggestions on how I think we can improve our verification.

Complexity involves both trying to track ownership and movement, which are not always the same thing. The operations that physically handle the product are not always the same operations that are owning the product that's being moved when it's being imported, and even once it reaches the U.S. or even domestically.

I think we all recognize the difficulties in trying to obtain full documentation of the supply chain when uncertified handlers are involved, but requiring all handlers to be certified will only solve part of the problem. The certification of those handlers needs to actually be meaningful to add genuine verification to the supply chain.

We already have certified operations in the supply chain that could be eligible for the current exclusion from certification, because they only handle packaged products and they don't do any processing. Unfortunately, some certifiers are not verifying packaged products that are being handled by those operations.

They assume that the certifier, the supplier has done that verification. Sometimes the only verification that is done is to ask if the operator has a copy of the supplier's certificate. Now when it's an uncertified handler and they give you a copy of a certificate, many times what's recorded is, you know, that that's the supplier.

But in fact they're not getting it directly from the person identified on the certificate. It's coming through an uncertified supplier, and it may be coming from an uncertified warehouse or other handlers, or sometimes a series of those. So it's not sufficient to match a certificate to a product.

We also have to verify that the product came from the operation identified on that certificate.

And through the ACA and others, we've developed some very robust verification of those uncertified handlers, which I'll speak to a little bit later. But it gets even more complicated when private label companies are involved, because then the certifier on the label may not even, you know, may not be the certifier that inspected or certified the facility where that product's made.

I'll give one simple example. I'm sure other panel members will give more. We have a certified handling operating that's sourcing imported product. It's being purchased from an uncertified handler, but it was coming to them through a certified warehouse.

We thought well that's good. However, the warehouse certificate does not list that product, so we asked the certifier of that warehouse if they had verified the import documentation for that product, you know. Was

there phytosanitary? You know, what -- did they verify that?

They said no they didn't, because their warehouse didn't own the product. It was being purchased or, you know, handled by the other company or by our buyer, so they thought it was the responsibility of our client to verify that.

I didn't necessarily agree with that, but we conduct the traceability. Our operator doesn't always, you know, we may not certify an operator who receives the entire shipment that was imported. So that means because the warehouse wasn't verifying that, everybody who purchases product out of that warehouse would have to do the same type of verification of that supply chain.

So we started asking the question of ourselves, what does it mean for a warehouse to be certified organic if they're not verifying the product that's being handled by it? I think that's a question that we need to bring up often

as we move toward requiring uncertified handlers to be certified, you know.

Just getting certified isn't enough. We need to make sure that that certification is meaningful, and that actually -- so I'll try not to digress too much from what I wrote down here. So how do we make the current system more responsive and effective at detecting and preventing fraud?

Let's remember that organic certification, certifiers and inspectors all existed before the NOP was created. The NOP was created because of -- in response to fraud and inconsistency in the organic supply chain that was occurring in the 1980's. Remember OFPA was from 1990, and if we had a good, consistent no fraud in the system then, we wouldn't have needed the NOP.

But we needed the enforcement strength that the government brings to this. So this is not a new problem. However, it takes a long time for this to be effective.

We have a good partnership with the private certifiers and the NOP and the trade, but it's going to take a long time, you know. We're still making improvements, which is why we're here today. In the case of --

MR. CHAPMAN: Sam, can you wrap --

MR. WELSCH: I'll wrap up.

MR. CHAPMAN: --up your intro, thanks.

MR. WELSCH: All right. I just want to conclude by saying accredited certifiers is striving to ensure consistent implementation of USDA organic regulations through collaboration, education of certifying agents, and we envision a world in which the USDA organic label is always trusted and valued.

One of our goals is consistent, you know, is to have best practices documents. One of the things I'd like to discuss more with NOP is: will the NOP support if a client, if we're using the best practices -- whether it's with supply chain or other issues -- and an operator appeals a decision we've made, will the NOP back

us up?

The NOP is vetting these and giving comments on revisions to strengthen our best practices documents. But to make it really strong, we want to know that we'll be backed up when we're following them.

MR. CHAPMAN: Thanks Sam. Next, we'd like to hear from Silke.

MR. CHAPMAN: Just real quick. I'll give you guys a one minute warning by going like this, just so you can know. Thanks, Tom.

MS. FUCHSHOFEN: Thank you for -- thank you for inviting me, and thank you to the IOIA for nominating me. I'm very glad that I can be here to share the viewpoint of an independent organic inspector. Oh, and I need to figure this out now.

So I will be speaking about handler operations. Sorry, this is -- okay. In the discussion of the last couple of days, inspectors were only mentioned in the context of problems. Organic reviewers have hardly been mentioned at

all, and none of the discussions the role of organic procedures came up, at least not at the times I was around here.

During my inspections of the last five years or so, I have developed risk assessment methods that allow me to find problems with documentation from NOP-excluded suppliers at at least 75 percent of the handler operations that I visit for the first time.

I developed those methods by looking deeply into the operational and recordkeeping procedures. With regards to inputs -- imports, the problem I repeatedly encounter at the processing facility is that personnel in charge of the organic program at the certified operation is not fully appraised of the purchasing procedures.

They're given organic supplier certificates, but do not know that the material is purchased from an uncertified distributor. And then receiving procedures are not designed for verification of the last certified entity.

So often one certificate is on file, but product from multiple sources is received into the location and nobody notices.

To make a risk assessment, one needs to understand the system in which one operates. During an inspection, that would be the operations procedures. But at this point, we are more focused on records rather than the written system plans, which usually are not specific enough to determine if the operation is in compliance.

However, if we spent the time to understand the procedures well, we can accomplish four things. We can determine high risk areas and ingredients, suppliers, operation, et cetera. During review of records, a well-chosen sample will show us if the procedures are adhered to and if they are effective.

Third, the staff at the certified operation usually appreciates thorough vetting of their procedures, because it helps them understand strengths and weaknesses. The

operation can work on improvements and will be better able to fulfill their -- sorry -- and the operation can work on improvements and will be better able to fulfill their responsibility of maintaining organic integrity at their plant.

I am referring to a much more complex issue when I talk about this, about receiving procedures. But I want to give you a simple example to showcase my point. During review of organic supplier certificates, sometimes one or more are outdated, and the staff obtains them from the supplier during the inspection.

If we focus on the records, the operation is then in compliance, because we can see that all ingredients are certified organic. If we focus on procedures, however, the operation is not in compliance because they must have a system in place by which they make sure organic certificates are on file at all times.

So then if we understand the operations procedures well, we can use records to verify that the procedures work. That gives the

clients more responsibility in terms of the oversight, versus saying "oh, we do that when an inspector comes," you know.

So I have six suggestions. First, that certified organic operations need to submit comprehensive organic procedures, and that reviewers and inspectors are trained to verify them in detail. Second, oh yes. Oh okay. That organic processing and handler inspectors should be trained and authorized to take samples if they encounter a high risk situation.

For example, if the auditor cannot be linked back to a certified entity and the raw material is still in storage, we should be authorized or even required to take a sample.

Third, that certifiers are required by the NOP to report uncertified vendors that appear to be repacking or relabeling, and that the NOP applies the same scrutiny to those as to certified entities.

Four, research and development of a system that is geared to identify and target high

risk operations. Right now, we're focusing on the areas where fraud has been discovered. If we want to be proactive, we do need to look for fraud and how do we best employ resources. The Pareto principle, also called 80.20 rule, could provide a very useful tool, and I hope that I will be able to speak about that later.

Five, to address the issue of inspection qualifications. We need to also -- we need to talk about trainings, but also about the work environment. It is ingrained in the organic industry that organic inspections should not cost much. Therefore, most organic inspectors will try to be fast.

But one cannot rush and be thorough at the same time, and the industry does not want quick inspections anymore. This needs to be addressed by and with the certifiers. Higher quality inspections come with a cost to the certifiers. To make it possible, a risk-based approach can be useful here, too.

Inspectors could be grouped into

different skill levels and areas, and they can be dispatched according to type of operation and risk level. High risk operations are matched with highly skilled inspectors. Thank you very much.

MR. RICE: Thank you, Silke. Excuse me. Next we'll hear from Albrecht Benzing.

MR. BENZING: Okay. Thanks for inviting me. I just arrived last night after a 24 hour trip. Somehow, I was asked to explain the world in 30 seconds or something like that, where things go wrong and what can be done.

(Pause.)

MR. BENZING: I started whether when I could share hundreds of pictures of these. Picture we see how some things go wrong. This is supposed to be an organic farm and yeah, and it's obvious from the people in which country it is.

What we see very clearly here, on the right we have our inspector, that the people who are working on the field, we are proud of showing their device to the inspector, and what is inside

that device is urea.

So they're applying -- so they are proud of being modern farmers and showing to the inspectors they are modern farmers. They have no clue they are part of an organic project or if they have heard it, they didn't know what it means.

Why is fraud in the organic industry so widespread in some countries? So one thing is very long and complex supply chains. Sam already mentioned that. I'm now more referring to the supply chain outside the United States. They often have a group of farmers supplying through one processor, another group of farmers supplying through an intermediary to another processor, and you have a long chain of intermediaries, exporters, traders, importers, other intermediaries, repackers, retailers until it finally reaches the consumer.

In addition to of course that things can go wrong at each of these points, this also means that the people who are at the beginning of

these supply chains, the farmers and processors and traders involved in different countries, they're very, very far away from the consumers and they don't really understand why there are many people in the United States who are ready to pay a lot of money for organic food.

So they're not really committed to the whole thing, because they don't understand it and they've just heard somewhere that this is business, and you get a higher price and that's why they do it. So this is one of the problems. There are hot markets where demand exceeds supply.

All these super foods, avocados, quinoa, all that -- all of the sudden people discover that this is healthy, it's great for you and create a huge demand and the supply is not -- does not keep pace. So this is another reason for why fraud happens.

The third reason I wanted to focus on is that certifiers are businesses. So you somehow have to keep a balance between integrity

and surviving, being successful as a business. But what happens in real life in for a certifier working let's say in China or in Africa or in South America, consumers are distant not only for the farmer but also for the local inspector.

That's quite far away. The loyalty of the local inspector with his countrymen is often stronger than with the consumer in California. There are often counterproductive remuneration schemes for the inspectors. You get some certifiers have models where the inspectors get a bonus when they find new clients. That is counterproductive in terms of integrity.

There is simply corruption, and that happens more frequently than most of us believe. There's a so-called social hierarchy that often involves that the manager of the company you're dealing with has a higher position than the inspector. That does not make it easy for the inspector to address fraud and serious non-compliances.

There is competition between

certifiers, and there's a lack of supervision by the NOP in this case. On the other side, there is -- of this balance there's personal integrity, there's fear of losing reputation, fear of losing accreditation. But in many cases, that is just not enough to balance the other side, and therefore the balance goes down on one side.

Some things, because I was asked to talk about what happens on other markets -- of course, the market I know best is the European one. Some things that are being done in the EU to deal with fraud --

MR. RICE: Albrecht.

MR. BENZING: Yes.

MR. RICE: If you could wrap up in a minute, we can touch on some other larger issues as well.

MR. BENZING: Compulsory certificates of inspection, that what is called certificate of inspection is a transaction certificate. What is different from transaction certificates here is that it's really compulsory, and it's the Customs

authority that require it for getting the organic product into the EU.

So it's, it's a pretty strong tool that allows to interfere in the market very quickly, and stop fraudulent products from getting onto the market. There is this office system that's the Organic Farming Information System.

So it's an official EU database where all the, especially the cases where all the pesticide residues are reported, and we are required as certifiers to investigate and so report what we have done to investigate it.

Once we've done that and entered our results, then we receive an accepted. Similar things do exist in the U.S., but for some reason the ratio of requests for investigation is about 50 to 1 from Europe versus U.S. I don't know why that is, if less testing is going on. But we simply get such things very rarely from the U.S. market while we get them on a daily basis from the European market.

Finally, there is a stop sale in case of suspicion in the EU regulation, and really just one more slide. I think this is a huge difference in the standard itself.

So if I have to read it, but it says "Where a control body has a substantiated suspicion that an operator intends to place on the market a product not in compliance with the organic rules, this control body can require that the operator may provisionally not market the product with this reference."

And yeah, I make a shortcut then. If this suspicion is confirmed, then removed. This is completely different from the NOP approach, where you first have to undergo -- have to issue a notice of non-compliance, then a notice of proposed suspension. Then you have to wait 30 days. Then the suspension and then the operator still can appeal. That can take another three months, and during all this time the fraudulent product continue ending up on the market.

Finally last point, what is not being

done either by the EU Commission or by the NOP is this effective supervision of certifiers in third countries. Most of the supervision by accreditation focuses on procedures, on formalities, but very little of that really helps overcome the problems that we're discussing here. Thank you.

MR. CHAPMAN: Thank you, Albrecht. Albrecht, quick clarifying question. Control bodies refers to governments or to certifiers?

MR. BENZING: (Inaudible response.)

MR. CHAPMAN: Thank you, certifiers. People didn't hear that.

MR. RICE: Next we'll hear from Jake Lewin.

MR. LEWIN: Thank you very much. It's an honor to be here. I want to just take a moment and thank my colleagues at CCOF and at other certifiers who have all worked on this really, really hard and the NOP.

I've also had the pleasure of working on the ACA and Organic Trade Association task

forces, which have been very much invaluable to me in this process and really helped shape the thinking. So as a certifier, we work with about 3,600 operations in 44 states and three countries.

Many of these are users of imports or export directly, particularly the ones that operate in Mexico, and we have a few importers. Over the last year, we've worked closely with the NOP and other certifiers to improve import oversight. We've also visited grain handlers, importers, transloaders and the actual ports themselves.

And when I say "visited," not inspections but our senior level staff and all the staff working on this. We see three primary issues. The majority of certifiers do not report acreage; certifiers are not fully collaborating with each other; certifiers are not always tracking and reporting exports.

But fortunately we have feasible, clear steps that we can take to shore up

certifier oversight of imports, and help address allegations of fraud.

Solution 1. All certifiers should report crop acreage to the Integrity Database. Reporting acreage is critical, because it helps certifiers and NOP look at aggregate volumes of organic crops coming from different regions throughout the world, and ensure that sufficient acreage exists to support these volumes of crops. This gives a baseline tool.

Here's the situation now. Globally overall, of the operations in the crop and wild crop scopes, these operations that have acreage, only 21 percent of them have any acreage reported. It goes up to 28 percent in the U.S., but in the rest of the world combined, after the U.S. it's 7 percent. So there's a lot of room for improvement here.

Basically, it's a critical tool for integrity, but an operational requirement for certifiers. From our perspective, certifiers need to overcome their inertia and simply do

this. The blind spots created are simply too large.

And as another step, the acreage and operation reporting should be a critical element of trade agreements moving forward. The NOP Integrity Database is the global gold standard, and this baseline information truly builds a solid foundation.

Solution 2. NOP should direct certifiers to collaborate on investigations, and we should all collaborate more effectively with the NOP on investigations. Certifiers have a tendency to be very careful and to withhold information from each other, and what we really need to do is speak with each other in a very open and collaborative environment so that we don't create holes between our investigations.

If we all handle a slightly different part and we're not talking to each other effectively, truly sharing information, we can basically miss opportunities to uncover what's going on. Ultimately, this could really improve

full supply chain verification and traceability, because we'd be talking to each other about what we're actually seeing, not sending each other kind of vague letters that cause us to not truly see the forest.

And we strongly suggest that NOP meets with certifiers regularly in an open kind of roundtable environment, to work together on problems and investigations.

Three, certifiers should track and report export activity to NOP. We need to track importer trade. Using the current per shipment transaction system is a viable path towards this. So transaction certificates that we issue now could be the baseline tool.

Essentially they're issued now to "verify a shipment." We could turn that system towards every inbound imported product has a transaction certificate. But that document is used more for registration, such that certifiers can then report periodically to NOP on overall volumes.

Couple that with acreage, you can now see what's trending, what's increasing, and you can see whether at the basic fundamental level the acreage is there to support it.

So we're in a good position for oversight. The thing is fraud is rare. That's the hardest thing about all this. I think that we all -- we're all talking a lot about fraud as if it's an everyday occurrence. It's unbelievably serious and we have to take it seriously.

The situation is that it's truly rare, and that's what makes this all so hard. We have an opportunity to work together, create effective tools and solutions. We do have boots on the ground. We have inspectors. We have a lot of opportunities to address this.

So three solutions, acreage reporting, trade tracking, collaborative investigations. With these feasible, actionable items we could probably move things forward. I just want to show quickly an example of how this works in

action.

An alleged fraudulent activity of a large shipment of grain imported from Turkey. The action at that step would be the ability to look at organic acreage from the region where the grain is reportedly grown. What's the acreage overall? Certifiers immediately share information with each other about what they're seeing, what the documents say on their side and the other side.

Then NOP can look at overall export activity in the region and see if this is a spike, is this indicating a spike above last year and things like that. So these three things together work, kind of play out in this way, and could be really helpful.

And thank you very much for your attention. Really just it's truly an honor, and really I can't thank you enough for taking your valuable time to focus on this matter.

MR. RICE: Thanks Jake, and thanks to the panelists. We'd like to open it up for

questions here. We've heard quite a bit of information, not just from the four of you but, as I said, from a lot of public commenters yesterday and in the Federal Register. I would turn it to Board members who have questions, to kick off the conversation.

MS. BEHAR: Not surprised I have a question. Jake, I'd like to -- since you were the last person so something came to my mind right away, and that is for acreages, do you think it would be useful too to have some sort of yield system where, you know, because yields let's say of corn in one region may significantly less than other regions to have at least some kind of baseline to look at.

I know in the upper Midwest, many of the certifiers do ask the inspectors to verify acreages on site and also talk about yield factors. So I think we do have some baseline on that.

MR. LEWIN: As a matter of theory, yield information would be great. The systems

exist now for reporting acreage, and I think the challenge before us now is simply to make use of those systems that we have now, so that we get the baseline information we critically need. I fear that integrating a yield expectation or yield tracking will simply only increase the inertia, such that nobody does even the first basic piece.

Because yield would be highly, highly complex to do. It has a lot of -- it would just be very, very complex to do. It has a lot of -- it would just be very, very complicated. Whereas we actually have the database. We have the reporting tools.

We have every opportunity to do the acreage and my experience is sometimes we try to do too much and we don't do the basics. And so acreage first. Let's talk yield if we get that done.

MR. RICE: Jesse, Tom.

MR. BUIE: You know, and this can go to anybody. As a small farmer, this traceability

process is so precise, and when I look at myself and go from the road that it came off of to where it's ultimately going, it is -- it's precise. So what is so different about what's happening now? I mean I'm maybe being over-simplistic, but it seems like the process is in place, but what's not being done?

MR. WELSCH: I can give a couple of examples from products, for example, coming from India, where we have a lot of certified operations. The yield information that's mentioned by Jake, that's great for those who are certified directly by an NOP-accredited certifier. But those in India are certified or accredited through APEDA, which is a recognition agreement, and none of those certified operations show up on the Organic Integrity Database.

There's probably ways for that to happen, but you know, that's a weakness. We've had operations that have told us, and it's by the same company who has those massive ships that have been caught for fraud, the same companies

contacting exporters in India. They want product shipped to Turkey.

Now we know the Association there. But they also want it done without a transaction certificate that's required from India, you know. So the transaction certificates can also be a tool for abuse, because they can indicate trade or sales, maybe who bought it, who sold it, and sometimes a little bit about what countries it's traded between.

But it can fail to indicate where that product's actually physically moving and what other parties are involved. So it can conceal things as much as it can reveal things. I don't have examples to show you today, but it's complicated when you try to connect invoices, transaction certificates and the actual physical movement of products.

You really have two parallel tracks sometimes. The ownership changes, and then the physical movement, and sometimes the people who own the product don't actually know where it's

been moved to because they contracted with companies who specialize in the movement of product.

So they may not even have records to know where their product is. When you ask them, it takes them weeks to come up with the documentation to show where their product has traveled. So just one example.

MR. BUIE: And how did they get paid?

MR. WELSCH: Oh, we don't track how they get paid. Yeah. There are -- yeah, it's complicated, because we sometimes have one company who has multiple legal entities, and they're doing a lot of internal transactions with themselves, which I think is a tool to avoid taxes. But it's complicated, yeah.

MR. RICE: Albrecht briefly, did you have something to add? We have quite a few questions here.

MR. BENZING: Yeah. I wanted to give the answer to Jesse, also related to what Jake said with the acreage. I mean part of the fraud

that we experience with the imports of large amounts of grains from -- through Turkey, because actually they were not from Turkey. Most of it came from Ukraine and Kazakhstan and other countries.

Part of that was organized in quite a clever way. There were traders in Ukraine. They made contracts with a number of large farms, 1,000, 2,000, 3,000 hectares, and they instructed those farms you will be my suppliers. Gave them some instructions on -- to use low levels of fertilizers, to use only pesticides that don't leave residues in the final products.

Yeah, but finally they did not really buy the produce from those farmers. They bought it somewhere on the market, after doing residue tests. So those farmers were just there to be shown to the inspectors and to the certifiers. Look, we have this area, 20,000 hectares, meaning that we can produce this amount of soy beans, this amount of grapeseed and a different word granola in the U.S., et cetera.

But the product did not come from those farms. So having the acreage is of course one step, but it's far from being enough. Trying to answer Jesse's question, I don't really think that it's too difficult to find out these tricks. You need competent inspectors and especially inspectors that want to find out, and that's my point, that there are too many people out there that are not really interested in finding out.

MR. RICE: Thank you. Tom.

MR. CHAPMAN: I have three questions, so I'll fire them off one after the other one. So the first one I'll start with Jake, I guess. CCOF, the California State Organic program used to or now does again collect acreage data. CCOF was part of an effort to reform that program. Can you talk about briefly some of the shortcomings or issues with the state organic program, how it's functioning now, what was the issues with that kind of state mandated collection of acreage data?

MR. LEWIN: Yeah absolutely. Under

that program at that time, the state-mandated collection of acreage data was dependent on each individual grower reporting each individual crop by parcel, size and gross sales for each crop, and that the weight of that reporting by each and every party was creating a barrier to their ability to successfully register and just remain in kind of compliance.

So what we've advocated for and what the situation is now is that the reporting is far simpler for the producers. It's frankly more in-depth than what we report to Integrity currently, but it's achievable for the producers. And what we're moving towards is the ability for certifiers to report back directly, which is in general our preferred situation because we are already sending a human to each and every operation where people -- we can do that work.

And speaking about the state organic program directly, to a huge degree over the current last several years, we've seen tremendous kind of improvement and integration and

collaboration with certifiers on some really substantive investigative issues, including residue testing, and I think at this point the State of California is in a really strong position as a matter of enforcement based on this work.

MR. CHAPMAN: Thank you. So my second question is towards you, Albrecht. You talked through long supply chains, hot markets, certifiers are businesses. You talked to some of the differences that the EU has, including the compulsatory TCEs, the OFIS database, the amount of investigation, stop sale.

Are those four solutions effective at dealing with those three issues? How are the European certifiers dealing with those three, you know, complexities in the supply chain that lead to fraud, and how is CERES dealing with some of these issues?

MR. BENZING: A complex question.

MR. CHAPMAN: Yeah.

MR. BENZING: I mean I do think that

the three tools that I mentioned are helpful. They do help to reduce fraud, but what I tried to say at the end is that there is a key piece that is missing both in the European and in the American system, and that is more effective supervision of what certifiers do in third countries.

We didn't -- that we have, we audit by -- the NOP, for example, they do weakness audits. They do audits through our office. That said, a good system it helps as to improve to detect weaknesses in our system. But it does not really help to prevent fraud, because it's too predictable. It's announced many months before and we can somehow help to select the operations that will be visited and will not be visited.

So if we know we have a client where they might be finding things that they shouldn't see, it's very easy for us to ensure that they are not going to see that operation. So I think that is a key point, that more resources should be allocated to doing more effective and more --

less predictable audits to operations in third countries, and of course risk-based.

If we know that the biggest risks are in countries A, B, C, then that those countries should be in the focus of the audit. So that is one thing. Then you asked what are we doing. We're trying our best but struggling with many internal problems to really reach what we would like to reach, and sometimes I feel that the authorities like the NOP are not as helpful as they could be in such cases.

I mean just a few weeks ago we -- the story started in 2015 when the Washington Post published an article about this whole fraud thing, and among others they also cited pesticide residue testing that we had been doing in China. We were -- had been contacted by this journalist, asking us to provide all the -- all the pesticide residue tests that we had done in China specifically.

We did that, but only in an anonymized way. The journalist came back and said please

provide us the name. We said we're not going to give you the name, but then we received a message from the NOP you have to hand out the names. You're obliged to do that, so we did that.

Finally, the journalist was fair enough to not publish the names, but he -- what he wrote is CERES had 37 percent of positive pesticide residue tests in China. At the same time, another certifier international had less than 1 percent of positive tests in China.

After that, our local office in China was contacted by the Chinese authority. Be careful, this -- we don't want these kind of things to be published in the international media. We do not really know what has been the cause of what, that finally we were -- our local office in China was closed down a few weeks ago.

Before that, I had asked the NOP could you please help us in this situation. Could you send a letter to CNCA, which is the accreditation institute in China. A few emails went back and forth, and finally we were told no. We don't

think that's our job. It's something between you and the Chinese authorities.

So on the one side we're obliged to hand out highly sensitive data, while we're trying to do our job in the best way we can. But then if that causes us serious problems in a country, because we're trying to do the things the right way, we're not being helped.

MR. CHAPMAN: Thank you. Quickly, my last one. Silke, I really appreciate your presentation as I work in a purchasing department. I run a purchasing department, so what you described is true, and it's true across the board for a lot of processors.

And I liked your approach of using recordkeeping as a tool to verify the procedures or functioning. How do we go about implementing that new thinking with certifiers, or that way of inspections with certifiers and inspectors across the world?

And if you're not ready to answer it, we can come back to you a little bit later when

we have the full panel, if you want to think about it for a little bit. Does that --

MS. FUCHSHOFEN: I'm not sitting on panels very often. I'm just thinking for a second.

(Simultaneous speaking.)

MR. CHAPMAN: No. So we'll have a combined panel --

MR. BENZING: If you would do it later, that would be great.

MR. CHAPMAN: Yeah, yeah, yeah. So think about that. We'll come back to it, because I know we're --

MR. RICE: Yeah. Time check. We've got a stack of questions here and about five minutes -- 15 says the chair. So I think next was Dan.

DR. SEITZ: First, I just want to thank you for an incredibly informative presentation, and it's heartening to know that so much thoughtful work is being done behind the scenes. Jake, you mentioned that from your

experience, you thought that fraud was fairly rare. But I'm also hearing from the panel that there are many factors that could potentially work into fraud, the long supply chain, corruption and so forth.

And I would imagine that successful fraud by its very nature would be undetectable. So what I'm wondering is how is it that you all can get a sense of how prevalent fraud is, and I'm wondering whether the panelists have different experience with the prevalence?

I could imagine that maybe there are very few cases, but they're so big and prominent and covered in a prominent way that may give the public an impression that fraud is much more rampant than it is in actuality. So I'm kind of curious to know how you would gauge the amount and what that would be based on.

MR. LEWIN: Yeah, I appreciate that. That's an actually really interesting question. I think the first thing is that in all cases of fraud, there is an injured party, whether that be

an industry and there's always organic farmers that are hurt. Whether they're in the source country or in the receiving country, and anyway there's always organic farmers hurt.

As a general rule of the trade itself, from my perspective on this, as a general rule the trade itself has a really good idea of what's happening. They bring things to light because they are the ones being cheated and hurt. So when you couple that with testing, oversight, observation, media, ultimately fraud items or patterns can come to light and be addressed.

Given the -- speaking from a position of testing, where we do pesticide residue testing regularly, and there are some commodities where various types of testing show fraudulent activities more readily or what could be fraudulent activities. The instances where we find positives that ultimately lead to purposeful applications are really quite low.

And I guess really -- I guess I would say this: we're looking for fraud all the time.

There's a lot of effort being put in this, and while there are great risks, simply the fact that we're not finding it constantly is an indication that it is rare. You know, I guess I would just say if -- all the evidence leads to the conclusion that it's rare.

MR. WELSCH: If I could comment on that as well. If fraud occurs at a 1 percent level and you want to detect that fraud, and you're sampling, you know, shipments or whatever, you need to sample a very high percentage, over 50 percent, sometimes closer to 90 percent in order to detect a small amount of fraud, at least in terms of transactions.

But if the number of transactions is low, the volume of a single fraudulent transaction may be so large that it actually affects the price of organic products in the U.S. That's not an insignificant -- it may only happen 1 percent of the time, but if it affects the price of organic products in the U.S., that's huge.

So it's not the percentage of occurrence; it's the size that's important, and it's also the fact that the lower the incidence is in the number of transactions means we need to vastly increase -- which is what Silke talked about. We don't collect high enough fees to spend enough time inspecting to find the fraud that may be there.

DR. SEITZ: Great, and it also just seems logical that domestic fraud would be a fraction of fraud due to imports and exports. Is that a fair statement? Just because you have a shorter chain of --

MR. WELSCH: It could even be higher.

DR. SEITZ: Oh really, and why is that?

MR. WELSCH: Because they've had more time to practice it. They can -- you can be more sophisticated. You know, some people keep excellent records. They have records of things they didn't do.

MS. FUCHSHOFEN: Right. I'm great

now.

MR. RICE: You have a quick follow-up, Silke.

MS. FUCHSHOFEN: I'm ready to answer Tom's question.

MR. RICE: We'll circle back. You want to go for it.

MS. FUCHSHOFEN: Okay, sorry for that. I think it's really the intersection of operations and records. You know, records, they have a life of their own. They live in the office with, you know, organic compliance personnel and they have their binders and they're ready for inspection, and they show you all these things. Then when you go on the floor, just what Sam just said, there's records for things that don't -- are not there.

So I want to give this example of these receiving procedures that I just recently saw. They were using the container number in their receiving records as proof of what came in, and the paper -- it was like on the paper

together with, you know, where they checked off that it was clean and all of this.

And but there was somehow in the paper that looked a little funny to me, because at the bottom, you know, at the top it was all computer-generated, and on the bottom things were hand-generated. You know, written at receiving. So the container number was in the upper part. So I'm kind of like okay, when do you -- where does this information come from?

That's at receiving they're generated out of the computer, the PO information basically. Then there is a place where at receiving in the office, they look at the documents and they look at the shipping documents, and then they write down the container number. I get that as receiving. They don't receive containers. They don't get there. The containers are unloaded earlier into trucks.

But that I didn't even know until I saw this funny break in the records, you know where it just didn't look right, you know. But

that's the investigation kind of part, where then you have to look and wonder and ponder and ask. And then also suddenly it's like okay, so you don't even get containers, because there was no lot number. There was nothing. It was that container number that was the linkage. I don't know. Does that answer your --

MR. CHAPMAN: I'm more interested in how do we get certifiers and inspectors to change their practices, and maybe Jake or Sam can delve into this, and maybe speak to it already happening. But if -- you spoke about, you know, you see a deficient record. That record gets fixed, the problem's solved.

But that should really be an indicator that the process wasn't working to verify it, and how do you fix that process then? Is that -- is that happening in inspections and certifications, or are we just fixing the record error?

MR. LEWIN: Just briefly, I think sometimes -- I think we are all becoming more professional and entitled in the process, in

terms of owning the outcomes. I find that inspectors need to be encouraged to own the process, own the room, own the time, and we're doing a better and better job encouraging that.

We've moved to a situation where all inspectors are not only required to have sampling materials with them at all inspections, but they are authorized to take a sample any time they see fit. I think it's just a combination of we need to have high expectations of each other. High expectations should be had for certifiers; certifiers should be expected and supported in their evolution.

The trade needs to support the process. Longer inspections attempting to find fraud are unpleasant for the people who aren't committing fraud. And so you know, what we find is that inspectors are -- as an example inspectors get pressured, because good actors end up, you know, going through the cycle that is meant to find bad actors.

It's just a matter of everybody's got

to talk to each other honestly, and you have to have the entitlement to do the work in a professional way, not in simply the lowest cost or the fastest way.

MS. FUCHSHOFEN: Can I speak to that again? This part of, you know when I said earlier investigative, investigative. I don't know how you say it. My experiences. Often when I go, I tell the client, you know, I ask them -- for example, I ask them do you use uncertified vendors? The answer is no.

Then I say are you sure, because many companies do and it's allowed under the NOP, and then they say oh really? Let me check. Then they, you know, call. So and then -- and I say it's allowed. The thing is only if you do, I need to look at some additional procedures, you know, because vendor is another and you still have to show the certificate.

Then when we look at that, and I tell them what I'm looking for. I said you know what? I'm going to -- often we don't find the answer.

There is nothing. I say you know what? Let's do the inspection. Let's keep look out for what you do, because maybe somewhere we find where there's actually a step that is done.

And then I engage them and then we kind of work on this together, and usually they really, really appreciate the work. You know, even if it comes out as not there, they totally appreciate. I mean it's processing and it's -- I don't know if, you know, how that is with farms, if they want to spend the time like, you know. Okay, thanks.

MR. CHAPMAN: Yeah, thank you.

MR. WELSCH: Yeah. I think what Silke said had more training and work at the inspection level. On the other end, what the NOP level can do, I think there's a great deal that could happen. When we suspect fraud and we report it to NOP compliance, there's not enough evidence for them to open an investigation.

The fraud may be there, but we don't have the power or the authority to get the

evidence. The NOP does have that authority, but doesn't always choose to use it. I think with the additional resources you have now been given with a few million dollars to do more work on this, having some people in the NOP who are dedicated to looking for original evidence, to do the kind of cross-checks that certifiers have a hard time to do.

But the NOP, you can start at any point in the supply chain, work your way forward and backward and see if all the actors in that supply chain are -- have the sufficient documentation procedures. You have the authority to do that. It's much harder for us as individual certifiers who are only certifying one small link in that supply chain.

We're trying to do it through trace back through uncertified suppliers. But the NOP has the authority to do this much more quickly and effectively that we do, and I'd encourage you to consider dedicating some staff to doing that.

MR. RICE: Thanks Sam. We have

Harriet, Emily, Sue and Dave, and we have seven minutes. So we need to keep it --

(Simultaneous speaking.)

MR. CHAPMAN: But we'll also have questions with the entire panel afterwards, so keep that in mind.

MR. RICE: Yeah, and we will have all of you here again. So keeping that in mind.

MS. BEHAR: Okay. So just like we have, you know, we are driving down a small little road and we go through a town. We know that this is a speed trap place, and we just always slow down because we know the cops are watching. I think that in some of these high risk situations, we need to possibly do some strong enforcement now, so people start learning that we mean business here.

I'm wondering, too, about electronic trackers. You know, we're talking about not knowing where the loads go. There are devices that could go into loads that we can then keep track, and if they don't have it, especially in

high risk, high volume, high dollar situations, right? We're not going to ask somebody who's selling six boxes of squash, you know, to a retailer to put in a tracking device.

But if something is coming as many container loads or whatever, I think there could be requirements in those high risk situations for some kind of electronic tracking. And also during the inspection, if there is a piece of paper missing, they just don't get certified. This is the speed bump or the speed trap I'm talking about.

The word needs to get out there that in the United States, we mean business, and that if it's not -- if it can't be proved to be certified, we're not going to allow it. I think then the trade will come into place, and we'll at least make it harder for those. I mean I think fraud happens when it's easy, and so we need to make it harder.

And so I don't know if you have any ideas about these tracking devices or

documentation or three strikes and you're out. I don't know the way to implement it, but I really think that we need to do something about this.

MR. WELSCH: The tracking sounds like a very interesting idea. I can see that tracing some of the large shipments and containers.

MS. FUCHSHOFEN: I don't see us eradicate fraud. I think and from what you're saying if a paper is missing they don't get certified. There's a lot of honest mistakes out there. Companies who do want to do the right thing and then, you know, like with my thing when I find things, next year they've fixed it up. Very often it's very pleasant to see.

So if we say, you know, maybe there's 2 percent fraud, that means 98 percent of the companies really want to work. I think whenever you install, there's going to be somebody figure out how to cheat the system, and it's just part of -- you know, you cannot get your house germ free, for example. You know, it's like it's life.

The thing it's hard to be, you know, on our tools and our methods, can be respond quickly, you know, put all these things in place and then it's like, you know, a dynamic or something.

MR. RICE: Thank you. We've got Emily next.

MS. OAKLEY: This is kind of two part. One, I was wondering, in terms of the stop sale in case of suspicion in the European Union, I mean that's a bigger issue that we can't just like snap our fingers and achieve. But I'm wondering to what extent the panelists think that's something that the NOSB and NOP should try to look at.

That's one, and then Jake, in terms of the California acreage reporting and yield and gross sales, and sort of the malleability and changes that took place, are you just seeing acreage reported right now, and is that publicly available information, and is there also yield associated with the acreage, or what is -- what

was the sort of conclusion about what are they reporting now?

MR. LEWIN: I can take the first one, then the second or the other way around. California acreage is currently reported by 26 commodities. I believe it's 20 or 26, closely related to the NAS categories. It's reported by county, and so that's the degree of information that's available, and it's publicly available and pretty strong. So if reported annually, I think it's pretty great.

It doesn't include, I think you said yield. No, it doesn't include yield. Weight is a variable. I don't think any farmer could tell you when I'm planting this what it's going to yield really. And then similarly with the stop sale, you know, stop sale is a big deal and it is something we should be considering what the pros and cons of that are.

And from my perspective and my understanding, it's the kind of thing that would need to be considered as a legislative matter,

because it's a matter of legal authority at whatever level it would occur at.

MS. OAKLEY: But it is a tool that you think we should be pursuing?

MR. LEWIN: Yes. I think that stop sale in a regulated environment is an important tool that's to be considered absolutely. It just needs to be used and considered wisely and it needs to be fair. Due process in America is an important thing.

MS. OAKLEY: I agree with that, but I also think without it, without that potential tool and obviously it can be abused by those who have the power to enforce it, but is to mean that it isn't in most cases. I think it's almost impossible to go forward without some sort of authority at that level.

MR. RICE: Jenny.

DR. TUCKER: I just want to very quickly jump in and confirm that stop sale would be a legislative change. We can't do that through regulation. I just want to confirm that

fact.

MR. RICE: Thank you, Jenny. Sue.

MS. BAIRD: I taught Organic Certification in Africa and in Egypt, and it was on behalf of U.S. Farm AID. But it was for a large ketchup company that we would all recognize their name, and I did not know until that point that the majority of all tomatoes were grown for this ketchup company in those countries. Really interesting to me.

But as I was teaching those classes, I identified with your little slide, your first slide Albrecht. They probably revealed that, you know, we have all these pesticides and we're using them and, you know, our tomatoes are beautiful. I said but that's not allowed in organic. Oh yes, yes it is. It is allowed. We've been told by our XYZ company that all we have to do and wash them and it will wash all those out.

XYZ company is a U.S. company that everybody would recognize the name of the

ketchup. So I'm wondering if education needs to be really, really, really taught. I taught that little group. It was a grower group, but that doesn't mean that it got passed down to the individual farmers. Observation.

Secondly, if those products have been routinely tested, they would have found residues of those pesticides. My question then would be when we have these types of companies, should we not be doing more and more testing, because I agree with Sam. I agree with Sam in that we're not finding it because we're not trying to find it. Question.

MR. CHAPMAN: Do any of the panelists want to respond to that?

MR. WELSCH: I would second what her findings are. The first time I went to India, I was told that well we -- the solution to dealing with -- the way they've got untreated seed is by washing the treatment off of it.

MS. BAIRD: Right, yeah.

MR. WELSCH: And that was being

certified until we got there.

MR. LEWIN: I guess I would just completely disagree with the supposition that the reason we're not finding things, if they're there, is that we're not trying. In fact, I would say that there is a --

MS. BAIRD: I didn't say we're not trying. I'm just saying that maybe we need to do more testing.

MR. LEWIN: Well, also if I was to do testing and many do lots more testing than they're required to do. In our case, the testing we do, 75 percent of it is not random. It's aimed at finding things. It's the worst possible case. On top of that, there's a tremendous amount of testing that happens at the border. There's a tremendous amount of testing that happens within state at the Department of Pesticide Regulation and the USDA Pesticide data program that when positives are found in organic, they get sent to certifiers.

We've received several, and I guess I

would just say that certifiers have to take responsibility for operating in places of high risk, and then elevate their practices and testing accordingly, and then operations and companies need to be educated. My guess is that that's as much a communication error as an attempt at defrauding the system.

I would just find it difficult to believe that a major U.S. company would be attempting to defraud the system with growing practices. It is far more likely that what they need is education and they'll get in line. They have a lot more to loose from having that. They don't -- yeah, they've got a lot more to lose.

MR. CHAPMAN: Thank you, Jake. Thank you everybody. We're going to have to stop with this panel, but if we missed you guys, they will be back later and Scott is keeping you so you'll be on the top of the list for the combined panel. You can ask them the questions then. So thank you guys.

Don't leave yet. We'll be moving to

the Industry Panel in about ten minutes, and then once that's concluded we'll bring you all back together for continued Q and A. Thank you very much for your time. So it's 9:50 right now. We're going to break for ten minutes while we set up the other panel. We will be starting promptly at ten. Recess.

(Whereupon, the above-entitled matter went off the record at 9:49 a.m. and resumed at 10:03 a.m.)

MR. CHAPMAN: Okay. We have the majority of members present. Dave, Harriet, if you guys would take your seats we're getting started. All right. So we're back. We're starting up now with the industry panel. Again, I will briefly introduce everybody, and then we will allow each of the panelists about five minutes to speak on the subject of their choosing, and then we'll open it up to the board for questions.

I'm going to start on, just to make things confusing, on the other end of the table

and move to the center. So up first is John Bobbe. John Bobbe is an organic farmer's agency -- is the executive director of the Farmers Agency for Relationship Marketing.

OEFFARM is a cooperative incorporated in the state of Minnesota, with five cooperatives as members, with organic producers in 19 states from Montana to Texas and Louisiana to Kentucky, and Ohio and all the states in between. He is the author of Marketing Organic Grain: A Farmer's Guide.

Up next will be Peter Carlson of Terra Ingredients, formerly AgMotion. Peter Carlson has led the Organic Division of AgMotion since 2008. Rebranded from AgMotion Specialty Grains to Terra Ingredients in March 2017, Terra is an organic supplier of the consumer and animal feeds market. Principally organic flax, milled flax, lentils, corns and meals.

While its core purchasers are directly from producers within North America, Terra Ingredients has an extensive history importing

goods from vetted suppliers throughout the world.

Up next is Mike Dill. Mike Dill, Food Safety and Compliance Manager and Organic Trade Policy Analyst for the Organically Grown Company. Mike manages vendor, consumer and facility compliance for the Organically Grown Company, a distributor of organic produce certified by Oregon Tilth since 1998.

He's the coordinator of organic -- he's their coordinator of Portland Organic Producers Wholesaler Coalition, which provides organic wholesaler and growers' voice to the National Organic Program, and the National Organic Standards Board. Mike has been working in the organic trade for over ten years, five of which were with Oregon Tilth, where he was an organic inspector and certification officer.

Mike received a degree in Food Science and Technology with minors in Chemistry and Horticulture from Oregon State University.

Up next is Erin Heitkamp. She's the Managing Director for Strategy, Sustainability

and Insurance at Pipeline Foods, and has worked in the field of environmental management and sustainability for more than 18 years. Immediately prior to joining pipeline, Erin led the sustainability consulting practice at Wennick, sorry if I said that wrong, a Minnesota-based environmental consulting ESOP.

In her most recent role at Delta Airlines, Erin led the development and execution of an environmental and sustainability policy and strategy. Prior to Delta/NWA merger, she held positions in areas of environmental and regulatory oversight, fuel and fuel services purchasing and corporate real estate at Northwest Airlines.

Erin holds a B.S. from the University of Wisconsin-Madison and a Masters of Environmental Management from Yale University.

Up last is Monique Marez, Director of International Trade at the Organic Trade Association. In her nearly four years with the OTA, Monique has executed trade-related

activities in 23 countries, leading to over 100 million in protected export opportunities, as reported by activity participants.

Monique also wrote the last seven organic HS codes, HS tariff codes, proposals to the United States International Trade Commission. Her undergrad is from Yale University and she has a Masters in Nutrition, Public Health and Food Systems from NYU.

So definitely a very, very qualified panel. Thank you all for taking your time here to share your expertise with us and to answer our questions. Up first, we will start with John with your subject of your choosing John.

MR. BOBBE: Thank you. Our farmers market organic grain and livestock, commercial size from a hundred to thousands of acres of organic grain. This is a ship with 15,000 metric tons that just was turned away yesterday and we were notified within an hour after it left port.

It was destined for Stockton, California. Customs and Border Patrol, APHIS

determined a couple of things. There's a lawsuit pending against the USDA among others, and Customs and Border Patrol on this ship, and it is headed out of the country simply because the cargo came from Kazakhstan, Russia and Moldova, none of which are saleable in the United States. It originated in Turkey.

This is the first ship that we found two years ago, the Nakagawa, Burns Harbor, Indiana. Not necessarily confirmed as fraudulent. However her origin, Turkey. This is the Ince Atlantic, September 13th, 2016. The first ship in Olympia, a warehouse full of the steamship. It originated in Istanbul, Turkey, organic grain.

Again, not necessarily evidence of fraud, but potential questions about it. Everyone knows this picture of the port of Stockton, California, which involved three ships by the investigative reporter Peter Whoriskey. This investigation started by introduction of a mutual friend of ours to -- by me, to me by Peter

Whoriskey, and we cooperated with his investigation on things that people were giving us information about.

You see the result. 36 million pounds of organic corn, 21 million got in the organic food supply before it was stopped.

This is the Diana Bolton last September in Bellingham, Washington. Our source, the United Kingdom. Our source gave us the words, heads up two weeks in advance. Did the NOP know anything about this one? No, because Miles McAvoy personally thanked us and told me that they do not track ships at that time.

This resulted in the cargo of corn being rejected, and it probably caused them to look at Stockton, California because just the week before that, there was another ship that was rejected. This one is a legal ship. It was from Argentina, scheduled to arrive in Stockton, California.

It says soybeans and corn, probably was organic wheat, which considered it to be

legitimate. So I mean we're not just picking out everything. We did file a complaint because we didn't know.

Now there's one other load that came in, and that is undocumented, of sunflower cake in 2016, rejected by the United Kingdom and our source said guess where it's going? It came into the United States, and I'm betting it got here. This is where all of this stuff is coming from, and you'll notice along Turkey.

Turkey, from our sources on the ground in Turkey, does not produce a single kernel of corn or soybeans organically. It is an importer from the United States. So how come they're the biggest exporter? The Ukraine. There are 440 total certified organic farms in the Ukraine. Eighty percent ship their production to the EU. That leaves about 60 farmers and two years ago the Ukraine was the biggest shipper to the U.S.

The unknown, Russia. It's not legal to ship corn into the United States from Russia, I understand, and Kazakhstan has no organic

production and that was a part of where the cargo of the ship turned around yesterday came from.

They have no organic production and how do I know? Because I was asked to go to Kazakhstan as a consultant on a U.N. project to help them set up corn production. Azerbaijan, Armenia, Georgia, don't grow any corn.

So let's talk about solutions. Requiring any entity to be certified. Putting a system in place for inspection at the U.S. ports. Protocols for residue testing. Putting in place a warning system similar to the U.S. We have a little bit of that with guidelines that came out here, but those are all definitely high risk countries.

And to strengthen the accreditation of certifiers, improve transparency on the part of the NOP, because we don't rely on the National Organic Program to get our information about what's going on in the marketplace, and examination of the ship captain's logs, their cargo and what it's ensured for. Nobody's going

to ensure a conventional cargo at the organic rate.

There is also required, which we found out yesterday, that those ships are required to file a travel plan similar to a FAA flight plan by a -- like the pilots do. So the bottom line here in wrapping up, that the USDA submits to an outside audit beyond peer review as called for in the Organic Food Production Act.

Instead of patting each other on the back with a peer review, no skirting the issue. The NOP to submit a full report on compliance and the OIG recommendations, and we are going to be demanding it, and I've got two state senators from Wisconsin of both parties that are going to be asking about that, because they're mad as all get-out.

And finally, what is does cost farmers? $400 million of disaster from imported fraud. Who should be held responsible? There are certifiers that are involved in complicity in this. There are buyers and there are others

along the supply chain and total negligence. Thank you.

MR. CHAPMAN: Thank you, John. Peter.

MR. CARLSON: Again, I'm Peter Carlson. Thank you, John. I too, it's been known within the trade, I think I see fraud as endemic. I do not see it as rare or for certain grains. It's been an open secret within the trade as early as 2014 that conventional grain gets transshipped in Turkey. It's non-GMO.

I've had conventional traders in Europe simply call me and tell me, and this is -- and it comes here as organic. Until this summer, the Washington Post, it's nice to have some -- the increased interest, because I did not see that previously.

A few things that I would add that I haven't heard today. The system is based upon document fraud. The entities who are committing the fraud are -- they have a lot of money and they're extraordinarily good at documents. I don't see solving the problem of document fraud

with further and more complex documents. It's the wrong trail and who that stops is it slows down good parties. It increases the costs for smaller and more traceable producers and partners in the supply chain.

So yes, documents are important, but I don't think we'll find our solution there if we do have the world for a solution. I think I hear a lot of residue testing. I think residue testing is important, not least because the consumer expects non-residues or their organic products to not have residues.

That said, I think that residue testing has also provided a lot of cover for the fraud. If you're producing organic corn, organic soybeans, you can spray pesticide pre-emergence. You can spray it when they're small and it's not going to show up on the residue testing.

So now when a bulk shipment comes in, and we can clap ourselves on the back and say good, there's no -- we don't test residues. That doesn't mean a lot. It doesn't mean that it's

not or that it's organic. I still think it's important to do that stuff, because it -- the scientists could tell us better. But things are caught through residues, of course, as well.

But I would like to see a system based upon -- because the organic goods really develop no matter how complex or simple the supply chain is, the organic starts at the soil level and at the initial producer level. I think that there is where we'll find our solutions. That includes soil testing. A lot of what I'm saying also speaks for -- there's quite a bit of fraud in the USA and lot of the solutions are the same, including Canada.

We've seen it. It's been very difficult to stop fairly openly fraudulent parties, even within the -- even producing within the USA. I think soil testing could be a big part of that, that we're looking for residues prior to planting. I also appreciate the suggestions for acreage knowledge.

You know when Turkey, I don't know

John's figures, but even as early as like I say '14 and Turkey's exporting, you know, 10 to 12 times more than they can possibly even produce. There's an acreage issue that just doesn't add up, even without specificity or clarity on exact yield estimates.

One solution, reporting yields by the producers at the time of harvest. Here's what we produced and here's our close estimate, coupled with a system where we can track where that product is traced throughout the supply chain, whether it's the geotagging a block chain, some of the technologies that go with the trucks, I think.

We really can in today's day and age, every single company on this panel, every single importer knows how many pounds and tons they purchased and from where, and at what price. So it's already built into our systems. Having that part of the audit process would be very important.

But keeping track of those quantities

is what's important throughout the supply chain and if it's trading on again a block chain system, where ourself as an importer we're buying those essentially rights to organic goods, instead of again creating more complex documents that the document fraudsters are excellent at manipulating. Let's see.

MR. CHAPMAN: We're just about out of time.

MR. CARLSON: Yeah, I'll leave it there.

(Simultaneous speaking.)

MR. CHAPMAN: Any final thoughts?

MR. CARLSON: Thanks again. No, that's fine.

MR. CHAPMAN: That's good. Okay, thank you Peter. Mike.

MR. DILL: Okay. Well I want to switch the conversation a little bit to produce. We've heard a lot about grain and I know there's a lot of similarities but there's also a lot of differences, and that's going to be seen on the

issues we face and also the solutions that we need in produce.

There's a slide. There we go. So produce is unique. It's always in boxes, at least at the distribution level. We're not receiving containers full of produce or a shipment. They're full ship containers. In produce, they can never be packed and sealed or impermeable or tamper-evident packaging. It has to be in packaging that provides airflow. So it's always open to the environment.

Timing is really critical in produce. Over half the commodities we sell have less than two weeks of shelf life. So that means we have to try to turn our inventory as quick as possible and shoot for about three to six days to sell through our inventory. So in many cases the product goes from the field to the customer in less than one week from harvest.

Also the volume that we handle is immense, as are the number of transactions we perform. On average, an Organically Grown

Company receives 15 to 30 truckloads per day, and we issue about 50 to 100 purchase orders per day, and that's between about six buyers.

Each purchase order could include 1, 5 or 10 items. So we're talking about a lot of product, a lot of variability. I want to note that in 2017, 77 percent of the product we distributed or purchased was produced in the United States; 23 percent was imported, and most of that was purchased through brokers, other handlers or uncertified operations.

The other I want to say is that our supply chain is very complex. It sounds like in grain that's also the case. In produce, it's a complex web of producers, packers, consolidators, importers and exporters.

So when we look at this, every way we assess the situation, we come down to three root causes, and they're probably not going to come as a surprise. The first is uncertified operations, and that includes brokers, marketers and distributors. But the one that's often left out

of the conversation are the major retailers and big box stores that have their own distribution centers.

So it might vary slightly, but these operations are almost all performing the same activities that certified operations are required to have documented in their organic system plans. So I thought we could quickly run through to take a look at what that actually looks like.

So the first one that's actually really alarming to me is that these uncertified handlers are purchasing and selling organic product, with no verification of their purchases, no one looking at their sources. They're also purchasing from uncertified handlers as well.

So you have an uncertified handler purchasing from an uncertified handler and so on down the chain until -- or up the chain until it gets to the retailer. This means that the product could travel -- that domestic or foreign product could travel from a grower to a retail shelf with the only certified operation in the

supply chain being the grower, and I think that's a problem.

So every operation that's receiving product is going to perform quality inspections. So that means taking product out of the boxes, taking temperatures, assessing bricks, pressure. To do that, you actually have to open the box. Sorting and quality control are really important, and if you think an operation is going to throw away $100 box of citrus instead of just pulling out one or two moldy lemons, you're wrong. They're going to pull those out, close the box back up and ship it out.

There's also repacking, labeling, stickering, all that that's not supposed to happen that actually is. If a PLU is missing from some fruit, it's going to get stickered. If the box is damaged slightly it's going to be re-boxed and it's going to be sold.

All this product has to be stored, so it's in warehouses, and as you can see it is obviously open to the environment, which

encourages or allows many opportunities for commingling to occur. And then this is what the floor of a shipping and receiving dock actually looks like. On the top, you can see product coming in, neatly stacked, all together by grower, product. But on the bottom you see product ready for distribution.

There's open product, there's product that's boxed, there could be conventional product that's all stacked on top of each other, not by organic compliance if you're an uncertified operation, but by what's dripping, what's heaviest and what needs more airflow.

So the second issue that we see is labeling and traceability.

MR. CHAPMAN: Mike, we're going to need you to wrap it up.

MR. DILL: Okay, and we feel that the link between the label and the certificate is the most important thing that we have in order to verify compliance. The third root is the -- root cause is organic certificates. Listing a

commodity on a certificate is not just enough. Last year we uncovered some fraudulent pineapples that were widely distributed.

The only reason we were able to discover that is because the certificate that we were given said that it was frozen pineapple. The label, everything matched, but it turns out that someone had obtained the certificate, created a label, affixed it to the conventional pineapple and distributed it.

Got through several certified handlers and luckily we were able to see that. And then I guess later on I can talk about what we feel are the solutions to these problems. Thank you.

MR. CHAPMAN: Thank you, Mike. Erin. Can we turn those speaker mics up?

DR. TUCKER: Yeah. Can we make sure that we do get to the solutions we get to the Q and A time?

MR. CHAPMAN: Yeah.

DR. TUCKER: Okay.

MR. CHAPMAN: Is it working now?

Yeah, they're working.

(Off mic comments.)

MS. HEITKAMP: Okay, can you hear me? So good morning. I want to thank the NOSB for having me and Pipeline Foods participate in this very important conversation.

DR. TUCKER: Can we turn her up?

MS. HEITKAMP: I get closer to it.

DR. TUCKER: There, thank you.

MS. HEITKAMP: Okay, very good. So again I want to thank the NOSB for having Pipeline Foods and me specifically participate in this really important conversation. So just I don't want this to come across as a commercial for Pipeline Foods, but I do want to spend a little bit of time talking about who we are and what we do, because I think this is fundamentally a conversation about a public-private partnership between the NOP and industry, because there are pieces of this issue that industry is going to need to manage, and we have to play our part and there are pieces of it that we simply can't.

We need NOP to harden the system on their side as well. So I'm going to try to get to a point where you see where there's an intersection between all the responsibilities and we identify how we can best work together, and really focus on those recommended solutions.

So quickly Pipeline Foods is a global, clean label supply chain company, and we are developing primarily organic grain and ingredient supply chains with transparency, traceability and assurance.

Pipeline is a short or a new organization. We were funded 14 months ago, and when our leader was our founder and current CEO was out in the marketplace looking for funders to finance the creation of Pipeline, he justified the existence of the business or the need for the business around the whole list of issues that he saw as being challenges in the organic industry, and then proposed to create a company that would address those challenges.

So those challenges include fragmented

supply chain, lack of price transparency, lack of supply chain transparency, and on these last two pieces are the two pieces that are most relevant to the conversation today, fraudulent product entering the supply chain and a lack of enforcement of that regulated market.

So to Peter's comment, he was -- Eric was aware of these fraudulent imports back in 2014 as well, and before he started Pipeline was closely following to see how the whole industry would evolve. So I would say we have created a company that can address those first three challenges and turn them into opportunities, where we have a lot of control over that.

These last two pieces we don't. Again, we need for this to be a partnership between NOP and industry as a whole and Pipeline specifically.

So $25 million into this investment, this business over the last 14 months puts a really fine point on the risk associated with this issue. There are different components to

it. For our food company customers, the risk of supply chain disruption is huge.

There's counterparty financial risk, recall risk, headline risk. There's lots of different nuances to each of those pieces, but I think in particular just focusing on the headline risk piece, which translates directly into a monstrous risk to this whole industry.

Whether, you know, to the extent that this issue doesn't get addressed, whether it's one organization or the entire industry, we could suffer catastrophic losses as a result of a failure to adequately address the issue.

So I'll really quickly, I'm going to talk a little bit about how Pipeline functions. We've got four components of our business. We own and operate assets, as of today four assets, two in Canada, two in the United States and a fifth under construction; specifically dedicated elevators and value-added processing facilities, and we do that with the implementation of world class operations around FSMA compliance,

environmental health and safety and really to kind of create that dedication to the whole supply chain, to build an efficiency both from a cost perspective and otherwise.

Our merchant group buys grain direct from farmers. I'm going to say that again, direct from farmers, and ideally we manage that whole supply chain to the point that we sell our ingredients directly to food companies. So we're creating, shortening that supply chain, reducing the complexity associated with it and absolutely are committed to investing in the transparency and traceability along the way.

This whole issue of imports, I think without question we often hear from farmers well why do we need imports? Why can't we just support farmers and growing acreage in the U.S.? That's absolutely we're in agreement with that and we're investing in doing that, bringing along more acres.

But at the same time, we don't want to squash demand. This is an incredibly exciting

industry, and it's growing at such a pace that we need imports for whatever period of time we need them until the U.S. production can catch up. So we are also --

MR. CHAPMAN: Erin, I'm going to need you to --

MS. HEITKAMP: Wrap up?

MR. CHAPMAN: --wrap up.

MS. HEITKAMP: Okay. So we're also importing from, currently from the southern coast of South America, but we're looking at other regions of the world as well. So we do so with the intent of ensuring to the absolute degree of certainty, the organic integrity of those products.

So there's a few slides here on how we do that. I can come back and talk more about some of those details later. I'm just going to jump to the last slide, which is the recommended agency action slide.

So we look to NOP to prosecute and hold accountable bad actors. To the extent that

crooks are out there getting away with it, it's just going to continue. So to the extent that enforcement resources need to be bolstered and capabilities, that is absolutely the top priority in our minds. Secondly --

MR. CHAPMAN: We're going to need to move on, but hopefully we can come back to this in the questions. But thank you Erin. Up next is Monique.

MS. MAREZ: Thanks, great. Clicker. Okay. So good morning everybody. Thank you very much for giving me this opportunity to speak with you on a topic that I think about every day, which is international organic trade.

This first slide is really just to help you set the stage on what we're looking at in terms of import trends over the last few years in our key imported products into the United States.

For the last four years for the organic trade association, I've managed our Foreign Agricultural Service grant funded

programs, and that includes work on equivalency arrangements. So I look forward to speaking with you on that specifically.

Also, I chair the trade association's Task Force on Mexico and on sugar imports, and I represented the U.S. organic industry, as mentioned in my bio, in 23 countries around the world in the last four years. So I've been out there in the field and there's a lot of buzz about U.S. organic. I also chair one of the subgroups for the Organic Trade Association's Global Organic Supply Chain Integrity Task Force.

That is a one-year old 30 plus member effort to develop industry best practices and tools to identify, assess and mitigate organic supply chain vulnerabilities. The list up here highlights some of the key risk factors that we've identified through this process, and I look forward to discussing the work of the task force with you in our panel discussion a little bit later.

We really believe that industry-wide

adoption of this vulnerability assessment and risk mitigation tool will help prevent the problem of fraud, starting from the buyer and sending a clear message back upstream.

I'll go quickly through some of our top priorities for the NOSB and NOP. You've heard this from several folks by now, but we really, really recommend that NOSB recommend to the NOP the required certification of currently excluded operations such as distributors, importers, online auctions, warehouses and brokers.

A first step there really could be defining clear terms on operation types, and whether or not those operations must be certified. So for example, retailers doing their own packing. That sounds like a function that should be certified that currently may not be in the definition of a retailer.

Second, we recommend that the NOSB and NOP work together to improve the timing and the communication around NOP's complaint procedures.

Right now, this is our number one industry tool for logging potential fraud and the turnaround for that particular system just isn't keeping up with the pace of complaints coming in.

So an alert -- also along those lines, in addition to improving that overall system in response, an alert system that identifies products or regions where heightened vigilance is needed, and then alerts the industry of those risks to provide better tools would really be helpful.

Of course most importantly, imposing penalties on cheaters. We need this action to be done efficiently and effectively, and I'm excited to hear customer service will be a key focus for NOP moving forward and hopefully responding to these complaints falls in line with that effort towards improved customer service.

Third, you know, we recommend that NOSB put forth a program recommendation that requires ACAs to harmonize a method and develop an industry-wide report for mass balance. Really

measuring aggregate production area by certified crop or by location ideally on an annual basis would be extremely helpful.

Right now, no such acreage or yield estimates exist, even on a country by country basis, and the estimates across certifiers are a little bit hard to compare. So pulling that together would be very helpful, and I think we can rely on our equivalency partners a little bit to assist in that effort.

Finally, I'd like to call to your attention the importance and the value of establishing more organic-specific HS codes. HS codes are used by the USDA, Customs and Border Protection, the U.S. International Trade Commission and other agencies to assign tariffs, but also to track trade flows of specific products.

So the list you see before you is the existing set of codes that we have. OTA was pivotal in establishing that first set of codes in 2011. We've been the only organization

successful in getting new organic codes added to that schedule through our applications. I have a package of those that we can send around so you can kind of see what we're working with.

We have 38 for exports, 49 for imports, and really that information does a lot of things. It helps us create graphics and data like this. So where products are coming from, how much product is coming from that country, how much it's being sold for when it's brought into the United States, and again, it really just helps track the flow.

It was also instrumental in identifying the ship that's currently on the water, as it was incorrectly coded based on what was in the container. So they're a very important tool. Lastly, I would request the opportunity to talk a little bit about a 332 study, and a way for maybe NOSB and industry to work together on that.

Neither requesting HS codes or 332 require additional financial resources. So I

think there are approaches that we can look at together. This is just a quick summary of the things I'd like to touch in our discussion.

MR. CHAPMAN: Thank you. Okay. Thank you all for your introductions. We're going to open it up to questions. I, to the prerogative of the chair, am going to start with three myself, and then we will move around. But we always have -- we have, we're going to have more time again if we don't get to it in this session of everyone together.

I am also going to ask the Board that please focus on asking a question. We have a lot of time on our agenda to discuss these issues together. So if you're wanting to make a statement, we have an opportunity for you to do that later. Let's really value this time in using the Board, in using their time.

So in the focus of getting along with this, I'm going to ask my first question, and then we'll look around to take names as the panelists start to answer my first question, if

that works. So my first question is kind of focused on you Monique. First of all, I don't really know what a 332 study is. Can you tell me what that is?

MS. MAREZ: Sure.

MR. CHAPMAN: But really briefly, and then moving into HS codes, what role does the NOSB have in encouraging the adoption of more HS codes? What role can we play, what role can the NOP play?

MS. MAREZ: Sure. Okay so a 332 study is basically a competitive analysis that's done by the U.S. International Trade Commission. The U.S. ITC is a non-partisan government agency and essentially it looks at competition factors against U.S. products.

So it's not agricultural-specific, it's not organic-specific. For example, the last successful 332 Commission was on aluminum. And essentially you can request a 332 through legislators, and the House Ways and Means Committee would put forth a recommendation to the

U.S. ITC which says we require you to do this study.

Now the kind of why would this be helpful? Basically, if we couch this as a competition concern, unfair competition because of imports not necessarily meeting the requirements of domestic producers, that is where the ITC can perform this type of investigation.

The questions that we could ask our -- we could ask them to perform an overview of the organic grain industry in the United States and major global producers around the world, and what their production is, what their processing volumes are, what the capacity is, what the trade is, what are the policies in place in those countries that allow them to potentially have a competitive edge.

We can ask how end users are using that supply, and whether it's being directed in a way that is consistent with NOSB/NOP requirements for imported products and timing. We can also identify a very clear time period from which we

want this study to kind of review products that have been brought in or products that are currently being produced.

We can identify key countries that we want to have reviewed, and essentially if there is political will and support and the House Ways and Means Committee writes up that letter that goes to the International Trade Commission, it's a requirement. They have to do the study, and usually they're about two or three years, and it comes back to us to say these are why you are currently competitive, not competitive, etcetera and whatever is revealed through that process, perhaps that they've been producing fraudulent supply or there's a gap in the supply chain, etcetera.

It is what it is, and we really can't control those results. But it's an opportunity to have the boots on the ground formal investigation.

MR. CHAPMAN: HS codes.

MS. MAREZ: HS codes. So I'm sorry,

can you repeat your question on --

MR. CHAPMAN: What's the role for NOP/NOSB?

MS. MAREZ: Oh yeah, of course. Yeah, I know how to answer that right away. We would love support in identifying the key areas or products of concern. As you can see, we only have 49 specific organic HS codes. Obviously, there are thousands and thousands of organic products being brought into our borders.

You saw imports have increased by 21 percent in the last year. So in order for us to best track items of key concern, it would be extremely helpful if the NOSB put forth recommendations or called from industry what are the items of concern so we can write that application.

I'll circulate the application package I have now just so you can see. It's really a different language. We're talking tariff code nomenclature, which you know, woo, it's challenging. But with a good list, we can have a

more robust application, and it will be easier for those codes to be approved.

MR. CHAPMAN: Thank you. Next question is for Peter. Peter, and I know I asked people not to make a statement. But I'm going to walk through a really simple supply chain of a product that we acquire.

MR. CARLSON: Yes.

MR. CHAPMAN: And I want you to help me -- because I hear the question around blockchain and geotagging and these kind of technology solutions. But I don't understand how they could be applied in some of these supply chains.

So let's look at a product like sugar. That was one that was on the top ten list. You know, sugar starts as sugar cane grown a lot in South America. So let's say the sugar cane is in Paraguay. It's grown there in the fields. It's harvested, it's brought to a mill. The harvesting happens continuously over several months, perhaps on a 24 hour cycle.

The cane comes in and yields sugar in the five, anywhere from 1 to 5 to 1 to 12, dependent on the moisture. So highly variable in what yield to give the sugar out. At that point, it gets handled through a series of warehouses and transportation companies as they move from Paraguay to ocean ports.

At that point, it gets exported into the U.S. through a registered importer under the sugar, a specialty sugar quota system. That importer then will sell it off to distributors, who then may take it to a third party and have that sugar liquefied. So it's now back in a liquid format, and then sell it to a bakery, who then puts it in a granola bar with several other ingredients and then sells that on.

How would -- how would a blockchain work in that complex of -- and I mean that's not even a complex supply chain. That's pretty straightforward. How does it work through those conversions and those handoffs?

MR. CARLSON: Sure. Specifically

during the processing period from the sugar from the producers, that that producer or collective of producers, depending on the countries, must report that quantity to their certifier, of what's brought in to the processor/handler. The processor/handler is reporting their yields from the processing, and that gets -- and that gets known to their certifier.

They then have a known quantity that they can sell. One of the things that I didn't -- and so forth up the chain. One of the things I didn't mention as a solution is I think part of the problem with the auditing process, as I see it on my level of a merchandiser/handler, is that really basic financial auditing is probably required in this.

Looking at books to be able to see those quantities, to be able to see prices instead of just a mass balance or a spot check on some particular transactions, which is the way we're audited. Being able to look at numbers in total, because part of the problem is that

certified entities, as it's been told to me by some of our European friends, a lot of times the producer can sell their goods numerous times.

And so it traces back. If I'm buying something, it's going to trace back correctly to a particular farm in a particular country. But what we don't know is how many times that's ultimately been sold or been used.

MR. CHAPMAN: Okay, and then Mike, can you get into your solutions?

MR. DILL: Well, it doesn't involve blockchain, because I'm not sure how -- like you, I'm not sure how that would work in produce, especially when it changes hands so many times, and I'd be interested in talking with you about that, who has the visibility throughout the supply chain.

But in terms of solutions for fresh produce, there's really just three things that we're looking for. One is -- I'm on the wrong page here -- is of course certification of handlers. We'd like to have all handlers of

products that are not in sealed, impermeable or tamper-evident packaging be certified.

And we really feel that certification isn't going to be that much of a challenge. I know that's the argument that we hear over and over again. But getting certified really isn't that hard if you're already a food business, because you're doing most of these things already.

Second is labeling, and what's interesting is in the produce industry, boxes of produce are considered bulk. So the labeling standard that applies or that most certifiers apply to labels and packaging is to 205.307, which just requires a lot number.

The lot number really doesn't do a lot of good in our industry, unless you have a transaction certificate of something to go along with it.

So just having a lot number is not enough. We feel that it should be clarified that 205.303 labeling is required for all packaged

products, whether they're opened or closed, sealed or not. And then third is about certificates. So we feel that certificates should have products, brands, services, everything that's necessary for us to make a full determination of the product.

Just listing the commodity is not good enough. I don't know how many times we deal with a broker or a marketer and we're buying like blueberries or potatoes and they send us a certificate. Well, the packages are labeled with their name on it. It says, distributed by Broker A, and they send us a certificate that just says blueberries or potatoes.

We have no way to link that. But if that brand was listed, if that operation or broker was certified, if there was information on that certificate linking directly to the label and directly to the product, we would have a lot better chance of verifying the product. In produce, this has to happen quickly. We don't have weeks and months to verify this product. We

have hours and days.

MR. CHAPMAN: Thank you, Mike. So I have Steve, Asa and Dan. Steve.

MR. ELA: I'm a little curious, I mean especially in fresh produce now in things, but I mean the Food Safety Modernization Act, which requires traceability on environmental operations, and it's getting a bit strained to meet those requirements.

But it seems like a logical collaboration. I mean growers are happy for FSMA do all this traceability. I mean it's very similar to what we have to do in organic. So I'm curious how we could -- if that, if that provides any potential to help us do more of exactly what you're saying Mike and/or Peter, I mean just to trace some of these products through.

MR. DILL: Well, I think FSMA didn't go far enough in terms of traceability and labeling, and there's not a lot in there about traceability. The common kind of understanding is that you can trace product one step forward

and one step back. That's not enough.

If we have just done that, we would have never uncovered the pineapple issue, where we have fraudulent pineapple, because we bought that from a certified handler that had a certificate listing pineapples. It's really a combination of the labeling, that the information on the label is required to disclose the operation, the last operation that handled or distributed that product, the last certified operation I should clarify, because that is not happening.

So if we're looking at organic-specific and leaving FSMA out of this, you have to have reference to the certified operation on that label. Without that, it makes it really difficult. If you don't have the information on the certificate to go with that, it just compounds the problem. So to us, labeling is just as important as certifying the whole supply chain.

MR. CHAPMAN: Dan. Sorry, Asa. Asa,

you're next and then Dan.

MR. BRADMAN: I have a question for Peter and also maybe perhaps a more general comment. I mentioned the whole issue of testing, and I should say I had a side conversation with Jake during the break. I realize I need to educate myself on the current guidelines for testing under the NOP.

But I'm wondering if there could be more enhancement testing, and then I think you raised some limitations. Those also should be acknowledged, and I'm almost wondering, in my world often we'll like have an external peer review or some sort of white paper, and maybe this is an opportunity where there could be kind of a task force or some sort of external peer review to evaluate the efficacy of current testing guidelines and how well they work, what are the limitations, are there any modifications warranted, and how well that can answer some of the questions we need to answer.

MR. CARLSON: So to speaking a little

more in general about testing, and again my experience is generally limited to whole grain commodities prior to a processing environment. I can say some of the -- there's a few examples where I'm coming from. We have been purchasing organic flax from a Canadian producer for years. We had tested it ourselves.

On several occasions, because we were shipping to Europe and the additional European sensitivity to trace levels of residues, always clean. This producer was -- lost certification because they finally started testing the soil. That showed that they were spraying, and it was a complex and really professional operation of fraud.

I'm a little bit leery of the system in Europe that has really slowed down trade, where it's testing in the parts per billion or the parts per ten billion. What is the denominator that we care about? At some point there needs to be a denominator that matters, that is zero. I think some of the zero tolerance

wishes are not really helpful.

So testing our way out of the solution, I think it's probably good from a -- helpful on a verification, but I'm not certain that that's where we're going to find our ultimate solutions to reduce fraud. So a useful tool, but maybe not where a solution will lie.

MR. CHAPMAN: Dan.

DR. SEITZ: My question was also about testing. Is testing mandatory or is it discretionary? Is it mandatory at a certain level, and Peter you mentioned that some types of tests really don't yield useful results because you can hide the application of pesticides or whatever so as to not -- so as to sort of fool the testing regimen.

Are there any tests that you feel might be routine or should be mandated at a certain level that could be reliably used? I appreciate what you just said, that by itself it's not the magic bullet that's going to solve a problem.

MR. CARLSON: So I will defer a little bit to our certifiers on the requirements of testing. I can say for the -- it's not a requirement, although when we're purchasing from organic producers in the USA, testing is not part of our normal protocols. It's really expensive and it doesn't yield much. So generally speaking, testing is not required.

We as a company, Terra Ingredients, AgMotion and a lot of other importers, for years we've been testing and doing self-reporting. We self-reported recently as last summer on some shipments that had some pesticides in them, because we decided to do testing.

But we didn't have to do that. Since last summer, there was additional on the areas of risk, additional testing was required out of certain -- the Black Sea regions, and I think that was a good -- it was a good response. I would just go back to soil testing as being -- as a good part of the solution here. It could help. Does that answer it for you?

MR. CHAPMAN: Dave.

MR. DILL: Could I add something about testing in produce?

MR. CHAPMAN: Yes, yes.

MR. DILL: I just wanted to say that in produce, it's not something that's really going to help a lot or is really going to slow down the produce trade. So you don't see it that much unless produce is going on for further packaging or processing, sorry.

The turnaround time is way too slow, and if you are going to test, then it's really wise to hold that product before you -- until you get the test results, and then you're already losing two, three, four, five days maybe a week, and then you have to distribute the product, get it on the road, and you're probably going to see twice as many rejections over quality from you, you know, from the distributors and the purchasers of the product.

So when you're talking about residue testing, please consider produce too.

MS. MAREZ: Depending on the lab, it's on average eight business days to turn around produce tests, depending on how many pesticide residues they're testing for, and it's around $300 per test. So for something like a precious where it's, you know, not going to work.

MR. CHAPMAN: Dave.

MR. MORTENSEN: Yeah. I think we've gotten a consistent message about a number of things, and it's been enormously helpful from this panel and the previous panel. One thing that I've been also struck by is the human relations dimension of this on the ground, and personally I would love us to move away from boots on the ground to thinking about engaging people where they are, meet them where they are.

And so the question is with six-fold increases in imports in a matter or four or five years, Monique I was intrigued with your data set there and I've been reading ERS data a lot, just trying to understand this. Do we have the human capacity on the ground engaged with local

growers, understanding the cultural nuances and the sort of things like, you know, how fields that have no wheats in them, that's really hard to achieve with a cultivator.

That's probably a place where herbicides were used. But doing that in a very thoughtful way that we're engaged and not off-putting Americans coming into enforce the regulations. I was intrigued with Albrecht's distance to the eater idea. So do we have the boots on the ground?

MR. CHAPMAN: Anyone want to take that? John, and we can toss is to the certifiers. John.

MR. BOBBE: Well, in the case of what's going on in the Black Sea region, it's not a matter of necessary. We have contacts to find out what goes on to impact our markets here. But what you have organized crime. You're dealing with organized syndicates, the Turkish, the Ukrainian and the Russian.

They're the ones that are going in and

making the contact with the producers, and basically as it was told to me in the Ukraine, is that -- by some of the organizers of the conference, they're going into producers and saying you sell us your grain or we'll make sure that you never sell another kernel of corn.

So it's not necessarily the face of the U.S. on this thing, but that's what you've got operating, and I can only speak for the grain aspect of it.

MR. CHAPMAN: Harriet.

(Off mic comments.)

MR. CHAPMAN: Sorry. Did someone have something quick?

MS. HEITKAMP: Yeah. I just wanted to react a little bit to your question. One of the key elements of the GOSCI guide book is a supplier questionnaire, and really establishing that relationship.

You'll hear from some of the more seasoned importers that developing those in-person relationships are the best way of

mitigating fraud, where tools like blockchain can step in and it should be stated here you cannot change a blockchain ledger.

So everyone on the chain is connected. It's as though you've established that in-person relationship because it continues with you through every section of the supply chain who's integrated into the chain. So in the absence of having someone in the field shaking hands with the farmer, knowing that that trail is unchangeable at the point it is entered into the chain, has kind of given some folks some assurance in that way.

But you're absolutely right. Creating those in-person relationships and long-standing suppliers is the best way to mitigate that problem.

MS. BEHAR: So three quick questions, the first one for Monique. Is the use of the HS codes mandatory and who verifies that if something is labeled under an organic code that it truly is?

MS. MAREZ: Yeah. So it is -- there is no official penalty for not using the correct HS code. However, it does flag an extra peak like in this case with cracked corn versus dent corn. The recommendation and the expected requirement is that you use the most specific code for the thing that you're importing or exporting, because it's assigned to tax.

But because these are ten digits and doesn't change the tariff at all and we don't want it to change the tariff, we don't want organic to be taxed higher, it's easy to kind of read between the lines there and pick whichever code sort of suits you. However, that's not what is supposed to be happening. With more organic HS codes, it would be more common to use that.

MS. BEHAR: And then for Peter, do you think in the fraud that you've seen, that there is -- sorry to the certifiers -- some negligence or something that you think that the NOP could in their connection with the certifiers to increase the oversight there, or do you think that the

certifiers are victims as well?

MR. CARLSON: I can't speak very well to the -- to the certifiers and in different areas. I certainly think that's possible.

I can say in all of our dealings with the inspectors that I've dealt with personally, they've been extremely professional and they've asked the right questions and they know their business and they're well incentivized to find the right answers.

I do think the inspectors are -- probably have some impossible tasks with limited time and money like during the inspections. So even with the assuming the best of intentions, it's still a very difficult task with their mandates.

MS. BEHAR: And then lastly for Mike, do you think that the definition for retailer needs to be changed and the rule or somehow some guidance to make sure that we cover those retail warehouses, and also I think it was 16 years ago OTA put out a book called GORP, "Good Organic

Retailing Practices," which myself and Joyce Ford were co-authors, to try to help retailers understand handling and perhaps kind of reinvigorating that might help them understand better to their part in the chain, and be asking questions that they should be at the loading dock as well.

MR. DILL: Well, I'm not familiar with that, with that publication. But one thing I will say, and I saw this in an article a couple of days ago which I thought was really fitting for this discussion, is Amazon has been -- they have warehouses all over and they have produce in those warehouses.

They have been asked by the FDA to register under the Bioterrorism Act for eight years now, and they have not done so, and they're not intending to. The FDA asked routinely for them to register, and their response is we are a retailer. We do not need to register under that Act.

So their mind set is that they are a

retail operation. They're not a distributor, they're not a wholesaler. They are a retailer. So under NOP, they actually have two loopholes. They can be exempt as a retailer and they can be excluded as an uncertified handler.

Then your other question, I feel that changing the definition of retailer isn't going to do it. I mean we can add to that definition. But I think the main focus would be to change the exclusion and add something in there about the nature of the product. So how it's packaged and let that be the determining factor of whether there is potential for commingling, contamination, fraud, based on the nature of the packaging.

If it's not sealed, that there's no way to determine if it's been tampered with, if the product has been replaced or product added to it, I think that should be determining factor.

MS. BEHAR: Thank you, good idea.

MR. CHAPMAN: Emily.

MS. OAKLEY: This is for John. You

mentioned that each vessel has a voyage path, and that that might be a tool. Could you elaborate a little bit more on that?

MR. BOBBE: I have not, because I just learned about it yesterday when we asked about it. We're very concerned about the ship that was rejected yesterday.

We know it's heading for the Panama Canal, and our concern is is it going to try and dock at another U.S. port or go to Canada and bring it in as Canadian product. So we did make that -- we asked only yesterday and they said yes, there is a -- our source said yes, there is something like that. But I have -- we haven't investigated it yet.

MR. CHAPMAN: Okay. John, I want to ask one last question, and then we're beyond our time. So then we'll take a break and then we'll reconvene with everybody in about ten minutes.

But so you talked about reporting ships to the NOP and about, you know, I've heard from your comments that you expected them to be

able to track these, or figure out these ships have fraudulent product on them on their own accord.

So how are you identifying these ships that you're reporting, and what's your expectation for the NOP related to those?

MR. BOBBE: Well, that comes from a conversation with Miles McAvoy, where he said we don't track ships, and we had a discussion. Just because I have said we don't get our information from the NOP doesn't mean that we don't -- or don't welcome cooperation, and that is we've had some very respectful conversations with Betsy Rakola about this issue as well as Miles McAvoy.

But there's -- Betsy mentioned at our meeting in LaCrosse that she came, generously came to, that the USDA tried tracking ships by one of the services and it didn't work out, and they found out that they were from the government, that they had disappeared.

Well, we have various people now that do. You can pull up something called

Vesseltracker, and it will give you every ship, whether it's military, whether it is a yacht, whether it is a cargo ship, the kind of cargo ship and where it's at and which port, and it will tell you --

MR. CHAPMAN: But there's thousands, literally probably hundreds of thousands of those ships. So how do you identify? Like what's your expectation around identifying organic ships?

MR. BOBBE: The Vesseltracker actually identifies with a yellow triangle which might be the ships are either container or cargo ships. That's one way. There's a number of other services out there. But you can actually go and we have been able to watch simply with Google. We can watch the position of the ship when we know it's the Bellingham shipment in the harbor.

MR. CHAPMAN: So my question is that's once you've identified the Bellingham ship. So how do you identify the ship to track?

MR. BOBBE: How do we identify the ship?

MR. CHAPMAN: Yeah.

MR. BOBBE: I mean in this case, we've been able to go to the port, some of the port websites that will tell you. That's how we uncovered the ship that left yesterday that was rejected. We knew on the 21st of February from our source there was a ship coming in and you go to the website and it's listed. Now some of the port websites are not that forthcoming.

MR. CHAPMAN: So you said "from my source." What's this source like?

MR. BOBBE: We have people that are interested in cleaning this up. Our marketers are in the grain markets across this broad area day in and day out. We have people that talk to us. They know that we're fighting fraud, and they're willing to supply us with information, sometimes by a third party introduction that we've got some very, very sensitive sources that are in a position to give us that information.

MR. CHAPMAN: So you have a whistleblower of sorts that's providing

information to you?

MR. BOBBE: Well, if they were -- sort of. But if they were a whistleblower, they'd probably blow their business.

MR. CHAPMAN: Yeah.

MR. BOBBE: There are any number of companies out here that are willing to -- they're not willing to stick their head up, but they're willing to talk to us. I mean our farmers have got nothing to lose at this point for us blowing the whistle.

MR. CHAPMAN: So I guess the connection I'm failing to make is they're talking to you, but they're not talking to the NOP, and it's this source that we're relying on to figure out these fraudulent ships are in motion. How do we make that connection between your sources or these sources and the enforcement authorities?

MR. BOBBE: Well, I think it's going to have to be a level of trust, and right now in the farming community it's not very high after the disaster that they've been through. Now how

you get people -- I mean and I've been in industry most of my life.

It's extremely, extremely difficult. I mean for us to -- we have gotten a reputation and therefore people feel comfortable because we're going to treat it so that they're not -- they're going to be protected.

And why they don't feel that with the NOP at this point, but part of it is that some of these people are seeing a lot of grain go by their doors that they know is fraudulent, that they could be making money on but they're not going to get their hands dirty.

MR. CHAPMAN: Okay. So we will -- oh yeah, sorry. Erin, have you got something there?

MS. HEITKAMP: Yeah. Just one, I think, point of -- kind of a simple answer to the question, is to the extent that a ship is registered as bound for the United States, containing corn or soy, it's organic product, even if it doesn't have an organic HS code associated with it, because the U.S. doesn't

import corn or soy as a general rule.

So that right there is your flag. As to the specific system or source for that information, I'd be happy to share some specifics with the NOSB. There's multiple sources for that information.

MR. CHAPMAN: Okay, yes. That would be nice. That would be great.

MS. HEITKAMP: And the European Union's very direct and specific approach is requiring that all imported organic product into the European Union, that trade is now registered through the traces system.

MR. CHAPMAN: As organic?

MS. HEITKAMP: As organic. Every transaction that is coming into the European Union that is expected to be sold as organic within that territory is registered.

MR. CHAPMAN: Thank you. So we will now move to a break, reconvene at -- let's just make it at 11:30, promptly at 11:30 with the full panel. If the other panelists could come up now,

we would like to take a photo.

(Whereupon, the above-entitled matter went off the record at 11:15 a.m. and resumed at 11:37 a.m.)

MR. CHAPMAN: Could the Board members take their seat? All right. We're coming back into session now. We have the full panel assembled for questions, and at this time I will hand it back over to Scott.

MR. RICE: Thanks, Tom. All right. We've got everybody back posing for a photo.

(Off mic comments.)

MR. RICE: Okay. Thanks Jenny.

MALE PARTICIPANT: Do we get coffee?

MR. CHAPMAN: Sorry, and just -- so we'll run this for about an hour. That will put us at what like 12:45. We'll break for lunch then until about one, and then reconvene. If any panelists need to leave for prearranged flights, please let us know and do so. But if you guys can stay, that would be great and we'll just continue to run though these questions.

MR. RICE: Thanks, Tom. Welcome back and thank you again. We did have a couple of lingering questions from our first panel that we wanted to loop back to. I have a question myself, but let's get to -- we had Dave and Asa and Tom.

MR. MORTENSEN: I guess to Albrecht and Silke. I was really struck, and I kind of asked the question of the other panel, about the human relations dimension of this issue.

What are your thoughts about the kind of staffing that we need, of folks that are shaking the hands, in Monique's words, in this blockchain system with the growers on the ground and the communities that are doing the local handling?

I don't have a good sense internationally what that needs to look like. Do we have the right number of folks on the ground to manage the flow of goods? As a person who's naive about this, a six-fold increase in the flow of goods in a matter of a handful of years leads

me to think that we are understaffed.

MS. FUCHSHOFEN: Wow. That's a big question, and honestly I don't think I can answer it.

MR. BENZING: I fully agree that there is understaffing. I mean of course the private certifiers, since they are market-driven, they have reacted to the increase of the market. I mean we have increased our staff in the respective countries where we get demand for certification.

But as I tried to explain before, if private certifiers are not strongly controlled by governments, then the risk of business interests getting more important than integrity is very, very high, and at that level of government people I see this yeah, situation of not enough resources being dedicated for that. Again, it's yeah, just the -- I mean of course I'm not longing for more audits, because they cost us a lot of money.

But I see they are necessary to have

more audits in the countries where -- by the NOP in the countries where these products come from, and more audits that really focus on the real issues. I mean if the last office audit that we had from the NOP, I think we had like 20 non-conformities. There was not a single one that I would consider substantial.

It was all the kind of thing the wording on the certificate is wrong, procedure number so and so is lacking, this and that. But there was not a single non-conformity that has anything to do with the things we're discussing here. So the whole system is based on the assumption that if you have the right procedures and if you follow these procedures, then you will be doing the right thing.

But then the whole auditing is focused only on the procedures, but not -- nobody really checks if those procedures lead to what they're expected to lead to.

So I would say more resources for monitoring what certifiers do, and using those

resources in a more efficient way. For example, doing it unannounced with five man-days of unannounced audits, I think you reach far more than with 50 man-days with five months of notice.

MR. BENZING: I do have -- sorry. Can I? I seem to take a moment to figure out what to say. I think it's less a number, and a question of number of people than of determination. If there is real determination to deal with the issue and find the fraud, that is I think the first question.

And then the second is do we have the system to break it down, you know, where you can -- if there is a big question, you have to have steps, you know, intermediate steps to kind of look at each part. What do we -- you know, and action items. What do we need to accomplish this, and then you can come up with a number.

And we are talking about risk-based approaches here, and what I am observing though it's pretty -- we know there's a risk when there was a fraud, and that's kind of -- we're a little

in a reactive mode with that. Say we figured out the grain and the, you know, the imports and there seems to be issues with dairies also when the NOP is talking.

And so say that's off the table and there is no other finding, you know. Like how do we do this practically, basically? I do have a short, you know, I've prepared something that I would love to show, but I don't know if there's the time. It's up to you. But like a system that would allow kind of that, you know, to break it down and see what's needed.

MR. WELSCH: We're doing some things to try to prevent that, not always by going out and doing more audits with inspectors, but to do more with our reviewers to test the system. You know, are they able to trace things back the way we want, ask them for copies, and finding that that's enough to identify that there are some gaps in what some of our operators are doing.

We haven't discovered non-compliances necessarily or fraud. You know, it's organic

product we've been verifying. But there have been gaps in some of their documentation in the past.

So by doing this, you know, from our office with reviewers, we don't have a lot of expense. There's a lot of back and forth, a lot of information to be gathering. I would encourage the USDA and the NOP to do more of that type of auditing.

When there's somebody suspects a problem or identifies something high risk, then ask all the people involved in that entire supply chain or the part of it that's highest risk, you know. Ask people for information and it's the kind of records that should be readily available. So we have -- we expect a really quick turnaround, you know.

We're not saying oh give us 30 days and we want this. No. We want this within the next day or two days, you know, depending on the what day of the week it is. So we can address that fairly quickly, even when we're dealing with

people on the other side of the world where you have to wait at least a day to get the reply.

But there's a lot that can be done if there is that willingness or intent to want to accomplish it.

MR. DILL: Can I add something real quick?

MR. RICE: Sure. I just wanted to offer Silke we might, if we can't get to your idea you mentioned, you can always share that with Michelle. You can share it with the Board members, so but I also want to get to all of our questions. Mike.

MR. DILL: Just quickly what Silke said is really accurate in terms of being proactive and when determining risk, and there's no one better to do that than the members of the trade and different sectors of the trade. And so I encourage certifiers to engage with their trade members at different times of the year to ask what time, you know, what seasons there might be more say pineapple fraud or when there's

shortages of supplies, those things that the trade experts know that could help in this process.

We've invited our certifier to spend a day with us. It hasn't happened yet, but the offer's still on the table.

MR. RICE: Thanks. We've got Asa.

MR. BRADMAN: Yeah, I think actually my questions were already asked before. I was just interested in the discussion around testing that was raised, and I think that maybe there's more discussion warranted about what existing programs there are, and is there any review or modification that might be helpful. But as we kind of said in an offline discussion, it's kind of a blunt tool and not necessarily effective in many cases.

But I think if there's any additional comments, that would be great. But if -- oh okay, good. So --

MR. RICE: That tied into my question as well, so I'll let you start with Erin.

MS. HEITKAMP: Yes, if I can start, and I would look to the certifiers on the panel to speak to the numbers of the data. But I think big picture, if you compare the European system to our system, we test just a tiny fraction of the organically certified products that are sold in the United States, and that's largely because of the fact that the system is really built around practice and process, so the point that was just made.

Ultimately though, I think there is a need for testing to play a larger role. It doesn't need to be the blunt tool, the ineffective tool and the expensive tool that disrupts our operations. But to the extent that it can be used as a backstop and an extra tool, in particular at the high risk points in the supply chains, it's a tool that I think we need to use more rigorously.

MR. RICE: Jake.

MR. LEWIN: Testing is -- we've been a proponent of testing, you know. You can't

define or prove organic through testing, but it really is an important tool. I think that there's a bias sometimes towards testing finished goods. That's natural, but we also test soil, plants and what we need is the support of -- collectively I think what we need to work together on is to help identify what we should be testing in given situations.

And so effective complaints that detail the nature of the complaint, the way the production could be illegitimate, can help direct appropriate testing. Because sometimes the best test is in the field, but not the crop, it's the leaves or the soil. We've had great experiences with that in terms of we currently do a proactive test on all new applicants in Mexico.

As a result of that, we've had about a maybe ten percent rate where we have denied certification, often not because of bad kind of fraudulent practices but as much not yet ready with controls in the system or not being able to come up with why the results are there.

That kind of thing, and that's principally testing plants, not crops, not the finished good and that really has a real role. We just all have to embrace it and do it, and we probably all need to do more. What our testing is not valuable for really, honestly I've been thinking about this, data.

Our testing is built to find things principally, and so it's not kind of a survey of what's out there. It's a survey of what if you're looking you might find, if you're really looking for problems, if you're testing in the worst possible place.

If you're testing the buffer that's meant to catch the pesticides, well the fact that you find the results, maybe that's appropriate.

MS. MAREZ: One of our key trading partners, Taiwan, tests in-market and it's a government program. So it's not the expectation of the certifier or the trade, but in fact in this case it would be NOP going out to grocery stores, buying product and then testing it

themselves.

MR. WELSCH: One of the tensions, I guess, about doing testing, we are required to test at least five percent of the operations that we certify. But that's only five percent of the operations. It's, you know, it's a much tinier percent of the products that are there.

But it's at our expense. So there's not an incentive to test more than that because of the cost is borne by us, not by the people being tested. Even if we think there's a high risk or even if we detect things, you know, we're not able to pass those costs back to the people where we're finding it.

Where we test in the supply chain is also a problem. We often get reports from Europe at the end of the supply chain, and then trying to figure out well, where did it get contaminated, you know? Was it at the grower or all those intermediate handlers?

That's very difficult. We've discovered some in the U.S. It was imported,

tested positive but okay, now we've got a long chain to investigate. Where did that come from?

MR. RICE: Sure, Albrecht.

MR. BENZING: I was really surprised when Mike said that you didn't do much testing for produce because I mean apart probably from cotton, there are no other crops where so many pesticides are used as in fruit and vegetables. It's also where we find this residue.

I mean of course, if you have only a few days from farm date to consumer, you may not get the results before the apples are eaten or the lettuce is eaten. But I mean the test is not primarily for finding out about that particular batch, if it is compliant or not. It's for finding out about fraud that goes on in the supply chain, be it at the farm level or somewhere else, that if somebody mixes up things.

So I would strongly recommend that responsible trade companies also for this kind of product do more testing, because -- and report to the certifiers, because it's necessary. I see --

MR. WELSCH: This is an area where the NOP could help could help a lot, by going into some of these distributors who are receiving produce from many different sources. You could take samples and it could be at the NOP expense, to really do a comprehensive survey of how much contaminated product is there, and that would remove some of the difficulties we have as certifiers or companies in the trade that conduct that kind of testing on produce.

So if you've got some extra money, there's another idea of where to spend it.

(Laughter.)

MR. RICE: And just a clarification. I wanted to be clear that it may not be that Mike or the trade is doing any testing, or not as much on fresh produce per se, but -- and my certifier colleagues are welcome to jump in. As a certifier, we indeed do testing on fresh produce, and that is something that we do a fair amount of.

I agree with Albrecht's points, that

it shows if the system is working or it shows, you know, it can show fraudulent activity. But I just wanted to make that clarification, and I think Tom had a clarifying point.

MR. CHAPMAN: And Jake, can you talk a little bit about what the state of California program does related to testing?

MR. LEWIN: Yeah. There's been two developments in the last year that I find have been very helpful with regards to principally finished product and mostly produce testing. The California State Organic Program does testing. They have a big budget for tests, a little closer, okay.

They do -- they currently do testing both for pesticide residue and GMO in California. So that would be at point of market sale. So that's at farmer's markets and in supermarkets, and they're doing a GMO sampling program in livestock, feed and other GMO potential products.

In addition, I have found that the Department of Pesticide Regulation in California

also does pesticide compliance testing, random sampling.

Both the Department of Pesticide Regulation and the USDA's pesticide data project, which also does food sampling testing, in both cases when those programs test an organic product and find it to be positive, in any way, at any level, often quite low, they then remand that test down to the state organic program, or in the case of the USDA, to the National Organic Program, and they send those to us and we investigate them.

That's been a very positive development in the last year, because what it does is if there's a potential problem, it could be -- it could be unavoidable residual environmental contamination that maybe we can't find causation. But what's happening now is that those are all getting investigated, and that's a huge positive development.

I would just say the principal value of testing produce is to look for problems in the

system, mistakes, problems, fraud and these kind of actions are really improving.

MR. RICE: I have a follow-up, but I'll defer to Tom. We've got Tom, Harriet and Emily.

MR. CHAPMAN: I wanted to move to the subject of uncertified handlers. It seems to be -- it seems the advice overall from everyone from all corners is that we should eliminate as many uncertified handlers as we can. So I kind of have a question for everyone on the panel that can answer it.

I want to start maybe with Albrecht, but then expand it to everyone else, and answer it in the simplest way possible. Either operations who should be certified who aren't currently, or who should be excluded from certification.

But Albrecht I want to start with you particularly. How is it operating in the European system? Who is excluded from certification in the supply chain in the European

system?

MR. BENZING: It's basically only retailers and only small retailers that do not have their own stores. Anybody who's -- because the scope of the regulation says that anybody who stores, produces, trades, imports organic product is subject to -- must be subject to certification. So even supermarket chains that have their own stores, where they -- from where they distribute products, are subject to certification.

MR. CHAPMAN: What about transit?

MR. BENZING: How's that?

MR. CHAPMAN: Transit, freight trucks.

MR. BENZING: No, no. Transport, no, no.

MR. CHAPMAN: But the handling? If the products are in a bulk format, the handling of that, the loading of those trucks, the operation would be certified?

MR. BENZING: Yes. I mean if it is -- it is the owner of the product that must be

certified. If he outsources that to a forwarding company, than either that forwarding company can be certified as a subcontractor, but it must be inspected or it can be certified on its own.

MR. CHAPMAN: Okay. Then generally for everyone, who should be certified that isn't? I mean I think we know a lot of those. We don't need to go over traders, importers. But there's, you know, there's been some conversations about warehouses, at what level a warehouse should be certified. Who should be excluded might be the easier question to answer. Help us start crafting some definitions.

MR. WELSCH: I think how you have it defined in the rule is that handlers must be certified except for retailers that do not process, and the handlers that were discussed earlier that were retail distribution centers, those are handlers. They're not excluded.

So those retailers who are claiming they are part of the exemption that was mentioned earlier, are not exempt. They are handlers by

definition because they are doing processing. They're relabeling, repackaging, you know. So those -- but I think everybody except retailers ought to be certified. I can't think of anyone that would be low enough risk not to include.

MR. CHAPMAN: So if a retailer takes a bulk sack of oats, a 50 pound sack of oats and puts it into a ten pound, you know, dispenser thing that, you know, a client come out and get a little bag of oats, is that -- if they put a label on that saying it's organic oats, is that processing?

MR. WELSCH: It is processing. Whether that's an activity that's excluded or exempt, we have to refer back to the regulations on that.

MR. CHAPMAN: Yeah. I mean I guess in your expert opinion, is that something that should be exempt in the future?

MR. WELSCH: It does seem to represent risk because of the people in the stores. Do they, how do you know which bag they're pouring

into that? You know, if they're going to be labeling as organic, who's going to check that it was an organic bag that was dumped into that container?

MR. CHAPMAN: Yeah. Everyone go for it. Jake first, and then John, yeah.

MR. LEWIN: Right now, the biggest -- the broker-trader and those parties, the parties in the middle of the supply chain, those are by far the place to focus on, given that those are the parties who have been correlated with major incidences of fraud in the U.S. and in Europe when they have occurred.

So if we were to create an exclusion, probably a sensible place to make it or to consider would be people who simply handle or move finished, packaged, retail goods, because that's when you start getting into distribution and you've got pallets, cans of soup in master cases moving through warehouses while they're -- you can't eliminate necessarily like all risk in the system.

By far our biggest problem is the areas that are in the middle of our food supply that are outside of certification. So focusing there would be the way to go, and then potentially we could give retailers directives about what they must do, what they -- how they must label without requiring them to be certified might be a pathway that we could be successful in this.

MR. CHAPMAN: Real quick follow-up to that. Albrecht, in the European system, are distributors of packed, finished goods like labeled cans of soup, are they exempt from certification?

MR. BENZING: No, they are not, but I agree with Jake that it's not really a major point of risk where many things would go wrong.

MR. RICE: Thank you. John.

MR. BOBBE: I think we had this discussion a little bit about certification with regard to transportation, and that is that on grain at least, the trucker is required to

present a washed truck affidavit at the farm. It's the farmer's requirement to inspect it, and if you were going to go that far, and I mean you're going to get into in some cases they're trucking grain from these ships.

They're not just necessarily trucking it or loading it on trains. They're not necessarily just putting into a certified elevator. That would be really a potential problem, simply because of the logs, the ten hour log limit, electronic logs at this point, and we're running into some really significant potential problems at this point for organic cattle that have to move beyond that ten hours.

So in our case, there are ways of sealing the truck once it leaves that part of the -- aspect of the transportation. We would be in favor of excluding, because we just had that discussion and replied to comments about two years ago.

MR. DILL: And for us in produce, it's a little different. But I think that we would be

okay excluding pretty much all of the transit operations, just because trucks are almost always loaded by the operation that's holding the product.

So if there's an agreement or they have procedures in place, it's going to be, and if we certify everyone in the supply chain, all the handlers, those trucks will be loaded and then unloaded by a certified operation.

So we feel that anyone handling any product that's not finished, labeled, because even with the can examples, I've done plenty of inspections where people are moving sealed cans in boxes that are going somewhere else to be labeled. So it should be labeled, sealed in tamper-evident packaging need to be certified. If you're storing it, handling it, selling, buying.

MS. MAREZ: One recommendation might be to require that all documents created by direct parties to an organic transaction include organic ID, so that even if they are passing

through someone who is simply moving from one container to the next or whatever the case may be, it's explicitly recorded on those transfer documents that this is an organic product. Without that organic ID, there is a flag raised. There's no reason it shouldn't be identified through that process.

On the point of retailers and the example that you gave of someone taking a 50 pound bag and putting it into a ten, it sounds like handling to me. At this stage in the game, retailers are reaping as much benefit from the organic label and the organic industry as some of our farmers, and there's no reason why they shouldn't have a shared responsibility in ensuring organic integrity all the way to the consumer.

MR. RICE: Sam.

MS. FUCHSHOFEN: Yeah, I agree there and what comes out of stores is not usually tested, you know. They get licensed boxes of apples in and put their own sticker on, and you

don't actually know, right, if that's an issue or not, or do we. I don't know who goes to retail stores and tests.

So I would draw the line with just tamper-proof packaging. You know like, there's like these finished retail products that you just don't change, you know, that there's nothing you do. Everything else, you know, anything that comes in these boxes, you know, where product can breathe and where you can open them to take something out that's rotting, that should be certified in my mind.

And even cans. You know cans, they're produced and stored as brights. I've done some, you know, canning inspections and so what they do, they have -- there's no label on there, and the label comes later. So anybody -- and it's almost like a box of apples, you know, because they take them and then they put the labels on. I think they should also have to be certified.

MR. CHAPMAN: They are.

MS. FUCHSHOFEN: They are, but okay,

yeah.

MR. CHAPMAN: Are and should be.

MS. FUCHSHOFEN: They should be, right.

MR. CHAPMAN: Yeah. The application of the label to the processed product requires certification. I think we clarified that yesterday in the public comment.

MR. WELSCH: It has been recommended by the ACA through our best practices that the NOP adopt, you know, the idea that it's only the -- it's any package that is not tamper-evident like the produce. Any produce that can be open or closed should not be allowed to be excluded from certification.

So anybody who's handling those should be certified, and that would not require a rule change. That would just require the NOP adjusting the definition of what it means to be enclosed in a container to be excluded from certification. So if you look at that again, you know, that could be something that could be done

immediately.

Extending certification requirements to others may take a rule change, but at least that's something that just takes guidance from the NOP to implement it immediately. There are -- when I look, think more about things that go on in retail stores, they often receive boxes of fruit with additional stickers to be put on that fruit and there's extras.

So a store that handles both organic and non-organic has these extra organic stickers they can put on. You can also go to Amazon or any printer and order those stickers. So you know, if you want another suggestions where to spend this money, do some of your own inspections of retail stores, you know, to see what is being sold as organic. Can they really verify that?

It's in the rule that they're required to keep those records, but I don't know if anybody is doing any verification of that, and it's only the USDA that has the authority to do that.

MR. RICE: Okay. We've got Harriet and then Emily, A-Dae, Tom.

MS. BEHAR: Okay. So I have a few things. One is there's companies that are nationwide that work with many co-packers, and the co-packer processor is certified. But the brand name, I mean you know, I'm just going to call it ABC, but you all can think of who it would be. They're not certified, but they send out the packaging to their co-packers, and really it's the --

To me, I always felt like I want to be counting the labels, you know, about how much of labels did they put out there and how many products did they actually then sell as organic and not too much. So that's one, and I'm not sure exactly how to do that except again these larger companies that are working with numerous co-packers that are all making, you know, whatever, baking bread in 16 different bakeries around the country going to their stores or whatever.

But the two questions I have, unless you have something on that, one is do you think it would be useful for the NOP or some other entity to set up a tip line for people who feel that there's been fraud committed? It could be anyone in the supply chain. It could even be an inspector or a certifier who feels too exposed, and it could be anonymous or not.

I don't know how you feel about that, and then also should higher volume businesses be mandated to have more audits, because that's where of course you have more risk. So the dollar volume or physical volume, should there be, you know, two scheduled audits a year and two unannounced or something like that.

MS. HEITKAMP: I'll address your second question about the tip line. So there is an email address that you can send concerns to the NOP about.

But in my experience, that essentially tip line is a little bit of a black hole. You send your information in and you don't hear

anything back. Having said that, I think that the Compliance Division at NOP is making some significant strides in this regard, and has been very open and inviting to the industry to provide information when they have -- when they suspect there's fraudulent activity. So I think that tide has turned.

The other part of this, to your point about a tip line is I think we as an industry in collaboration with NOP need some avenue for communicating concerns in real time. I think what we have been -- Pipeline has been doing is essentially using the OTA GOSCI Committee as an avenue to do that on weekly calls, because that's the best way to get the information out.

We've also been very proactively notifying certifiers that are associated with organizations, where we suspect that they're involved with fraudulent activity. So at the end of the day, the point is that everybody has a responsibility to communicate, so that we can all respond in real time to hold accountable those

bad actors, and to avoid being put in a situation where we're complicit.

So it's a good question. I don't know what the exact solution is, but I think there needs to be a solution and it needs to be a coordinated one across industry and NOP.

MR. RICE: I see we've got Jake and Albrecht --

MR. DILL: Can I address the co-packer scenario?

MR. RICE: Sure, briefly.

MR. DILL: Your example is our worst nightmare, and something we experience all the time. Which is why we're asking for brands and brand information and private labels to be on certificates. You wouldn't even believe how many times we get a private label brand of berries and clamshells or any kind of product that's packaged, produce items, and the only reference on the label is that of the uncertified private label owner or brand owner or marketer, and there's no certificate that they have to show us.

So they send us a certificate that says "blueberries from Grower A," and then their product. I don't know how anyone is able to verify that product. There is no way. So we end up -- and they do have to put the certifier statement on that label. And so they -- most of the times put that of the grower or the packer. A lot of times they don't and they just throw a random one on there.

So we contact those certifiers and when products come in from Chile or Argentina, it takes days and weeks and language barriers to try to figure this out. At the end, we get a response back that says we have -- this label does not appear in our database, and we end up rejecting the product and that marketer sells it to our competitors around the road who doesn't do the same due diligence as us.

So that is why we would love to see brand information on a certificate. It doesn't even have to be a publicly available certificate, but one that is issued to that co-packer or that

manufacturer, so it is available to go with the product.

MR. RICE: Albrecht.

MR. BENZING: Yeah. I would say that I think we have a tip line. We have processes for taking in complaints. I think what would be a helpful next step would be for an NOSB statement recommending stakeholders file complaints when they're aware of concerns, with an outline for what an actionable complaint looks like.

All too often, the problem with complaints is either that they are not filed, they're filed -- or they are filed very vaguely or without sufficient information to allow follow-up. So if you send me, you know, people call and say I have a concern, but I don't really want to go on record.

We need the industry. We need to encourage each other that if you're not going on record and providing what you know, you start to become a party to the problem. So this body

recommending to the trade ways to deal with complaints effectively and to own them and bring them forward is the next step, because we have the agency there. They have ways to get them the complaints.

That's not -- the phone number's not the problem. It's the quality of what does and does not come in.

MR. RICE: Albrecht.

MR. BENZING: I strongly support what Mike said about the co-packers. When we started certifying to NOP, we were really surprised when we saw -- we were requested to approve labels with our certifier name on it, for a company who we have no clue about who they are and what they do.

But you know, we asked the NOP are we supposed to do that, and they told us yes, you're supposed to approve that label because it's a distributor, and a distributor is not required to be certified.

So we yeah, we're doing it but we feel

very bad about it, because it's -- yeah, there are many companies out there using our name, and we have no clue what they do with that.

MR. WELSCH: We started to put the --

MR. RICE: Sam, one sec. We had one, we had Monique and then Silke and then you, and still make room for questions.

MS. MAREZ: Just to reiterate what's already been said, the complaint system exists. It's about helping industry submit better quality complaints, which through GOSCI we've tried to develop a template to do that.

But when NOP receives a very qualified good complaint, the fact that it takes a nine month response time is not appropriate, and it disincentivizes trade to utilize that procedure.

So it would be very helpful if there was a commitment on the NOP side to improve that process dramatically from where we're sitting now, especially when the complaints are complete. I think that would make a big difference and help people use that tool more.

MR. RICE: Silke.

MS. FUCHSHOFEN: Oh, inspections have come to the -- oh, this is the second question I guess. Inspections have come to be quite a big, I mean there's a lot to cover. So I would say, I would not do more inspections. I would do longer inspections.

If it's a big, complex company, then maybe there is, you know, some red flag attached to it. I would say, you know, go for two day audits and maybe even, you know, if there is big red flags then two inspectors, because it's very tiresome if you're trying to get behind something, you know.

And then unannounced inspections, they can be very useful, but they are useful if they're kind of targeted, if you have like a question and you want to get at something. I'm not easy because sometimes you go, and the people who can actually work with you are not there, you know. You get somebody else and they don't know where things are and then what do you do?

So again, they are a good tool, but not just as an unannounced inspection, and especially sometimes, you know. If there is not a different angle to the inspection also, you know, if you basically cover the same things, you know. What kind of pest control do you use or something, these are all things that I think that doesn't help. That's enough to look at once a year.

So that there needs to be -- the unannounced inspection is an opportunity to do something outside of what you normally do. Thank you.

MR. RICE: Sam, and then I think we'll move to --

MR. WELSCH: Sure. On the private label question, we do issue label addendums for each private label company that our co-packers pack for, so there is a way of documenting every label that's approved, and even the labels that a company does not have co-packers, we have label addendums that we clearly record and have, issue

a certificate or an addendum to the certificate that lists every label we've approved.

So it's easier to track when we get questions that says certified by one cert, you know. We can answer those questions. I've been frustrated too by asking colleagues or, you know, other certification agencies about that and waiting months to get a reply. Actually, I've waited months and never gotten a copy of a label. They say yes, it's somebody they certify, but they've never approved a label for them.

MS. BEHAR: But when the company has labels and we're not counting oh where all those labels went, they could send it off to an uncertified co-packer, and make the product and put the organic labels on, because nobody's counting labels at that brand name person.

MR. WELSCH: We've raised that for over ten years in front of this Board, that there are private label companies who are not certified, or sometimes they are certified, but they send labels out to be packed that don't

match the ingredients that are going in them. And then when we make issues, they force the co-packer to find a different certifier.

MS. FUCHSHOFEN: Could I quick for one thing for this particular.

MR. RICE: Very quickly.

MS. FUCHSHOFEN: Sam I think earlier requested that who owns product should be inspected and certified, and I think that would go under that one. You know, if somebody owns a private label brand and they own it, they should be inspected, certified.

MR. RICE: I had a quick clarification for the program on -- you know, there was some questions around anonymity of complaints and what is the status or stance rather of the program?

DR. TUCKER: I appreciate the question. We do right now accept anonymous complaints. So as I mentioned Joan yesterday, in our front office, actually takes in a lot of complaints. We have revised -- Betsy's done really good things over in the Compliance and

Enforcement Division.

One of the things she has done is really, really looked at the intake process, because the reality is we do get an awful lot of complaints that really don't even have enough data to begin an investigation. There's, you know, evidence. It's not even at the evidence level. We don't even have a way of following up because it is so vague.

One of the things that Betsy has introduced that I think is working is when a complaint comes in and there isn't enough there that we can investigate, they're immediately writing back to the complainant saying we don't have -- here's the information that we would need in order to carry this forward.

What we have found, Betsy's been tracking this just to learn about it, 90 percent of them we never hear from again, right? So that is -- so we ask them. We tell them specifically here's the stuff. Help us help you. Here's what we need. 90 percent of them don't follow up.

So I think that by doing, having the filter, having the funnel better will help us with the responsiveness, because we are aware, the complaints are open a long time. We have to find ways to shorten that time, which means we do have to funnel better in terms of what we are able to accept as a complaint.

Are we going to miss some stuff in that approach? Perhaps. But when we think about the risk-based approach, educating folks on what we need for a complaint is incredibly important. We have started that process, because we do -- we understand the challenge of the really long time, but that doesn't help.

MR. RICE: Thanks, Jenny. I think we're on A-Dae.

MS. ROMERO-BRIONES: I appreciate the conversation around long term solutions to address this issue. I do feel like there is a sense of urgency from some of our panelists and our commenters, and understand I'm coming from a food and legal perspective. Are there inklings

-- and fraud is defined in the U.S. criminal code and we do have codes on trafficking, counterfeit goods and services.

Are there inklings or discussions in the industry about possible suits around this issue?

MR. LEWIN: I am aware of instances where people sue each other when goods are found not to be what they have initially claimed. I am aware of some and that, you know, is -- can be an effective methodology, private party suits. They're ugly, they're protracted. My perspective on this is that there is also an under-utilization of law enforcement. Private party suits are kind of a threat, but they're really a remedy to being cheated.

But there is potentially a role for us to bring our major concerns to law enforcement, where they can investigate and potentially prosecute fraud. We've seen that in a variety of places in organic, and it's possible that that's under-utilized and we could be moving our

concerns in a coherent way, with enough evidence that they can do investigations.

There's no reason that law enforcement wouldn't be interested in investigating organic fraud, and I believe that they've demonstrated that in several different areas, including in Idaho with regards to a gentleman selling non-organic seed as organic, with regards to liquid fertilizer, where people went to jail.

And so, you know, let's bring the FBI in when we need to. That would be great.

MR. RICE: I realized I passed over Emily, Jenny sorry.

DR. TUCKER: Very, very briefly. I think OIG, USDA's OIG can be a useful entree. OIG investigations take time, and so that is -- but they are willing and do take on these cases when they are -- they have evidence. And so let's not -- we don't want to underestimate the role of the USDA OIG in that, and that is another sort of line that one can call.

They are going to have a high

threshold for evidence, because when they take on a case, it's a big deal.

MR. RICE: Emily.

MS. OAKLEY: You know it was actually an appropriate skipover, because it kind of dovetailed exactly into what I wanted to talk about. Because over the break I was speaking with Laura from OTA about this exact thing, and she suggested the criminal investigation route. We were talking about the stop sale measure and the legislative challenges around that.

One suggestion she had might be a stop import option. So I wanted to just ask you guys about that and get your feedback.

MR. RICE: Anyone? Jake.

MR. LEWIN: I'm always a proponent of anywhere where we can identify a risk and apply heightened scrutiny to that risk, and we should use all legal recourse that we have and all measures that we have as either agencies or certifiers.

So if we can say that a given region

or product is higher risk and therefore subject to be it additional audits, if the authority is there and the evidence is appropriate and a stop import can be executed, that's assuming that that's the right thing given the evidence, sure.

And if legislative action is necessary, then that's just a matter of probably we need to come together and agree and work together to push that through Congress, because getting things through Congress I gather is challenging, right? But right, let's work together on that kind of thing and do everything we can.

MS. HEITKAMP: Just to clarify what you're asking Emily, are you asking about a stop import provision when that evidence, to your point, has already been demonstrated? Or stop import from certain countries or what exactly are you thinking?

MS. OAKLEY: Yeah. I mean that's a good question, and one I would have for myself as well. I don't think that -- and who would have

that authority as well is also another important question. I think some of that would have to be worked out within the community as to where that would be most appropriate and when. It's just the general concept I think right now.

MS. HEITKAMP: So I like the idea. I think it could be a highly effective idea, especially with coupled with some testing protocol. So to the extent that there would be a requirement to test product immediately prior to sealing before a product is exported, and then the remedy to the extent that there would be prohibited substances found could be a stop import upon, you know, entry into the United States, and then it does become a question of agency collaboration and authority.

MS. MAREZ: I do think that there -- oops, sorry. Am I jumping ahead?

MR. RICE: Go ahead, then we'll have Sam.

MS. MAREZ: I'm going for it. I do think there's an opportunity for NOSB to perhaps

recommend to the National Organic Program that they better utilize organic equivalency relationships to prevent fraud. There are of course our countries will have different requirements on what triggers a stop sale, what might trigger a stop import.

But coordinating on those efforts a little bit better enforcement authorities of trading partners and what their actions are when they have a domestic problem, and then maybe translating that over to an import case is definitely an option, and of course those equivalency arrangements are reviewed at least every few years.

There's an opportunity, especially with changing regulations in Japan and changing regulations in the EU, Canada, for us to address these questions now, where perhaps at the initial time those arrangements were forged, it wasn't as big of a concern. So utilizing our key partners to help with enforcement, I think, is a very important development in those relationships.

MR. WELSCH: I just want to remind you that we do have one exclusion from organic sale provision regulations. So if there is a product that testing results in contamination above five percent of the EPA tolerance level, we can immediately inform the operator that they must exclude that product from organic sales, and that would include imports or domestic products.

If there is no level set for that particular substance in that particular crop, then any detected amount would prohibit it from being sold, and we've utilized that a number of occasions.

MR. RICE: Thanks. Dan.

DR. SEITZ: One impression I've gotten from the conversation is that the range of rigor, so to speak, among certifiers, and that may be due to resources or understanding, and that for marginal operators within the system, to some degree they may be shopping around for a certifier that might be more lenient.

I don't know if that's a correct

understanding of how things work. But if that's the case, is there any way that you can limit the ability of someone, a certified operation to shop around, so to speak, for a certifier, especially if they've been identified as potentially marginal in terms of their adherence to the rules?

MR. RICE: Sam.

MR. WELSCH: The Organic Integrity Database has one element that helps with that, because if somebody withdraws from certification with non-compliances that's -- we're able to submit that information and the next certifier they apply to has access to know that.

And if they -- if somebody's leaving, obviously if the certifier they're applying to is less rigorous then it's, I guess there's a weakness in that. It is a problem, but I'm not sure there's a solution other than NOP's audits uncovering those kind of changes. But they could monitor -- that's something they could monitor since they have the data.

You know, where are certifiers going? Who are they moving from and who are they moving to?

MR. RICE: Albrecht.

MR. BENZING: Two very small administrative improvements that could, yeah, improve something very quickly without spending much money. If you go into the Organic Integrity Database, the default setting is for certified operations. So normally that's what people do. So you will not find the suspended and revoked certificates unless you are really after them.

So that's one of the reasons why sometimes operations that had been suspended by somebody else are then certified by another certifier because they are just not shown if you search under the default setting. So that's a very small technical thing that could be fixed very easily.

Another thing in the same context, sometimes under specialty in some countries, it's not so easy to identify if the company or farm

that had been certified by somebody else is the same that is now applying to us.

So if there would be something, some ID linked to each operation that cannot be changed, that would be helpful to prevent certifier shopping. Could be, for example, GPS tracking for farms or even for -- GPS coordinates for office locations, something like that.

MR. RICE: Erin and then Silke. No, okay. Silke.

MS. FUCHSHOFEN: Oh. I'm wondering, I don't know. I'm wondering if when there are certifier audits through the NOP, if there could also be like a risk analysis on that end, where these audits look into how the certifiers work. You know, not just going down the list through our requirements, but also kind of to get a picture of how, how many tests do they do and how do the tests come back.

You know, for example there's ways to do tests where you try to not find something, and then there's ways to do tests where you try to

find something. So if they're always testing no, where there's like kind of a system. But I do not know if that's practical. That's just something that comes to mind.

MR. RICE: Yeah. You might be about to submit my point. Jake, go ahead.

MR. LEWIN: There's a couple of things. I think we all need to look closely, and certifiers need to be careful about only operating where they have the resources to do so, where they can provide the appropriate personnel, where they can afford to do unannounced inspections, they can afford to return.

I think there's a tendency unfortunately to want to help a region develop its organic program, but at the same time potentially get over-extended. I don't have a ready solution for that, but I do think it's something we should be cautious about, and potentially there needs to be investment made if we're going to operate in an area.

The next thing that I think we could

do that would be practical would be to integrate the use of the international GGN number. This is an international repository of business names. The Global Gap food safety system requires each entity to register a GGN number. If that was integrated -- if that -- if every certified entity was required to register for one of those, it would add perhaps $50 into the certification system for each and every entity one time.

They could -- that number would then be tied to that business, and we have a better ability to be able to correlate that with that kind of movement if it's in fact happening. People change certifiers for a lot of reasons, you know, theoretically good and theoretically bad.

We just need to bring visibility to that, and then I think that the accreditation system can work with that and frankly certifiers need to look to see who's leaving and why, and kind of be honest with themselves about whether that's their failure or the operation's kind of

seeking an easier path, and then go from there.

MR. RICE: We had Tom, some questions.

MR. CHAPMAN: I wanted to circle back on something Peter brought up about the role of financial auditing of operations, and kind of get some of the certifiers' perspectives on is financial auditing occurring and what role is that playing in detecting fraud.

MR. RICE: Jake, Sam.

MR. LEWIN: Financial auditing?

MR. CHAPMAN: Uh-huh.

MR. LEWIN: We have one auditor who is brilliant at this kind of thing at this time. We're not doing -- we're not doing this, but I think that a mandate, a directive or a recommendation that we focus on this if the Board believes it's important and then you put forward a recommendation or statement to that effect.

That's something that we would pay attention to and consider ways to make sure we have the resources. I would think that the -- a financial -- it's actually a service that's

available. It might not be an organic inspector, but rather a financial auditor. Those are available services that can be hired out.

So I think that the mandate, I think part of the problem is is that we have real challenges where the expectation in the system is that every organic inspection covers every single point of compliance soup to nuts, and that the ability and the -- the ability on a risk-based basis to focus inspections on single areas of the operation would give us the autonomy and ability to do these kind of audits.

So that I don't have to send a person that knows everything about receiving and the organic standards, and maybe the organic inspection this year is a financial audit, and that suffices for the organic inspection. The alternative is we send another person at another time, or do this in response to complaints. So those are pathways to get at this.

MR. RICE: Silke.

MS. FUCHSHOFEN: I really like what

Jake said, and I want to add that I think sometimes it would be great to do even annual inspections with certain focus, you know, where one year you look deeply into this, another year you look deeply into that.

And that sometimes I wish I could make a recommendation for next year's inspection, you know. Towards the end of the inspection, there is something where I think gosh, if I started now, I would look at this, you know. But so to not just repeat the annual audit every year the same thing, but to, you know, yeah.

MR. RICE: Yeah.

MR. CHAPMAN: And I had another quick one and I'll stop. So I keep hearing about Mike, you've said it; John, I mean this is in some of your comments, that we find bad materials, some bad actors are identified. You guys reject them. So you know they get identified, they get rejected at the port. You don't buy them, and then they go on to the next guy.

And so it's not really -- I mean you

guys are doing a good job. You're blocking the fraud from your product stream, but you're not blocking the fraud out of the marketplace. How do we go about resolving that issue of after fraudulent activity has been identified, making sure it doesn't enter the market at a later point?

MR. DILL: Well, I should maybe clarify a little bit that if we don't have the information we need to feel comfortable about the product, we'll reject it. So it's not that it's always fraud. If we know it's fraud and we have evidence and we have enough to support it, we file a complaint.

I'm sure NOP has very many organically grown company complaints in their file. I'm sure that Jake has heard from us several times, because we follow up with certifiers. We verify labels. We do everything we can. But if we can't feel comfortable at it, about it at the end of the day at a reasonable time, then we'll just take the safe road and reject it.

But to your point, it does then end up somewhere else. It's not just it's going back on a truck and they're going to -- just like someone that's trying to find a certifier that's going to approve their process, they're going to try to find someone that's going to buy that product.

Hopefully, it will be someone that's going to keep the organic claim on it, but maybe it will be diverted to conventional. We're not able to do that. We don't sell conventional produce. But it's true that it does happen, and I wish I had a solution to that or I knew the problem. I don't know if it's a training problem, if it's integrity behind the company.

But everyone has a different level of knowledge of certification, and luckily organically grown has quite a few people that have bene in the trade for a long time and have been involved with organics. So we understand it, but other companies aren't that fortunate.

I really wish I had a solution or a better example, but it's a frustration that we

have and that's -- I mean I put it in there on purpose. I didn't hold that out, because it's something that is known and should be known that that's happening.

MR. WELSCH: Just to give you an idea of the time frame, you know, last March in 2017 we submitted a complaint on a product we knew to be using a fraudulent certificate to sell product in the U.S.

It was resolved in December. So it took nine months, and that was something I specifically requested can it be expedited, because this product is being sold right now. It's a fresh product, you know.

So it's still -- and I understand. I mean there's a lot of steps that go into that, and I think they started looking early, but there were some issues that kept it from being resolved that long.

MR. RICE: John.

MR. BOBBE: When it comes to grain, we have an immediate reaction. When word of that

ship got out yesterday that it wasn't going to be docking in Stockton, California, the prices of grain went up. But what has happened is it has interfered with the open operation of the markets and market transparency.

When you have a grain marketer that is marketing a farmer's grain, and in some cases for monetary purposes, tax purposes, planting season, there's a new crop coming in, whatever, and that buyer says you can bring it in oh maybe next week, a couple of weeks.

You can fire sale it to us, because the U.S., they're using the U.S. as a residual supplier, when in fact the market should be signaling we need more acreage of grain because we're importing about 40 percent of our grain, 70 percent of our soybeans. There should be a market signal there to farmers to produce more.

If they're going to take that risk of transition and get to the end of that transition period and they're going to get beat over the head because of a false market because of it,

that's' what we're asking for. We're not against the imports. What we are against is what this has done to the fair and open transparency of market operations on an extremely significant scale.

MS. MAREZ: The Organic Trade Association's Global Organic Supply Chain Integrity Task Force has discussed an industry-driven alert system. Of course, there are many risks associated with developing an industry-driven alert system because such systems can be manipulated.

A similar system was developed by BO -- oh heck. The guys in the Netherlands, the equivalent of the Organic Trade Association; I'm going to forget their name. But they had that system in place and then pulled it because it was being abused.

So one idea that we've thrown around is perhaps you're allowed to have an industry-driven alert system after you've submitted a complete complaint to NOP.

If you're willing to do that, why wouldn't you be willing to share it with your actors. I think the important thing here for us to remember, we need to develop an industry culture and commitment to prioritize organic integrity over supply chain consistency. That is extremely important.

So if there are going to be buyers constantly looking for that supply and are willing to take that good deal, you know, that's a problem and that's an industry culture problem that we can probably work on together through things like enforcement, if people understand that it's getting harder to bring in that product.

But the idea of an industry-driven alert system is one that we're talking about, but we recognize the inherent risks in such an approach.

MR. WELSCH: If I could just step in and say I think -- yeah.

MR. RICE: Sam, and then we're going

to have to wrap it up here and get to lunch.

MR. WELSCH: Just quickly. I just wanted to correct an impression I might have given. The USDA did start the investigation within a week of when I requested an expedited investigation.

It's just that the due process that they have to go through takes a long time for those to get concluded and become public. So I do appreciate the fact that they are starting the investigations early. It's frustrating, but I understand the due process. It takes a while to complete sometimes.

MR. CARLSON: I would just say that we're talking about reactive systems, which is important, and part of that, the reactive systems will only mean anything if there's penalties. Right now, there's not a lot of penalties, and there will be -- of course I don't know the legal environment for changing those penalties may be a large hurdle.

So I would just encourage that if

we're focusing on the preventative, the preventative will most likely come through systems of traceability. We have a lot of technology and ability that's not in place to encourage the traceability side, including that some of the financial traceability, especially for those intermediaries that are set up specifically to propagate fraud. Thanks.

MS. MAREZ: Well, and back to Dave's point. In addition to that, we also need to prioritize as a preventative measure better quality inspectors, better harmonization of inspection standards across certifiers. The ability to send out a high quality inspector no matter who the accredited certifying body is that's sending them out.

I think that is one key area for improvement, and of course the NOSB can work with the NOP to make sure that that happens.

MR. RICE: I think that brings us to the close here. I want to express our gratitude again from the panel and just incredible

discussion. At both the breaks, we heard some really great feedback from Board members and from members of the audience how useful this was. So thank you again.

MR. CHAPMAN: As we continue to work on this issue before we -- but yes, that's good. As we continue to work on this issue, you guys now have, you know, my contact. You have Scott's contact. Please reach out to us if there's items we didn't get to, if there's other thoughts that you have in how we continue to address this.

This goes to everyone in the room, but particularly to our panel who's here. Thank you very much for all your travel here and providing this testimony. A round of applause, and thank you.

(Applause.)

MR. CHAPMAN: Okay. So we will go into recess. It's 12:53 right now. We'll start back up at two o'clock. So that's like an hour and seven minutes.

(Whereupon, the above-entitled matter

went off the record at 1:53 p.m. and resumed at 2:06 p.m.)

MR. CHAPMAN: If Board members can get seated, we're about to get started. Okay. We have all Board members present, so we will come back into order. If folks can take their conversations outside, that would be appreciated. So the agenda has us moving on to CACS right now, but we are planning to reorder the agenda and move to Livestock.

So we'll do this by consensus, unless there's an objection to reorder the agenda and take up the Livestock Subcommittee at this time. Is there any objection?

(No audible response.)

Seeing none, the agenda is reordered and Livestock will be up first, and before we get into that, I just want to note for folks keeping score is when we do get to the votes, that there are only 13 members, and so a two-thirds vote of 13 members is nine votes. So it takes nine votes for a decisive motion. Just so everyone's aware

that's a little bit different than how it is when we have 15 members seated.

So with that, I will hand it over to Ashley Swaffar, the Livestock chair.

MS. SWAFFAR: Hi everyone. Welcome to Livestock. We're going to start with our sunset items, then move to our proposal and then our document on Defining Emergency Treatment. So just to get started, we'll start with our co-host Devon.

MR. PATTILLO: Yes. We'll start with sunset review of materials for livestock production, starting with 205.603(a) as disinfectant sanitizer and medical treatments as applicable. One, alcohols, ethanol, disinfectant and sanitizer only prohibited as feed additive methanol. Thanks.

MS. SWAFFAR: Great, and I do want to mention that I should have done this before that. So some of these are being reviewed early. We'll be voting on these in the fall, but they will not -- if something doesn't get relisted, it would

not be removed until its current sunset date. So all right, Jesse.

MR. BUIE: Okay.

MS. SWAFFAR: Speak into the mic.

MR. BUIE: Yes, ethanol. During our recent webinar, April 17-19 and during the public comment, 25th, April 25th, there were no additional comments on ethanol.

According to the re-registration eligibility decision of aliphatic alcohols, ethanol and isopropyl alcohol were registered in the U.S. as early as 1948, as active ingredients in indoor disinfectants. This is according to the EPA 1995.

Aside from accidental spills, the risk of environmental contamination from release of ethanol is minimum. It is therefore and likely that large-scale spills and associated environmental contamination will occur under the allowed use of ethanol as a sanitizer and disinfectant in organic livestock production.

We had proposed two additional

questions, but because we didn't have any additional comments we will -- we can discuss those two questions that were posed if you have any additional questions.

The question, the first one was is a substance still considered to be essential for organic livestock production, and since the material was last reviewed, have additional commercially available alternatives emerged?

And the answer to number two is no, it has not, and we might want to discuss one a little bit more.

MS. SWAFFAR: Okay, thanks Jesse. So now we'll just open it up to conversations of the Board. Just a reminder we are not voting on these this meeting. We'll vote in the fall. So anybody have any discussion? Yes Harriet.

MS. BEHAR: Coming from a state where there's a lot of livestock production, I know that I see this used on many operations, and I will be voting to -- next time to keep it on the list. But sometimes it's nice to hear from the

public and hear them say that they would like it.

MS. SWAFFAR: I will note that there was a comment, a couple of different comments that did say these are important materials for use. Okay, all right. Moving on to isopropyl alcohol, Devon.

MR. PATTILLO: Under the same section, 205.603(a) as disinfectant, sanitizer and medical treatments as applicable. Paragraph one alcohol's ii, isopropanol disinfectant only. Thanks.

MS. SWAFFAR: Thank you, Jesse.

MR. BUIE: Okay. Again, during the webinar 17th and 19th, and during our comment period, there were no additional comments on isopropyl alcohol. The agricultural uses of isoproponal include disinfection of production tools and surfaces and topical antisepsis during medical treatment.

Although isopropanol is a volatile organic compound and potentially contributes to the formation of ozone and photochemical smog,

large scale releases of isopropyl -- proponal under the prescribed use pattern in organic crop production is unlikely.

The questions. Again, we posed two questions here and we may want to discuss that. Is a substance still considered to be essential for organic livestock production and number two, since the material was last reviewed, have additional commercially available alternatives emerged? Again, the answer to number two is no, but we may want to look at number one.

MS. SWAFFAR: So we'll open up for discussion. Anybody have any discussion?

(No audible response.)

Thank you, Jesse. Moving on to Devon for aspirin.

MR. PATTILLO: The next listing is for aspirin, 205.603(a)(2), aspirin approved for health care use to reduce inflammation. The most recent TR on this substance was completed in 2017.

MS. SWAFFAR: Thank you, Devon.

Aspirin is nine, so aspirin is a non-steroidal anti-inflammatory drug used for temporary relief of minor aches and pain. It is also used for reducing fever.

We did receive several comments in support of relisting aspirin, and stating that it is important to the humane treatment of organic animals, and it was commonly used to reduce inflammation and pain management.

We also received one that said it is the only real time responsive form for inflammation and fever management available, and there are other products that are available but do not offer the same type of timely response to ensure animal health and well-being. This is also a proven remedy and is critical in organic livestock production.

We also had several certifiers write in their comments, that many of their livestock operations list aspirin on their organic system plan. Any questions about aspirin?

(No audible response.)

MS. SWAFFAR: All right. Seeing none, moving on. Devon.

MR. PATTILLO: The next listing is 205.603(a), as disinfectant, sanitizer and medical treatments as applicable. Paragraph four, biologics-vaccines. There are technical reports available from 2011 and 2014.

MS. SWAFFAR: Harriet.

(Off mic comments.)

MS. BEHAR: So of course I have somewhat of a little controversial. Maybe that's why the mic didn't want to work. So vaccines are used against bacterial or viral infections, and are a cost-effective and efficient method of lessening animal suffering and disease.

A vaccine contains or produces in the vaccinated individual an antigen that stimulates an immune response and enables protection from the disease and/or future infection. Vaccines are produced through a variety of methods to use natural pathogens grown in a culture, yeast, bacteria or cell cultures.

A separation and purification of the vaccine and then done, and addition of other materials that may enhance the efficacy of the vaccine, and these methods will result in either a live, modified or killed vaccine.

So the Subcommittee is not -- in the questions that we brought forward, we talked also about not in the National List listing but in another place in the regulation talks about the use of excluded methods and a place where vaccines could be approved by the National Organics Standards Board and put on the National List on a case-by-case basis.

And so the Subcommittee is not suggesting that the current listing is -- would not be relisted or viewed differently, but we wanted to revisit the excluded methods vaccines because the previous National Organic Standards Board that reviewed this put it on hold until there were -- was a better definition for excluded methods, and we have now done that.

So we did put out some questions to

the public about how they felt about excluded methods vaccines. One of the reasons that we put that out was because in our Subcommittee discussions, we found there was inconsistency in how certifiers were allowing or not allowing these GMO vaccines.

Some allow, some don't even ask, some don't allow unless proven to not be GMO, and we felt that this was problematic for the organic livestock community, that depending on your certifier you could have a burden of proof of non-GMO or you couldn't even use a GMO vaccine, or it wouldn't matter.

So we asked the questions, and through public comment there was agreement by most of the commenters, by certifiers, advocacy groups and producers, that this issue should be put on the NOSB work agenda to look at possible solutions for this inconsistency between the implementation of the rule.

It was in agreement that the National Organic Standard Board should either develop some

kind of guidance that the NOP could put in place, or perhaps regulatory wording to give clear direction to producers and certifiers. It seems that of course we could come up with other solutions too, but it seems like we basically have three options to change the regulatory language and allow GMO vaccines by removing any -- the part in the regulation where it says that it has to be put on the National List an on individual basis.

We could change it and say that if there's a commercially available non-GMO vaccine, that then that would be the preferred version or completely ban GMO vaccines. The Subcommittee has not discussed in any detail those three options, but it seems like that's what would be looked at.

The NOSB has worked on this issue in the past. We have quite a bit of -- we have a technical review on this subject and quite a bit of information, and in the public comment we did hear verbally and in writing that yes, this is

inconsistently implemented across the United States and among the various certifiers. I guess that's it.

MS. SWAFFAR: Okay. I just want to remind the Board there's kind of two different things with those statements. This is the sunset review process. That was just gathering some more information on some work that we may or may not do in the future. So this will kind of be around the sunset review process. We need comments though. Open the floor up. Anybody. Seriously? Asa?

MR. BRADMAN: I just have a question perhaps of those who were reviewing this. Is there any difference in efficacy for a GMO-produced vaccine or a non-GMO vaccine for the same target disease end point?

MS. SWAFFAR: So typically they're not the same vaccines. I would just say in like the poultry industry, for example, many producers are federally mandated to use certain types of vaccines on salmonella, for instance, by the FDA.

They require killed vaccines. Those are GMO vaccines, so there's not alternatives to those.

MR. BRADMAN: So I guess what I'm getting at is there seemed to be one proposal that if there's a non-GMO vaccine available, my understanding was that a non-GMO vaccine for the same end point as another, you know, perhaps another vaccine produced by a different company, there would be a preference for the non-GMO vaccine if it was the same disease end point. Does that situation ever exist?

MS. SWAFFAR: No, no.

MR. BRADMAN: Okay.

MS. SWAFFAR: It just -- because maybe.

MS. BEHAR: We don't have this on the work agenda yet, so we're just going -- you know, this is part of the sunset review and the 601 listing. And so that's what we're mostly looking at. But since we're talking about vaccines, I brought up the inconsistency in how that National Listing is applied, due to another part of the

regulation.

So this was to kind of gather information from the public, to see if there was an issue out there, if the inconsistency that we thought we saw was actually happening, and if the community wanted us to look at this issue so we had some idea of whether or not we would go forward with this later.

MS. SWAFFAR: Okay. Any other discussion? I just want to say that I think vaccines are critically essential for health care in all species of livestock. So they are -- I don't want the public to get the wrong sense with the way that some of those questions were asked.

The Subcommittee all said that we feel that vaccines are critically essential. So please don't take those questions the wrong way. So Dave, did you have something?

MR. MORTENSEN: Ashley, also like Asa, this is not my field. But when I was at the University of Nebraska, I was struck by findings that were coming out about the influence of

animal density, birds or beef cattle in that case, in incidents of disease, that there's a pretty clear relationship when crowding begins to occur, and then vaccines become more and more necessary as a therapeutic treatment.

So I just am curious. How do we factor that into our thinking about what is essential and what's not essential with respect to vaccines? I'm not arguing against vaccines here. I am concerned about the GMO vaccines, because it appears to me to be a slippery slope when we're looking at excluded methods.

But just generally, how that does cultural practice enter into the thinking about what we decide we put on a list or not?

MS. SWAFFAR: So as far as the question of stocking density to relation to the need for vaccines and prevention -- because vaccines are a prevention. They're given as prevention tools. Like in poultry, for instance, we had a very standard list of vaccinations that are given to birds at various stages of life.

For the companies that I've worked for, for the different styles of production relating from to an organic barn all the way to a pastured barn, those vaccination schedules were varied, just because where we are in Arkansas and Missouri is a very high density of poultry and a lot of these things are airborne.

Diseases are airborne, and so that's what those producers are vaccinating for, is basically production from their neighbor and their fans blowing and things like that. But I do think that is a huge thing. Density does relate to healthy animals. That was some of the great parts of OLPP was going to help with. But since we do not have that, we don't -- we have no standards.

MR. MORTENSEN: So I guess, I guess -- and I'm not trying to be difficult here. I'm just trying to understand how it is that this cultural practice of animal density is considered when we think, when we consider whether or not vaccines are allowed, or whether or not we need

three vaccines versus one as a resistance management strategy, one perhaps a cultural practice of reducing animal density and one active ingredient is enough, that kind of thing.

MS. SWAFFAR: Tom.

MR. CHAPMAN: If I understood what Ashley was saying though, is let's just OLPP as the example. In an OLPP situation and a non-OLPP situation, your vaccinations for your chickens, that schedule would be the same.

MS. SWAFFAR: Yes.

MR. CHAPMAN: That's related to not just what the practices are on the farm, which is in the farmer's control, but really what's going on in an environment completely around them. That's completely out of the farmer's control.

MS. SWAFFAR: Yes. That is correct, yes.

MR. CHAPMAN: So I hear your questions, but I don't know how they relate to vaccines.

MR. MORTENSEN: Well, I would also say

that it's my sense, and I'm not an expert, but I do have friends that raise chickens in Pennsylvania, that there are some that rely more heavily on vaccines and others that rely less heavily on vaccines. My sense is it's tied to animal density and isolate, yeah.

If everyone's doing chickens and they're at some modest density, then the landscape effect of aerial borne disease, the pressure will be high. But if the animal density is lower and the density of poultry houses or poultry rearing facilities, small farms whatever, the inoculation density is low.

I guess I would -- to me as we go forward, I would like to think that we're thinking about these kind of cultural. To me, that's a landscape scale cultural practice. I don't think it's hard-wired that a particular regime is followed by every farmer. That's not my understanding.

MS. SWAFFAR: To some degree when you get to commercial-size scale of say poultry,

we'll take that example, the majority of everybody uses somewhat the same vaccination program. And density, there's two different types of density. There's farm density, individual farmer density, and then there's community density.

And producers don't have any control over the community density, just you know. If you have a farm and you're doing great and you have no disease challenges or anything like that and you decide to maybe take away a vaccination, but then your neighbor has LT, that's an airborne or an airborne virus, you have no control of stocking that.

If your birds aren't vaccinated for that, you could get it. So there's -- it's a preventative tool on the neighbors. In the poultry industry there's pockets of it, you know. It's not like you got one farm and the next, yeah. Wild birds, that's another one. Harriet.

MS. BEHAR: So disease is not just one -- have one cause. I mean there could be breeds

that could help, you know, have some resistance to certain, maybe not in poultry. There are, you know, environmental, you know, the housing, the feed, the supplements in the feed.

I mean there's lots of different things that you can do for disease management. I'm trying, you know, I have to barely turn to get to the microphone. And also just because it's on the National List doesn't mean it's required. So those who don't want to use vaccines don't have to.

MS. SWAFFAR: It's a great point. Sue.

MS. BAIRD: In dairy industry, a lot of -- the livestock industry, in beef, dairy, cattle, some of those diseases are in their soil, and even -- when they are outdoors, they're going to pick up I'm thinking blackfoot, some of those kinds of diseases.

They've been in the soil for years, and if you don't vaccine then you're going to lose your cattle, you're going to lose your milk

production. So some of those things are not linked to stocking density.

MR. MORTENSEN: Yeah, I think well enough. I accept your points of view, but I also know that the cultural practice by disease incidents interaction is profoundly strong, and I'll just leave it there.

MS. SWAFFAR: Dan.

DR. SEITZ: I just want to say I actually think it's a very good point and a more general point, because we're often in a situation where we're talking about substances where there is a linked cultural practice that may make those substances less necessary in terms of intensity.

So I think it's good for us just as a board not to always think about here's, so to speak, the quick fix or the technological solution, but are we also being mindful that we're losing sight of a cultural intervention that may balance the need for that substance or intervention.

MS. SWAFFAR: I just want to follow up

and just to reiterate that there are some industries where the government does mandate certain vaccinations occur. So you can't get away -- you can't get away from vaccines 100 percent. So Harriet.

MS. BEHAR: I would just say that vaccines do not necessarily enable high confinement. There's other aspects to confinement operations, and vaccines are a useful tool even for pasture-based animals and actually for many types of pasture-based animals they're essential.

So I'm not speaking against vaccines, even though I brought up the dreaded excluded methods.

MS. SWAFFAR: Any other discussion? Great. Looking forward to an even better discussion in the fall. Devon, next.

MR. PATTILLO: We're moving on to paragraph eight of the same section, 205.603(a), disinfectant, sanitizer and medical treatments as applicable. The listing is for eight

electrolytes without antibiotics.

MS. SWAFFAR: Thank you. Harriet.

MS. BEHAR: So electrolyte balance is essential to maintain normal physiology and health of livestock, when there's an imbalance of cations such as sodium, potassium, calcium or magnesium, either too low or too high.

The health and life of the animal is at risk. Stages of life, environmental stresses, stages of production such as birthing an animal are all conditions that can throw the electrolyte balance off and would necessitate the use of the material to restore health and well-being to the animal.

The public comment was universal, in agreeing to relist this product. That included manufacturers of the dairy products. There are quite a few certifiers, advocacy groups, who else? Both mod, MODKA, excuse me, NODPA and WODPA, and I'll throw in MODPA, because they're kind of under NODPA. Everybody know what the NODPAs are, and so everyone agreed and I think in

Subcommittee we all were very positive towards this material as well, with no change to the annotation.

MS. SWAFFAR: Great. Thank you, Harriet. Any further discussion?

(No audible response.)

MS. SWAFFAR: Great, Devon next item.

MR. PATTILLO: Next substance is under paragraph 11 of the same section, 205.603(a) as disinfectant, sanitizer and medical treatments as applicable, and the listing is for glycerin, allowed as a livestock teat dip. Must be produced through the hydrolysis of fats or oils. The last technical report on the substance was prepared in 2013 for handling uses.

MS. SWAFFAR: Thank you, Devon. Sue.

MS. BAIRD: Yes. Glycerin is a byproduct of the manufacturing process. It could be manufactured either by a hydrolysis of natural fats and oils, or by heat, steam, pressure split the glycerin from the oil. But it also can be formed by chemical reaction of sodium hydroxide,

producing a chemically catalyzed hydrolysis reaction and therefore considered to be synthesis.

In reaction to that, the Committee has added the annotation that it must be produced through the hydrolysis of fats and oils. There were 12 public comments for the addition or the retention of glycerin on the sunset, but those 12 public comments were received -- they represented all the different organic dairy commodity groups, certifiers.

So even though they were only 12 listed, we don't know the numbers. But they represented the whole gamut of the dairy industry, and all of them stated that glycerin was essential for organic dairy production. There was during the review, the last subcommittee asked a question as this.

In April 2015, the NOSB Handling Subcommittee recommended listing glycerin at 205.606, and removing it from 205.605(b) after review of the practices. So we asked are there

any non-food grade agricultural sources of glycerin produced by microbial fermentation of carbohydrate substances, or are there any other sources of glycerin produced by hydrolysis fat, use of physical methods that are readily available for teat dip.

I read with interest the comment by Beyond Pesticides, and they commented directly to that question. So I wanted to read that to you, because I found it very pertinent to our question.

They said the petition approved in spring to delist synthetic glycerins on 605(b), which is the handling, was based on production of organic glycerin through fermentation of organic corn starch. Therefore, it was considered to be organic.

And they made a comment that fermentation varies widely from pickling, wine making, cheese making and different types of fermentation products. In this case, they said the processes vary in nutrients, the process and

the physical method of extraction. The fact that all these processes are evolve growth of microorganisms, they did not seem to make that sufficient and treat them all as one.

So their comment was yes, let's go ahead and list glycerin at 205.603, but they requested that the NOSB add to its work plan in general to the development of a criteria for evaluating products of fermentation processes. That doesn't directly impact our consideration, but something I wanted to bring out that was brought up.

The other thing that I did find interesting is that some supporters of listing glycerin said that it's needed, that they're using or it's needed as an oil in the mouth supplement to follow up dextrose and glucose IV for ketosis, and that is not allowed by our annotation.

And so that point needs to be made, that if they really feel like supporting, it needs to be petitioned separately as inclusion to

the National List. So comments.

MS. SWAFFAR: Thank you, Sue. Any comments, questions? Tom, yeah.

MR. CHAPMAN: You touched on it a little bit in that petition, but on the handling side we have recommended organic usage of glycerin, and I'm curious to know why that's not being considered here. I think that's how it's listed in the Canadian regulations as well. If it's good for the handler, why isn't it good for livestock operations that try to source organic glycerin first?

MS. BAIRD: Right, and that was a point that Beyond Pesticides was stating, that the organic --

MR. CHAPMAN: They went into the fermentation stuff. You can leave that fermentation stuff aside. I'm curious about, because there's multiple ways to make organic glycerin. You can also make organic glycerin via saponification if you use organic feedstock materials.

MS. BAIRD: Right. That is a great question. I think that we do need to explore the question. Is there enough organic glycerin available that it would be used as a teat dip, in a teat dip formulation? I like that question.

MS. SWAFFAR: Harriet.

MS. BEHAR: I think the other question is if the -- if the organic dairy industry purchases enough of glycerin-based teat dip --

MS. BAIRD: Teat dips, right.

MS. BEHAR: --to encourage a manufacturer to make an organic or one using organic glycerin, and I guess I would be somewhat skeptical to that. However, with the however, there are companies that do cater to organic dairy operations.

MS. BAIRD: Sure.

MS. BEHAR: There's a pretty good-sized one in Wisconsin. There's a good-sized one in Pennsylvania. I'm sure there must be some out on the west coast as well that -- I mean if we put it out there. I would hate to make an

annotation that it had to be organic, and so the producers would lose access to this very good teat dip.

But I'm not sure how you get the word out, but see if they could possibly start looking at the development of an organic glycerin teat dip for their producers and see where that all goes.

MS. BAIRD: Yeah, I would agree. I think that's something that we do need to explore.

MR. CHAPMAN: Yeah, and if I can clarify, our recommendation on the handling side was to list it in 606, because there's also just agricultural ways of producing this with pressure and steam. That is another format in which glycerin is potentially available.

MS. SWAFFAR: So I just want to say Harriet that was a great, a very, very great point to make, that there's probably not that many folks buying these products to get someone to formulate with an organic glycerin. It would

be very difficult. It would be great to find out from those sitting on the front row if that's even a possibility.

So maybe in the fall you could maybe be prepared, maybe Sue could ask that question, you know, is that a possibility? Is there enough out there for them to formulate these teat dips with an organic glycerin. Yes Harriet.

MS. BEHAR: But there are small companies that might be willing to make the jump to organic, and they're already organic-minded.

MS. SWAFFAR: Right, and I was just making a point. If those dairy organizations could maybe do a little leg work on that, that would be very, very helpful. Okay. Any other -- thank you, Sue. Moving on, Devon.

MR. PATTILLO: It's come to my attention we have a couple of typos in the slides, but I'll be reading off the correct -- have been reading off and will continue to read off the correct listings under the correct electronic federal regulations.

So the next is paragraph 19, phosphoric acid under the same section, 205.603(a), as disinfectants, sanitizer and medical treatments, as applicable. The listing is for phosphoric acid allowed as an equipment cleaner, provided no direct contact with organically managed livestock or land occurs.

MS. SWAFFAR: Thank you, Devon. Dan.

DR. SEITZ: So phosphoric acid is used by the dairy, by dairy operations to clean and flush build up in milking systems in dairy pipelines.

Phosphoric acid, the chemical composition of which is H2PO -- no, excuse me, H3PO4, has many uses. As a cleaner, it is generally used to remove rust and mineral deposits found on metal equipment such as boilers and steam-producing equipment.

In dairy operations, it is used to remove calcium and phosphate salt deposits from processing equipment, in addition to cleaning the milking buildup. Phosphoric acid is a hazardous

substance. The exact dangers of it depend on the concentration and strength of the solution, with higher concentrations presenting greater hazards.

Phosphoric acid at 85 weight percent is considered a corrosive chemical solution that can cause through skin exposure and inhalation severe skin burns, permanent eye damage, sore throat, shortness of breath and even death among other things.

Also there are some hazards, environmental hazards associated with the mining of phosphate, which is the main source for the materials needed to make phosphoric acid. There are only four written comments, and they were all in support of continued listing of this substance.

A couple of the comments were from farmer and dairy associations. One was from a dairy farmer and one was from Beyond Pesticides. One of the associations mentioned that there is some variance in terms of certifier requirements, with some requiring a water rinse after use and

others not requiring a water rinse.

And so it was suggested that an annotation may be useful for this substance, and it was also suggested that given the environmental and health hazards that can be associated with this substance, that while it does need to be relisted, the NOSB should continue to keep an eye out for safer options should there -- should anything come to our attention, and that's it.

MS. SWAFFAR: Thank you, Dan. Any comments? Yeah, Harriet.

MS. BEHAR: This is a consistently used material in organic dairy production.

MS. SWAFFAR: Great. Emily.

MS. OAKLEY: Yeah. I had a question about some comments regarding the possible need for annotation that clarifies when a rinse or purge is not required. Do you guys have any thoughts on that? I'm on the wrong thing. Ignore me, ignore me. I'm on the wrong topic.

MS. SWAFFAR: Okay. Anybody else?

(No audible response.)

MS. SWAFFAR: Okay, thank you. Devon.

MR. PATTILLO: Okay. Now we're moving to Section 205.603(b) as topical treatment, external parasiticide or local anesthetic as applicable. Paragraph five, lime hydrated as an external pest control not permitted to cauterize physical alterations or deodorize animal wastes.

MS. SWAFFAR: Thank you, Devon. A-Dae.

MS. ROMERO-BRIONES: Okay. We've had several comments about lime hydrated. There was unanimous support to relist it. We had one qualified comment by Beyond Pesticides that supported the use of hydrated lime when it can replace more toxic inputs.

They also mentioned the use of hydrated lime as a walk-through to reduce the use of copper sulphate, and that should be encouraged. But in general, we had overwhelming support to relist it.

MS. SWAFFAR: Thank you, A-Dae. Any

comments?

(No audible response.)

MS. SWAFFAR: Great, moving on. Devon.

MR. PATTILLO: Moving on to paragraph six of the same section, 205.603(b) as topical treatment, external parasiticide or local anesthetic as applicable. The listing is for mineral oil for topical use and as a lubricant. The last technical report was completed in 2015.

MS. SWAFFAR: Thank you, Devon. A-Dae.

MS. ROMERO-BRIONES: Okay. So the organic regulations currently permit the use of mineral oil in organic livestock production for direct topical application, and as a lubricant under 603(b). Regarding the former use pattern, mineral oil acts as an external parasiticide when applied topically to animals infested with mites, lice and other parasites.

We had several comments, written comments about mineral oil. We had one -- in

general, we had one comment against relisting from Beyond Pesticides, and their concern was that there are alternatives to both use as an external parasiticide and as a lubricant, and these alternatives are more compatible with organic production.

They suggested if we relist mineral oil, that we should use an annotation like, for instance, use as an orally administered treatment of constipation in cattle and other ruminants is not allowed, or by noting that exception.

MS. SWAFFAR: Emily, do you want to ask your question? Is that a no?

MS. OAKLEY: No.

MS. SWAFFAR: Okay. Any other discussion?

MS. BAIRD: I have a question. Can we change annotation during sunset? I didn't think so, okay. That was my question.

MS. SWAFFAR: Harriet.

MS. BEHAR: I just want to have more clarity. There was discussion that it's used as

a way to prevent constipation or deal with constipation, and also that it's used as a lubricant during application of artificial insemination. If you've never done that, it's really fun. To get your arm all the way in the cow.

And also it is used to help boluses be given orally, and I am just not sure if the constipation part will be considered a lubricant as well as the helping you get your arm in the cow and the boluses. So I'm just trying to understand. I think it's not applied really universally.

Seeing that that word lubricant has kind of an internal use application, but it's not really approved as an oral treatment. So that's where I'm trying to get the --

MS. SWAFFAR: Devon, did you want to comment?

MR. PATTILLO: Yeah, just to clarify. We have a proposed rule that's still open for comment, which would change the annotation to --

or add a use. The annotation for mineral oil would be changed to "for treatment of intestinal compaction. Prohibited for use as a dust suppressant."

MS. BEHAR: So that proposed -- if that proposed rule moves forward, then that would be the use. It would be allowed for that use.

MS. SWAFFAR: So basically what that commenter was asking was for us to reverse that decision. Any further discussion?

(No audible response.)

MS. SWAFFAR: Okay, thank you. Moving on, Devon.

MR. PATTILLO: The last substance for consideration is under paragraph eight of the same section, 205.603(b) as topical treatment, external parasiticide or local anesthetic as applicable. The listing is for sucrose, octanoate esters in accordance with approved labeling.

MS. SWAFFAR: Thank you, Devon. Sue.

MS. BAIRD: Yes. Sucrose, octanoate

esters forever in my mind SOEs belong to organic chemical family of sucrose fatty acid esters. They are manufactured from sucrose and octanoate acid ester, commonly found in plants and animals. They're an effective adult boticide as well as controlling other pest types.

It can be used at all plant growth stages. It is in this particular section listed basically for beekeepers to control Varroa mites on honey bees.

A suggestion was made, and again it's not within this context, but it was suggested that we actually change the annotation, which says in accordance with approved labeling, which all products have to be used in accordance with approved labeling.

To just accurately describe the use, which says for control of Varroa mites and honeybees. Again, because we're in sunset review, we can't make that annotation, but it did make sense to me. Otherwise, there were 16 total public comments on SOEs, but all but three of

them said we received no comments. So we had three comments, and all of those asked that it would be -- continue to be listed because it is a common tool for honeybees, for control of Varroa mites.

MS. SWAFFAR: Thank you, Harriet. Did the commenters state if they were using it or they just wanted it in their toolbox?

MS. BEHAR: I heard -- none of the comments that I could see where from beekeepers unfortunately, and so we really don't know. The three commenters who made that comment were actually dairy people who said oh, but leave that on. We don't use it, but leave it on because beekeepers use it. So we don't really know.

MS. SWAFFAR: It goes to the whole soapbox about bees and livestock and not a real standard. So I just -- yeah Harriet.

MS. BEHAR: So I don't see it as a difficult item, but I don't also see anybody clamoring who was actually using it.

MS. SWAFFAR: Not at all.

MS. BEHAR: And having used it once myself because I'm a beekeeper, it's a miserable product and there is another beekeeper in the audience who's agreeing with me. There are others. We have formic acid on our list as well, and there are cultural methods for trying to control Varroa mite.

But I'm not necessarily advocating for it to come off, but because you never know when maybe the formic would have resistance and people might need it and it does take a while to get things back on the list.

But this is somewhat of an example of kind of like the appendix on the National List, you know. It's an organ that we don't need, but we just kind of have it there and why go through the surgery to get rid of it.

MS. SWAFFAR: Tom.

MR. CHAPMAN: One thing to keep in mind. At least as I understand it from import data that I've looked at, I believe the vast majority of organic honey at a commercial scale

comes out of Brazil in very rural areas of Brazil. So I question how much that early sunset material got to users of this material potentially.

MS. SWAFFAR: Yep. I would kind of -- just because we don't hear from farmers that it's not critically essentially doesn't meant that it isn't critically essential to some farmers. They may not be a part of an active certifier organization. They may not be a part of an active industry organization. So I'd just caution us when we just don't receive support. It could be critically essentially. Yes, Dave.

MR. MORTENSEN: Yeah, and this would be a place where folks in the audience that represent certifying organizations, if you could just see what the need is, because I do know at the Pollinator Center at our university, Varroa mite is probably the main pest of hive beekeepers, and it's definitely a problem for organic honey producers in the northeast at least, and I also know in the Plain States where

the hives that are moved to California, the Varroa mite is a big problem.

So we should hopefully hear from some folks that we don't need it or it's helpful, that would be helpful.

MS. SWAFFAR: Thank you, Dave. Any other discussion? Yeah Steve.

MR. ELA: Just out of ignorance, I was just trying to look up the label. Is the honeybee use the only label acceptability on it? I mean we say "in accordance with approved labeling," but we're talking exclusively about honeybees. So I'm curious.

MS. BAIRD: No, because it is actually labeled as for other types of insects. It's used -- well, it's in my other notes, which I don't have, because I've got synopsis. But it is labeled as a pesticide for other types of insects on plants. So this particular -- and we will address that in crop section. This is specifically for livestock.

MS. SWAFFAR: Yeah. Most of the

comments that I was just looking at said that it's not used primarily in organic livestock production, but mainly in beekeeping. But there is the, as you know, the crop listing.

Okay. Anything else? All right. that concludes our sunset items. We'll be voting on those in the fall, and I just want to say a thank you so much to several of the certifiers and organizations that actually answered the questions that we posed.

Those are really critical in us making our decisions as a Subcommittee. So thank you very much for answering those questions. We really appreciate that. All right. Moving on to our petition item, glycolic acid. Devon, would you like to introduce it?

MR. PATTILLO: Up for consideration is a petition for glycolic acid. It's petitioned for use as a pre- and post-milking sanitized teat dip. It was submitted by the Chemours Company in May 2016 in support of NOSB's review of the petition. A technical report was obtained and

published on the NOP website in October 2017. Thanks.

MS. SWAFFAR: Thank you, Devon, and this is my material also. Glycolic acid has been petitioned as a component of pre- and post-milking teat dips to control mastitis at 205.603(a).

Glycolic acid is shown to be an effective post-milking teat disinfectant for dairy cattle, and specifically to aid in the prevention of mastitis.

Glycolic acid is different from other teat dips because it conditions the skins by exfoliating cracked skin layers, which removes potentially hiding places for mastitis causing bacteria. So we received several comments on the potential listing of glycolic acid.

Some of those comments were -- we had a trade organization stating that they did not hear a clear message from its dairy members, that glycolic acid-based teat dips were absolutely necessary, nor did they hear that the current

teat dips were not effective at controlling mastitis.

But they did hear that having access to multiple types of teat dips used in rotation could help avoid resistance to one material, and provide more flexibility when applying teat dips in varying weather conditions, especially during cold weather spells where cow's teats can freeze when using the iodine.

We had WODPA supporting adding glycolic acid to the National List, and they stated that their organic producers needed options that are more effective in controlling mastitis. We did hear from some commenters that they opposed the listing of glycolic acid because they said it posed environmental and health hazards. It wasn't essential and incompatible with organic production.

And some commenters stating that we should not list glycolic acid because several alternatives were available. I would like to say we did hear from several of the dairy groups that

alternatives they're currently using did not control their mastitis problem. So that's kind of a brief overview on this. I'll open it to questions. Yes, Emily.

MS. OAKLEY: So I see you guys had a split vote in your Subcommittee, and I was wondering if some of you could just elaborate on some of the discussion that took place.

MS. SWAFFAR: So a lot of that was just around the essentiality of it. We questioned whether it was needed, and that was one of our questions that we posed. Because we knew there were teat dips that are out there and dairy folks used.

We just didn't know if we needed another one. I felt like we got back some pretty good information that what they're currently using doesn't work to control the mastitis. So yeah Emily.

MS. OAKLEY: So not to put anybody on the spot, but for someone who voted against it, I'm curious if they felt the same as Ashley.

MS. SWAFFAR: I voted against it?

MS. OAKLEY: Sorry for that assumption.

MS. SWAFFAR: I don't remember who else did. Sue, did you or Harriet? You or Harriet. Yeah, Sue.

MS. BAIRD: Yeah. My and not objection, but my concern was exactly what Ashley said. Are there -- are the teat dips we're using now effective. And the answer I think is if you do dairy inspections, and I do a lot of them, you'll see the high numbers of mastitis out there. So the -- you would surmise that perhaps it's not really effective.

I know that there is a link made between mastitis and Crohn's disease. I'm not definitive. There are other reasons for Crohn's, but I know that I grew up on a dairy farm and drank raw milk and I have Crohn's disease and it's not fun.

So the control of mastitis is really important, and we heard I think as Ashley said,

and so I was one who abstained and now I've changed mine to a yes.

MS. SWAFFAR: Harriet, did you have something?

MS. BEHAR: I believe that acidified sodium chloride is kind of in the pipeline, where we approve that. So that's another teat dip that is probably coming down the pike. I haven't heard anything from the program that they're going to not follow through on our recommendation.

So it's just a matter of that's yet another one, and I believe Ecolab gave public comment that they were very supportive of the other one being put on the list, which we already voted and approved that. So that was part of my reason also.

I think, you know, the argument for having products in rotation, we have quite a few and even though it leaves that really nice blue color, like Dr. Suess-looking cows, but you know udders, you know, you saw the pictures, I just

did not think that it was necessary to put yet another teat dip because there's even more of them out there.

It's not like we would have -- I mean we could probably have a list of 35 items on our list with better teat dips. So with the acidified sodium chloride coming down the pike, I just feel like we didn't really need that now.

MS. SWAFFAR: Yeah Dan.

DR. SEITZ: Yeah. I think I voted against it at the time, again based on the essentiality question. Looking at the testimony that we did get, the comments that we did receive, there doesn't seem to be a strong push from the farmer community for this.

I mean there's always that general comment it would be nice to have another tool in the tool kit, but that's very different from saying we have, we have a strong experience of this. It fills a hole that nothing else can really fill.

So in that sense, I don't feel we've

gotten from the folks that would be directly impacted by this really a strong endorsement. Given what Harriet just said about having just added another substance, let's see how that does and why rush to put another one on?

MS. SWAFFAR: So Dan, just to reference back, I would like to point out that the Western Organic Dairy Producers, they did say that they supported adding this, and they represent quite a few farmers.

DR. SEITZ: Right, but if I read their -- that's correct. But if I read their comments correctly, it wasn't -- it was more of that general comment of it's good to have another tool in the tool box. I didn't have the sense of it coming from yes, our farmers are using this. They're directly asking for this.

I may have not read, you know, we may have read it a little differently in terms of that, and that's a more nuanced point that I'm making about it.

MS. SWAFFAR: Okay. So obviously

their farmers couldn't be using this because it's not allowed, but that's when I ask him -- in his public comment, I ask him in controlling mastitis, do your alternatives work that you're currently using, and he said they do not control the problem, the current items that they have available. Yeah, Emily.

MS. OAKLEY: Yeah. I would echo Dan's comments, and I definitely understand that concern that was expressed by that stakeholder. But also have this concern that we might just continue to be adding teat dips to the National List, and when it one going to work, and we just going to keep adding items because --

I mean mastitis can be caused in a number of ways, and this might not be the answer to it. So I'm conflicted and probably will not vote for this, because I didn't see a sufficient amount of need expressed by growers to add this to the list.

MS. SWAFFAR: Harriet, did you have a comment?

MS. BEHAR: And I agree with Emily. I'm not sure that this is the cure for mastitis. There are many causes of mastitis and many routes to mitigating the effects of mastitis, as well as ridding the animal of this problem. A lot of times stage of production will contribute to that as they go through their lactation cycle.

So really what we're looking for is something that keeps the teats clean and healthy, you know, not cracked or rot, and a lot of that can be done culturally too. I mean we just were talking about glycerin.

So and for the acidifieds, if we didn't have the acidified sodium chloride in the, you know, kind of waiting in the wings, that you know then it would be like well, maybe we could use it in other. But we have something already coming.

MS. SWAFFAR: Tom.

MR. CHAPMAN: So Dan, I have a hard time taking your interpretation from the Western Organic Dairy Producers' Alliance letter. I have

it open right here and it says, if I can read from it, "Western Organic Dairy Producers Alliance supports adding glycolic acid to the National List. Organic producers need options that are effective and economical to be competitive in this market.

"Denying options or removing options because there are alternatives available is not an adequate justification for placing restrictions on our producers. Denying or removing tools from the organic tool box because options exist places our producers at a competitive disadvantage."

With everything that's going on in the dairy market now, I don't understand why we would add more barriers when they're making a clear statement to us that they're in need of this. This is an animal health issue and animal health and animal welfare are very linked subjects.

I just -- I don't understand that rationale that's being put forward, and I don't think the comments given to us support with how

they were being interpreted there.

MS. SWAFFAR: Dan.

DR. SEITZ: So I do read that differently as a general comment about tools in general. We're not taking this away from the farmers. This is a question about adding, so those are two different things. As Harriet pointed out, there are -- there may be cultural questions here. There may be other practices and so forth.

So I mean I think we are often -- the argument is often made to the Board here's a tool. We should add tools to the tool box, and I think if we're constantly adding tools to the tool box, eventually we would start to replicate conventional agriculture.

So we constantly have to be very critical. Is this particular tool absolutely necessary, and because we don't want to rush to adding tools if there are other factors here that need to be taken into consideration.

I say this generally. I'm not a dairy

farmer, okay. So I'm looking at this from a more general standpoint.

MR. CHAPMAN: Yeah. Just as a point of clarification, the comment says "denying options or removing options." So this would be denying options.

DR. SEITZ: Well, okay. I mean you can call it denying an option. I mean it's really up to our Board to decide to whether to add something. Someone can characterize that as we've denied the community something, but that's our job, to decide whether this particular substance or not is reasonable to add.

MS. SWAFFAR: So Dan, I just want to, you know, go back to that. You know, they said they have a problem. So they're not just wanting this just to have another tool in the tool box. They want it because they have an issue and they need help solving it. When you get mastitis in a herd or, you know, or in a cow, it's detrimental to a dairy farm.

We've heard, you know, yesterday in

you know these guys are struggling critically, and you know, giving them an option to help control their issue I think is something that our Board can do. I just want to talk about the alternatives that you guys talked about a little bit, you know.

We had the commenter said that iodine, you know, there's concerns there with residues in milk. Chlorine dioxide's not stable. Hydrogen peroxide is an inhalant problem and harsh on skin, and ASC, it's in the pipeline. We don't know when it's going to be approved per se, you know. Has the program issued a date on that? Is it in final or --

MR. PATTILLO: The acidifieds and chloride's included in the proposed rule. It's still open for comments, to add it as a teat dip at 603.

MS. SWAFFAR: So it's still open, not guaranteed in that area.

MS. BEHAR: But it would come sooner than the glycolic acid anyway. But I wanted to

also bring up, just started looking through these again. I mean I did make copious notes on this like I do on my own products, so I know I read these. There is some concern about the inert ingredients that are in the formulation, and there were other -- I mean I'm looking at the OEFFA comment that they -- does not support due to those inerts.

I'm not sure, you know, who else. But I know there was quite a few comments similar to that. So as a consumer and, you know, I don't think that glycolic acid is going to solve all the mastitis in organic dairy production. So we're just looking for yes, another tool in the tool box is what we're talking about. It's not going to be the, you know, the savior for the organic dairy farms.

MS. SWAFFAR: Yeah, and Harriet, I just want to point out that inerts relate to crop materials, not livestock substances that would be excipients.

Those comments, I think they got their

inerts and excipients mixed up, and so I checked with the program and, you know, excipients are allowed for use, as long as they are recognized, if they're GRAS by FDA. So there are no concerns to that comment that I found. Yes Tom.

MR. CHAPMAN: I also question whether or not sodium acidified chlorate would come before this one. It was part of a massive number of issues that received so much comment that required the program to reopen the comment. We should also note that our November 2017 items that we petitioned are coming out in a week.

So clearly the program is working to expedite petitions that are happening now, and so I really question whether or not ASC would happen prior to this one if it was voted on at this meeting.

MR. BRADMAN: I'm sorry.

MS. SWAFFAR: Yes Asa.

MR. BRADMAN: Ashley, can you explain that again, the issue with inerts, because I'm -- like right now here I'm reading the comments from

Beyond Pesticides, and that actually definitely raised some flags for me.

MS. SWAFFAR: Yeah.

MR. BRADMAN: And so can you explain that again?

MS. SWAFFAR: I'm actually going to turn to Devon, because Devon and I have done a little bit of back and forth via email on this. So Devon, do you want to talk about that?

MR. PATTILLO: Yeah. I think it comes under distinction of a pesticide versus a drug. FDA considers teat dips to be drugs. So the allowance at 205.603(e) for inert ingredients pertains to inerts used in pesticide, and pesticides that are used on livestock. So that would be for external pest control.

MR. BRADMAN: Even if like say the glycolic acid is registered as a microbial pesticide with EPA, you're saying in this case it's being used as a drug or --

MR. PATTILLO: Yeah. In this case, as a teat dip, it's my understanding that the FDA

considers teat dips drugs, and so any additional ingredients in the product that aren't considered active ingredients would have to comply with the excipient requirement at 603(f). A different set of substances, which includes FDA GRAS materials, FDA food additives and other ingredients that have been approved by FDA as part of new animal drug applications or new drug applications. So is that clear?

MR. BRADMAN: Another point they make is about compliance with food tolerances, and I guess I'm not sure about how it would apply to something considered a drug versus EPA pesticide.

MR. PATTILLO: Right. I think food tolerances refer to EPA regulations, whereas this would be under FDA.

(Pause.)

MS. SWAFFAR: Any further discussion? Yes, Emily.

MS. OAKLEY: This is just point of humor, but this is where I miss Francis as a dairy producer on the Board, and having that

perspective. So it would be great if we could get some more livestock producers in the future on the Board.

MS. SWAFFAR: You better believe it. I thought about asking him on the call-in webinar. Like I know you're not here; talk about livestock. But yeah, phone a friend. I wanted to phone a friend, and this was Francis' material. I took it over and I really do -- I echo your point. I miss his perspective.

MR. CHAPMAN: How did he vote on this item?

MS. SWAFFAR: How did I vote?

MR. CHAPMAN: Francis.

MS. SWAFFAR: Oh, Francis was not here when we voted. He was assigned and the TR took quite a while. He was assigned the lead so then I took over, you know. A-Dae.

MS. ROMERO-BRIONES: I hesitated making this comment, but I just wanted to give a perspective, my perspective. So mastitis, I work with -- as a breast feeding mother, I work with

women who suffer from the same issue. In general, it's a very painful, very painful -- it's just very painful.

And so the way we deal with it with breast feeding mothers is that we try to give them as many options as possible, just because one option is not suited for everybody, and some women react differently to others. That just kind of informs my decision about this, so I'm voting for it.

MS. SWAFFAR: Yes, Emily.

MS. OAKLEY: A-Dae, I appreciate those comments, and I actually -- I think about that and the humane aspects of all materials, especially for livestock.

But I tend to also think that the ASPCA and the Humane Society and others do tend to weigh in when they want us to vote on the material for humane reasons. But I also appreciate making that comment, and agree that that is a consideration we should always be looking at.

MS. SWAFFAR: Deep sighs. Any other discussion? I just want to throw my pitch out there one more time. I feel like this was a great item to add, just because we did hear from producers what they have available right now is not controlling the mastitis. That's my last statement. All right. Back to Tom to vote.

MR. CHAPMAN: Okay. So up first is the classification motion. This is the motion -- we'll deal with the amendment in a second. The classification motion is to classify glycolic acid as synthetic. The motion was made by Ashley and seconded by Harriet, five yes and zero no. The voting on this will start with Emily. A yes vote is to classify as synthetic; a no vote is to not classify it.

MS. OAKLEY: Yes.

MS. BAIRD: Yes.

MR. BUIE: Yes.

MS. SWAFFAR: Yes.

MR. RICE: Yes.

MS. BEHAR: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: No.

MS. SWAFFAR: This is classification.

MR. MORTENSEN: I'm sorry, yes, yes. Sorry.

MR. ELA: Yes.

MR. BRADMAN: Yes.

MS. SWAFFAR: So eight, but we didn't hear your vote.

MS. DE LIMA: Yes. That's a yes.

MS. ROMERO-BRIONES: Yes.

MR. CHAPMAN: The chair votes yes. 15 yeses, or 13 yeses. The motion passes. I think I heard 15 yeses and a no in there. So I'm not sure if my count was fully off. Okay, the motion to amend.

MS. SWAFFAR: Yes. So we did determine that I made a mistake in this document on the National List motions. So I need to amend it where it goes in the right place. So I would like to make a motion to 205.601 to reflect 205.603(a). Second?

MS. OAKLEY: I'll second.

MR. CHAPMAN: I have a motion and a second. Any discussion?

(No response.)

MR. CHAPMAN: Seeing none, we'll proceed to a vote. So this is a motion to just amend the National Listing motion, to list it in the appropriate livestock section, 205.603(a). So this is a simple majority vote and the voting will start with Sue.

MS. BAIRD: Yes.

MR. BUIE: Yes.

MS. SWAFFAR: Yes.

MR. RICE: Yes.

MS. BEHAR: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

MR. ELA: Yes.

MR. BRADMAN: Yes.

MS. DE LIMA: Yes.

MS. ROMERO-BRIONES: Yes.

MS. OAKLEY: Yes.

MR. CHAPMAN: Chair votes yes. 13 yes, the motion passes, the amendment passes. We'll proceed to the National Listing motion, the motion to add glycolic acid as petitioned at 205.603(a). Motion by Ashley, seconded by Jesse. If there's no further debate, voting will start with Jesse.

MR. BUIE: Yes.

MS. SWAFFAR: Yes.

MR. RICE: Yes.

MS. BEHAR: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

MR. ELA: No.

MR. BRADMAN: No.

MS. DE LIMA: Yes.

MS. ROMERO-BRIONES: Yes.

MS. OAKLEY: No.

MS. BAIRD: Yes.

MR. CHAPMAN: The chair votes yes. I have seven yes, six no's, the motion fails.

MS. SWAFFAR: Thank you, Tom. Now

back on our items, there being two. Clarifying emergency for use of synthetic parasiticides in organic livestock production, Harriet.

MS. BEHAR: Okay. Oops, wrong thing open. Okay. So emergency, defining of emergency treatment for parasiticides. So the proposal has a fairly long background on why we're discussing this. In October 2015, the NOSB recommended continual listing of three parasiticides, ivermectin, moxidectin and fenbendazole as part of its sunset review.

Then in April 2016, the NOSB unanimously approved annotations amending the use of fenbendazole and moxidectin, lessening the withdrawal time between use of the parasiticide and sale of milk products.

(Off mic comments.)

MS. BEHAR: And then in November 2016, the National Organic Standards Board unanimously with one absence approved removal of ivermectin from the National List. In January 2018, a proposed rule to implement the NOSB

recommendation for the removal of ivermectin was printed in the Federal Register. It closed in May and it's open again, am I right?

MR. PATTILLO: It closed in March and reopened.

MS. BEHAR: March, and now it's open again.

MR. PATTILLO: Yeah.

MS. BEHAR: So but there is -- so I don't know if ivermectin's going away or not, but in the discussion of why we needed to define emergency, we've had two meetings where the public gave comment, and many mostly certifiers but producer groups as well discussed the need for defining what would constitute an emergency.

I would like to thank the public for giving us the language, much of the language that we're using, and also to make the comment that while it may seem like we deliberate forever, this is an example of us getting somewhere as a community and finding something that everyone can mostly agree on. Now on that, light it up.

(Off mic comments.)

MS. BEHAR: Just tell me where I -- is that good? Just stay right here.

MR. CHAPMAN: That's great.

MS. BEHAR: Okay. So I want to read the comment of CCOF on this proposal, because it is like my favorite comment. "The proposal provides clear and strong language that is not overly prescriptive to livestock producers. CCOF supported the fall 2017 proposal to clarify emergency because it recommended adding necessary language to the Organic Livestock Health Care Practice Standards that limit the use of synthetic parasiticides.

"The routine use of synthetic parasiticides should not be allowed in organic livestock production. The current proposal sets forth clear preventative practices and accomplishes the same goal with less prescriptive language and a logical definition."

That is really what we were trying to go for, so I appreciate that it was noticed by

the public that we were striving for that, so thank you.

This sentiment was echoed by producers, producer groups, certifiers and others. Many stated that the proposal should be approved without any changes, and thanks again to the public for aiding us in crafting the language that provides this clarity to both the operators and certifiers to bring consistency to the implementation of this area of the organic regulation.

There were, however, some tweaks to the language proposed by a couple of certifiers, and the NOSB will provide this language to the National Organic Program, so during rulemaking they can consider if these proposed tweaks would aid in further clarification. None of them significantly change or actually change at all the meaning behind it, but if we decided to make those changes here, we would have to send it back to committee and come to another meeting.

So we will pass those on to the

National Organic Program, and I specifically both MOSA and Pennsylvania Certified Organic, PCO, made good comments. I'm not necessarily sure I agree that they have to be added or subtracted, but I leave that up to the rulemakers at the National Organic Program.

So I'm not sure if you want me to read the proposal in. It's quite a bit of language. Ashley, would like me to actually read what we are going to add, because it is in the docket and --

MS. SWAFFAR: Not now. We'll read it as we vote at that point.

MS. BEHAR: Okay, okay. So yeah. Anybody else have any comments? Just like I said again, this was I think an example of good public process, good engagement, a lot of excellent comments and I hope the public sees that we listen to you and took a lot of your language.

MS. SWAFFAR: Thank you, Harriet. Open it up for discussion. Yes Emily.

MS. OAKLEY: This has been on the

agenda for a while, and I just wanted to thank you guys for your persistent work in this, and I'm glad to see where it's come and thank you for working on it.

MS. SWAFFAR: Anybody else? Everybody's just so tired of talking about it. Steve.

MR. ELA: I'm generally in favor of it. I'm just curious at some of the comments that said this really isn't necessary. I guess I'd like some input from the Committee. I just want to justify it. I don't want to add regulations for regulation's sake. I mean I tend to think it's necessary, but I'd like to hear a little more on that, just to have that out in the open.

MS. SWAFFAR: Harriet, do you want to take that?

MS. BEHAR: Yeah, there was -- that's true. I'm sorry, I didn't make a note of that, that some people felt that it was already present in the rule. But since there was a significant

change and a heavy reliance on that term "emergency treatment," and having been an organic inspector and worked with producers for many years, I think having transparency and clarity in some of the cultural methods and what would lead to an emergency and also adding that definition of an emergency, that would lead to the need for the use of a parasiticide.

I think it is useful. We have seen many times just recently, you know, how easy it is for the rule to be inconsistently implemented and interpreted differently by different certifiers in different regions on different animal species.

And so I guess I personally disagree that it's not needed. I think this will be a useful tool for both certifiers and operators to clearly understand when the parasiticide is acceptable and what they can actually do to remove that emergency situation from their farms.

MS. SWAFFAR: And I just want to follow up a little bit. You know, we did have

several comments over all of the meetings we've had on this, that this should be guidance versus rulemaking, and my view as chair of Livestock is I don't like to see guidance documents really come out of Livestock, because I do think they are inconsistently enforced across different areas of the country.

That's why we decided to go with a rulemaking suggestion to the Program. Yes Harriet.

MS. BEHAR: I want to thank Devon for helping me through the regulatory language and being patient with the back and forth and getting it right in the end. So thank you, Devon.

MS. SWAFFAR: All right. Thanks to Harriet. You know, this document started with Tracy and Jean and now got passed to Harriet. Harriet's championed this document, getting it finalized and out the door, and you know, I do think every time we brought this back to committee, this document got better.

You know, we took into account a lot

of public comment. And so you know, this is one where taking it back to committee really helped us do a little bit more refining on it. So hearing no further discussion, Tom -- oh, I'm sorry, Harriet.

MS. BEHAR: At one point there was discussion that we wouldn't need this if the organic livestock and poultry practices was put in place. So I'm glad we moved forward with this, to have it ready to go.

MS. SWAFFAR: That brought up one question. So I've got to find this one comment. There was a comment that thought that since OLPP didn't go forward, that we needed to move it around. Did you read that? Let me --

MS. BEHAR: I did read that, but I guess I was trusting that Devon was helping me with all the correct, because that's his job, all the correct citations in the rule.

MS. SWAFFAR: So no concern with that comment?

MS. BEHAR: Well again, I think that

at rulemaking inside the NOP. They can put it -- if there is an issue, which I don't think there is. But the National Organic Program will get it right. They won't put it in the wrong place.

MS. SWAFFAR: Okay. I just wanted to flush that out, because that was a comment. I was looking for the exact comment. Emily.

MS. OAKLEY: Is documentation required?

MS. SWAFFAR Is documentation required for using a parasiticide or -- ?

MS. OAKLEY: For determining an emergency.

MS. BEHAR: I'm going back to the rule. There is some documentation required as far as that there has been some review of the animal for either through fecal samples or the FAMACHA review, that there is something in -- but we didn't put it in here.

We kind of took it out, but part of the fecal sampling is also understanding what parasiticides are present, so that you can modify

your management practices based upon your problem, because certain parasites will go through a life cycle in a certain amount of days.

If you're rotationally grazing, you don't want to bring them back while your parasites are still viable. But if you don't know what your parasites are, then you can't modify your management practices. So those would be probably part of the organic system plan, because it is in there that you should be looking to modify the organic system plan to avoid the problem in the future.

MS. OAKLEY: And as an inspector, I'm going to come on your farm and look at your materials input list, and I'm going to say when did you use this, how did you use it, why did you use it? I'm going to ask you 800 questions around that. So yes, everything we all do is documented, yeah.

MS. BAIRD: The same comment. Health inputs have to be documented, use of health inputs and the reason for the use of health

inputs has to be documented. It's part of the system plan.

MR. CHAPMAN: It's in there. It says "monitoring with documentation of parasites," blah blah blah blah blah.

MS. SWAFFAR: Yeah, Harriet.

MS. BEHAR: Just because this is what I always say, documentation is not meant to be a burden. It's meant to help with management. And so the better organic farmers are those with the good records that refer to them for historical reference, to then actually lessen the need for use, for inputs because they're addressing issues with systems.

MS. SWAFFAR: Okay guys. I see no further discussion. We'll proceed to vote, turning it back to Tom.

MR. CHAPMAN: So the motion is to adopt the proposal, to approve the proposal. The proposal recommend two additions to the standards definition for emergency treatment of parasite control and breeding dairy fiber-bearing animals.

And then in addition of the paragraph to Section 205.238(b)(4), organic breeding dairy fiber-bearing animals when meeting the following conditions, and then it's spelled out in section (i) and -- paragraph (i) and paragraph double i, I guess (ii).

I'm not going to read it but it's on display in front of you and has been previously distributed to the Board. The motion came from Harriet and seconded by Jesse. A yes vote is to adopt this proposal; a no vote is to reject this proposal, and the voting will start with Ashley.

MS. SWAFFAR: Yes.

MR. RICE: Yes.

MS. BEHAR: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

MR. ELA: Yes.

MR. BRADMAN: Yes.

MS. DE LIMA: Yes.

MS. ROMERO-BRIONES: Yes.

MS. OAKLEY: Yes.

MS. BAIRD: Yes.

MR. BUIE: Yes.

MR. CHAPMAN: The chair votes yes. 13 yes. The motion passes and the proposal is adopted.

MS. SWAFFAR: And that concludes the Livestock Subcommittee.

MR. CHAPMAN: All right. Thank you, Ashley. So looking at the time, it's 3:42 right now. We will move to recess until four o'clock, and then we'll reconvene with the CACS Subcommittee.

(Whereupon, the above-entitled matter went off the record at 3:42 p.m. and resumed at 4:05 p.m.)

MR. CHAPMAN: All right. I see all members present and we are back in session, and up next is the CACS Subcommittee. Scott.

MR. RICE: Thank you, Tom. We are looking at one discussion document and two proposals this afternoon, and we start with the continuing discussion on imports and import

oversight, and we'll turn that back to Tom, since he was the lead on that discussion document, and had many questions.

MR. CHAPMAN: Okay. First of all, I'd like to thank the public, panel and folks for providing just a massive amount of input to our discussion document. It's very helpful and it's so much information that I think we are all still trying to organize and digest it.

I realize once you ask 75 questions, you're going to have to deal with 75 answers, which is a lot of answers. So as we go through this document, we have it really pared down to the title sections of the questions we asked. What I figured we'd do is just kind of go through the 11 areas.

I'll do a really high level summary of some of the themes that we got from the questions in those subject areas, and then discuss them through those kind of 11 areas, realizing that 11 areas is kind of a catch-all for pretty much all subjects related to import oversight,

opportunities and threats. Sound good? People okay with that?

All right, and then like an apology. This is a really high level. There's so much information there. Like I said, we're still working to organize it appropriately. So I want to call this a thorough review of all the public comments or a thorough review of the details of the public comments.

We are going to be working on that as we continue to move this issue forward into next steps. So the first subject was the role of documents in the organic supply chain, with a focus on imports. Generally, we received a lot of comments in this subject area, with a lot of support for making it a requirement to include organic designations on documents everywhere.

There's a lot of focus on the importance of that for verification. There was also a lot of conversation around the validity and the veracity of various documents. Some of the themes which we also heard on the panel were

around the difficulty of connecting products, suppliers and documentation, that kind of triangle altogether.

We asked some questions around what type of documents. Were some documents -- did some documents have greater veracity than others, and should organic be required on every single document everywhere? Generally, there was consensus around definitely title documents, that documented title change required organic labeling, shipping and sales documents.

But there was some concern around government-created documents, particular phytosanitary documents that just by action of the government it's not common to list organic on those products, and we may not be successful in requiring foreign governments to list organic on their phytosanitary certificates. So that was a callout noted by a lot of commenters.

Some other folks noted that the California State Organic Program already requires organic documentation on title change documents,

so documents of sale and receipt and things like that. A lot of folks commented that clear documentation would aid in audit and trace facts, and make the overall process simpler.

There were some requests for guidance and/or instructions on what exact documents would be needed to verify a product in the supply chain. We had some good dialogue especially during the panel about the documents themselves only -- there's the documents. There's also the process around maintaining the documents, and that that process is just as important as the documents, if not more in verifying that the organic system is functioning.

Documents can serve somewhat as a one pinpoint check, and this is really kind of from an audit perspective. But recordkeeping from an auditor's perspective is really a one-time view into an operation, and it's really to -- you're checking to make sure that the process is operating appropriately.

And so a lot of times, this was a

little bit off the scope of what we were asking for, but a lot of times it seems that just fixing the missing document is what's sought, as opposed to fixing the underlying the problem that the process broke down and allowed someone to accept a product without sufficient documentation, whether or not there is actually an issue with organic compliance or with that ingredient.

There was a lot of comments around transaction certificates, whether or not they were useful. Some folks did agree strongly that they were useful. Other folks raised some concerns with them.

There was also a lot of discussion around HS tariff codes in this section, and around generally their utility in identifying organic products for folks as they transact goods.

I'd really have -- although I'm going to stop it there, but that was a lot of the conversation around documents, and I'd like to open it up for discussion with the rest of the

Board now.

MR. MORTENSEN: So I love, I like the document a lot and thank you for the summary. I think that was very helpful. There are a couple of things that I was struck by, you know, at the 10,000 foot level, that I'm wondering, you know, the extent to which they need to be reflected in the document.

But the very sort of significant difference between perishable things and commodity crop non-perishable things, it really struck me the time frame, the capacity to hold something up and not have it perish. While holding something else up it perishes, but many other things. The idea that a ship could carry millions of bushels of something, all of one thing, raises an interesting question.

So I was struck by that, and the other thing I was struck by, I keep thinking back to that fulcrum in Albrecht's presentation, and then we saw case studies, I think of this, by several of the other panelists. That is the human

dimension. So when I look at the document, I'm trying to imagine if the human dimension is captured well enough there.

So that's what on my mind about it. I like the document, but I think -- and I also really valued the, a lot of the written comments and this global globe-side thing that was submitted had a lot of details that's in there as well. So it seems to me we have a lot of material to work off of.

MR. CHAPMAN: Yeah, and you brought up also -- you jogged my memory on another area that was brought up, which was around private label and branding of products, and how that can create confusion. I definitely see that in our own supply chain.

We work with companies that operate under multiple DBAs for no real apparent reason. There's no fraudulent activity for them, but they have a company name, they have a DBA name. There might have been a merger at some point in the history.

So they operate under multiple names. I just get used to using those two names interchangeably, and so does our receiving department. But then if you're coming from the outside and you're not familiar with it, it can, you know, I can see how that creates confusion. Anywhere that you create confusion, even if there is no fraud, that becomes an opportunity for fraud.

So that's, you know, that's an interesting point of how to deal with multiply named operations and just connecting documents. I'm curious to hear Scott's perspective on organic status on documents, you know, how you connect documents and products, you know, the comments you read on it.

MR. RICE: Yeah. I think you captured it pretty well, but definitely what we heard pretty consistently was that challenge of linking those documents across by the labels, across, you know, in the fresh produce trade of just here's your certificate with an unlabeled flat of

berries or tomatoes or what have you, and the need for not just clear labeling but labeling that provides information that has enough to conduct a pretty solid traceback.

MR. CHAPMAN: Steve.

MR. ELA: Yeah. I thought it was -- I guess the take-home message for me is more documentation and definitely linking them, but also still the documentation is somewhat easy to replicate, especially if you have a great computer.

So I think that making sure the links are put together is critical. Making sure, as you said, the company names. I know we even in our handling side have a terrible time trying to get certification documents from certain big companies, because I'm sure they're just overwhelmed with things.

But I think that all still needs to be matched with the traceability all the way back to where it came from, and I think that's the real key. I still get a little worried about, and I

don't know actually how to handle it. But I'm going to call it inventory.

Yeah, you know, let's just say Country B can produce 80,000 pounds of whatever. You know yeah, I'm buying ten pounds. It's possible they can produce it. But you know, is that ten pounds 80,000 times? I don't think we have any good way to do that, and I don't think yields are a good way to do it.

But I still think being able to have at the end thing the traceability go back and actually contact that farmer or that certifier where it started from and say does this make sense is really important.

MR. CHAPMAN: Yeah. Kind of common theme I noticed throughout the comments and the panel was that one, that there's no one fix that's going to solve this for us unfortunately. But beyond that is that there's -- there's a lot of opportunity for confusion around the status of an organic, whether a product that they have in their possession, based on the documentations

they have, whether it's organic or not.

A lot of that has just been accepted as common industry practice, because the standards don't require organic to be displayed everywhere. It doesn't even require organic to be labeled on the product specifically. So we've created opportunities. It doesn't mean they're going to be exploited, and it doesn't mean they're not going to be exploited.

But we've created a bunch of opportunities for this fraud, and so one of the reasons why I was interested in asking these questions about documentation is our Subcommittee had brought in Betsy Rakola and asked her about, you know, some of the -- and she's not here, so I hope I don't misrepresent what she said to us.

But some of the difficulty they've had and kind of the speed it takes to resolve some of these issues is that organic status is generally a separate document that goes alongside the other stream of documents that are there, and the product itself. So that like makes it harder or

creates again more opportunities for fraud, and then just makes it harder to conduct those traceback audits expediently and efficiently.

So as much as we can get that out there, it seemed to be a benefit. The downside, I think, is the more you force everyone to label something as organic, once that product becomes unorganic like through fumigation, you know, you're going to have to equally be secure in making sure that that organic designation ends at that point, and we haven't had much discussion about that.

But that would be my area of concern. Up next is Harriet and then Emily.

MS. BEHAR: I've got a couple of takeaways, and one is something with the traceability, really is part also of just a standard recall procedure, that if you had an issue with the product as an input, and I'm looking at Tom with Clif Bar. If you've got 16 different ingredients and you have a problem with a finished product, you have to figure out -- you

have to be able to go back and trace all of those ingredients and try to find out what the problem was, and then look and see which of those -- lots of those ingredients would have ended up in others of your product, so then you could pull recalls on that.

So a lot of this traceability, I'm always looking at how to market more documentation and tracking to people. This is just part of a good recall project and could actually be useful in helping them just run a better business.

Because if you had to do a recall on every single product that you had out in the marketplace rather than being able to narrow it down, you know, having a good traceability system is important.

I think we also saw too that we have issues not just in grain. There's a lot of loopholes across our organic supply chain. But I think not just on that traceability, but also continue in a tracking of the organic status. So

did it get fumigated? Was it handled by someone maybe could have commingled or contaminated it in the process? How do we know through all those hands that the integrity of that organic status was maintained, because those that are handling it are trusted to maintain that integrity?

So I think that's another challenge. So it's not just tracing it, but also feeling the trust that it's being handled correctly. That's it.

MS. OAKLEY: So this was a question maybe for the program, speaking in terms of document forgery. Do you see any opportunities of minimizing that through more standardized use of the USDA certificate?

DR. TUCKER: I think that Organic Integrity Database, the federal certificate, we put some things on it to make it slightly harder to forge. But we've also heard from other vendors that yeah, again somebody just said if you have a really snazzy computer program, a good printer. The certificates have QR codes and they

do have direct links back to the integrity database.

I think that's frankly where the traceability value is, because yeah documents, anyone with a really cool printer and a nice piece of software, and it is a true challenge. So there are small things that you can do. I'm interested in more of these what could a blockchain implementation do, where these are immutable ledger transactions that happen, and once they're committed you can't change them, and that I think there are some sort of risks associated with that.

You always have to be able to attach the data to the actual product. You can't disaggregate the product from the data. However, those electronic systems, particularly with these perishables, when you're trying to track down documents is there, you know, we hear these stories about just consolidations of trucks and trucks and crossing the border at three o'clock in the morning and needing to cross the border,

right.

Paper's just not going to cut it in the long term. So I think electronic data is easier to prevent fraud than paper data.

MR. ELA: I think just one last thing on the produce side, and you know, listening to the morass of undocumented -- I mean sort of documented private label things. I mean I think it just comes back to having the certifier listed on the box.

So you can just cut right to the -- you jump over all the people that were in between and go right back to the start and say is this your product? And you know, and produce works quickly. So hearing unlabeled boxes, unlabeled, you know. I think the comment that those boxes are actual, even though they're not retail level per se, they probably need to be treated as retail level, at least with who certifies it and the name of the certifier who's going to have the Organic Board on it.

MR. CHAPMAN: Scott, then Harriet.

MR. RICE: One thing that struck me through all of this, whether it was documentation or any of the other areas in our discussions, is a huge opportunity and need for education and outreach. Whether that is to the certifier, whether that is to the certified operation or it's the handler or at least for now uncertified handler.

Because clearly there are certain messages and requirements that are not getting out there, and sometimes those that do get out there are not understood in the manner in which they should be. So I think that there is great opportunity, even to something simple, so that what we started doing at our agency is just having one on ones with our certified handlers, to help their staff understand what they should be looking for.

That box with just sort of a random lock code is not sufficient, and here's the reason why you should be looking further and the why, and how that covers their liability or

strengthens their systems.

So yeah, just wanted to put that out there. Through all of these areas, there's a need and an opening and I think further discussion will help, you know, identify who can best fill that.

Whether it's -- whether it's the NOP, NOP in partnership with the certifiers, certainly the inspectors have a role. But just lots of opportunity.

MS. BEHAR: Another takeaway that I had was that we might be looking at the labeling requirement for bulk materials, as you just mentioned. The only requirement now is for a lot number, and we might be looking at that it should be, let's say, on the tote or pallet tag. It would need to be on the invoice, on the bill of lading, whatever. Just the word "organic."

And then one of my favorite pet peeves, which goes back many almost decades, is that in bulk, in the rule there's an anomaly that the USDA organic seal can be used on a made with

organic bulk product, while it's not allowed to be used on a retail product. I have seen that cause confusion in manufacturing plants, where they get a partially processed product and it's got the seal.

So they're assuming it's an organic product, but it's really only a made with because there is that allowance. So maybe this would give us an opportunity to kind of do that fix, and get that seal off of the made with organic bulk products.

MR. CHAPMAN: Sue.

MS. BAIRD: I think one of the take-homes I heard was, and I've seen it as an inspector for 20 plus years, is the role of the uncertified operation in the chain.

MR. CHAPMAN: We're going to get to that. That's when we get through our list.

MS. BAIRD: Oh, I'm so sorry.

MR. CHAPMAN: Yeah.

MS. BAIRD: I'm sorry.

MR. CHAPMAN: Sticking mostly to

documentation now.

MS. BAIRD: Okay.

MR. CHAPMAN: Yeah. Any other comments in this regard? Yeah, Harriet.

MS. BEHAR: I thought it was really an interesting idea to bring in financial auditors in addition to the organic inspector for the review of financial records, because as Silke said, you can't expect an inspector, an organic inspector to under the complexities of organic and also have a Ph.D. in Accounting.

MR. CHAPMAN: Do you have a question Asa, or are you just looking at me?

MR. BRADMAN: I just have a comment.

MR. CHAPMAN: You're thinking about saying something. Go for it.

MR. BRADMAN: I'm just trying to formulate it. I'm not quite sure how to frame it. I'll just repeat one of the suggestions we had earlier. I thought the idea of a trade commission review of the market would provide really valuable information, and that's something

that we might want to consider.

I could also help with thinking and evaluation of programmatic and acreage and production and that sort of thing.

MR. CHAPMAN: So it looks like our conversation is evolving beyond documents?

MR. BRADMAN: It might.

MR. CHAPMAN: So perhaps I'll close this one out and we'll move on down the list to keep this conversation moving forward. The one thing I do want to say, we talked a lot about documents. We heard some people also on our panel speak about the -- how documents can easily be forged, and they may not be the answer.

The one thing I do want to say is I think most of our conversation actually is around improving the documents, not creating new documents. So it's getting the right information on the right documents, not really like now you have to do ten new ones. It's making sure the status, the name of the operation, the name of the certifier, the connecting dots are all

present.

So that's just something also to keep in mind. So we'll move on to the next one. The next two are actually very interrelated, so I'm going to kind of just merge them. But it was the role of importers in the organic supply chain, who may be uncertified or certified, and then the role of uncertified operations in the supply chain.

Really briefly on the importers, generally there was an overall alignment from the comments that importers who may or may not be certified definitely do need to be certified. They play a unique role in the supply chain, and the lack of their certification is a detriment to traceability and enforcement activities.

We got comments that practice standards related to the importer's role should be clearly defined and may be different than that of a classic handler. I ask some rules around whether the rules for importers should be stricter, given their unique status in the supply

chain.

We got some mixed comments back on that, some thinking they should be more strict and others thinking that, you know, the rules should set out as they are in a similar fashion to traceability requirements in all operations.

Then there was again a lot of comments around the use of the Organic Integrity Database to verify organic status. I'm going to move right into the whole uncertified operations, because they are highly related to importers and most people looked at it in the context of uncertified importers. So if there is one area that rose to the top from what I read, this is the area, which is the role of uncertified operations and supply chains.

Clearly, it seems like everyone voted for this loophole to be closed. I don't think I saw a single comment that did not say that. It really seems to be top area that the CACS should pursue, including starting to kind of get into the ugly details of where are we going to draw

the lines and if we're going to close this exclusion.

Some of those questionable areas seem to be around warehouses, transports and retailers. So for other areas where it seemed somewhat more clear, and when I say warehouses I think I mean warehouses of packed product, although we're going to have to get through this issue.

Because there's warehouses of packed product, there's warehouses of packed and unlabeled product, there's warehouses of bulk product, there's contract warehouses, there's warehouses that serve the distribution chain of retailers, there's warehouses that are, you know, just part of a normal operation. There's warehouses of produce.

So there's -- that definitely needs to be dug into. You know, other areas that were brought up were ports, brokers, traders and distributors, anyone who's applying a label anywhere.

There was various types of vehicles. There's grain brokers. The other area I think of alignment that did come up is I asked questions around Customs brokers, which they play a role in importing items, but they themselves are not the importer.

They're not the one who owns the products. They facilitate the interaction with the government officials, they're licensed through the government, and it seemed quite clear that they also were not an entity that needed to be certified.

There was a lot of discussion around if you take possession or title of a product. Those are kind of two areas that we should look at, and that exemptions or exclusions should be, you know, limited based on how the product was packaged and how impermeable that packaging was. I'll stop there and open it up for discussion. I'll start with Sue, because I cut you off with an area. So on the certified operations.

MS. BAIRD: That's okay. No, I

appreciate all this discussion, and I also agree that this is probably the most critical point, uncertified operations in the supply chain. I've been on a lot of inspections and I actually came, in one of my lives, from feed and seed program and state programs, and all the brokers and all the transports had to be certified.

So when I came into the organic program, at that time it was Bob Pooler, so you know how long that was, and I said -- they did the first training I went to and I said are you kidding? Brokers don't have to be certified? He said oh no, it's exempt. I said well, you've got a problem, and indeed we've got a problem.

We have brokers who collect organic producer certificates and use it then to move other products, and I've seen this and I've heard of this firsthand, as in my inspection years. Without any kind of oversight, that's going to continue to happen. On warehouses that don't have a clue, that may be on a warehouse affidavit.

Sometimes not. You get to an inspection and you say well man, you don't have much room here for your finished product. Oh no, no. We store it in cold storage, out 50 miles away. Why isn't this on the OSP? Well, I don't know. Didn't know I had to. So, and when you get there and you call the certifier and you say hey, there's you know -- 50 miles away there's a warehouse.

Well, you'd better go to it too. You get there and the warehouse doesn't have any idea about maintaining organic integrity because they're not educated. So I would agree. This is probably one of the easiest loopholes to fix, although that's not true because you have to do a rulemaking change. So anyway, my comments.

MS. BEHAR: So when the rule was put in place, and even when the organic law was put in place in 1990 and then the rule in 2002, we didn't have the same maturity of the organic industry or the supply chain as we have now. While there was some discussion even when the

rule came out about why aren't brokers being certified and actually the state of Texas was actually certifying retailers at the time, and requiring that of retailers.

They had to change their law to meet the federal law, so that has been done. Of course again back in 2002, there were a lot less retailers who were selling product. We didn't see the necessity as desperately as we do now, but this is an example of the continuous improvement of our regulation to respond to our marketplace and the needs of our stakeholders.

Obviously, our stakeholders need to see integrity maintained throughout the supply chain. So I understand why the brokers were not included, but at this point I think we need to recognize that we're at a maturity level that we need that.

And I hope -- and also too, part of it was that they were not handling nearly as much organic, and so they were not then gaining the financial benefits of handling organic and that's

not the case anymore either.

MS. BAIRD: Yes. I'm sorry, you're right, absolutely. Feed and seed law has been law since 1919 and I always say that, and this law was in 2002. So a whole lot more years of maturity in the two different laws.

MR. CHAPMAN: I've got Ashley, myself, Steve, Scott, Dave. Ashley.

MS. SWAFFAR: So I know we're talking just about imports here, but I just want to bring up the broker point on the domestic side, I think that's a real win when you talk about this, or if we propose anything. Please don't leave those folks out, because I think that's a really critical part.

You know back on my days when, you know, I was doing a mill and sourcing, you know, we sourced everything through a broker, a domestic and there's some challenges sometimes doing audits, organic inspections with those brokers, and I think that's a real issue there on the domestic side.

I want to echo Sue's point on a lot of offsite storages. So it's more than just grain, you know. There's eggs, there's all kinds of stuff I see everywhere.

MR. MORTENSEN: Could I just ask Ashley to expand on something? I myself am wondering during the course of the day how does livestock? So we looked at fresh produce and commodity grains, the kind of issues that we're exploring here in this document. Are we missing things when we think about livestock, or should we not be thinking about livestock when we think about this?

MS. SWAFFAR: From an import issue, you know, we're not really importing any eggs or -- I don't know about other things. I'm an egg person, you know. I do buy some beef at the store when our beef isn't around and it does say other countries. So I do know, you know, we are importing other stuff.

But I mean there's fraud. I think there could be fraud in any category, you know,

domestic or imported. So it's just getting the better certification program that encompasses everything. Scott from your --

MR. RICE: Yeah. In terms of uncertified handlers or operators in that livestock supply chain, you know, we did have in the last -- the years bleed together. But not too long ago, auction yards came up as an issue, and a number of auction yards came to light, that they were not just, you know, a quick pass-through but animals were there for a period of time. A little difficult to see if they were getting organic feed and how they were being held, etcetera, etcetera. So that came from the program, a clarification that those indeed need to be certified.

I think it just points to the, you know, the work that we have ahead of us of defining what it is we're talking about and what it is that needs to be certified.

MR. CHAPMAN: I guess I have myself next. Oh, what do I want to say? Oh, you know,

we're talking about the need and the benefit to all these. I do want to point out and I, you know, an organically grown company, the whole Organic Producers Wholesalers Coalition. I think I butchered their acronym, but I think you know who I'm talking about, who Michael's representing.

You know, they have provided comments over the years detailing the issue in the produce industry. So I'm not -- what I'm about to say is not -- I do think it's an issue that needs to be addressed directly. But also I think you have to keep in mind that there's a lot of small operators that you, you know, especially on the fruit and vegetable side that may use cold storage warehouses that, you know, if they're the only organic operator around, they may be the only person that we require certification of that warehouse that may make their operation more difficult or more expensive to be able to manage.

So it's a tradeoff. I'm not saying we shouldn't still go forward with it given the

integrity issues, but that's something that should be considered is these, you know, third party kind of cold storage warehouses and small operators and the impact that requiring organic certification of warehouses may have on these various types of operations. Steve, Scott, Dave, Emily.

MR. ELA: Can I change names to see if I can mess you up? I totally agree with what you just said. I mean it's an issue for ourselves. I think at a minimum, then, it still needs to be documented in the OSP and it still needs to be -- somehow the producer still needs to show how their product isn't going to be compromised.

I mean whether it's a certificate of integrity or something from that warehouse, I think there may be ways to play that if there's an exception but still not ignore it. The other thing just quickly is I think, you know, it came out and I know Allen and Lisa as retailers.

I get their heartburn over this, but I certainly get if it's not at the store level

and the store is running distribution, which is very common, I think that loophole of saying that's part of the retailer is dicey.

You know, at the exact store, when it's being delivered to the store, you know, then I get the complexity of trying to, you know, certify a whole store. But I think we need to -- distributors saying they're retailers or one in the same, I think we need to tighten that up.

MR. CHAPMAN: Sorry, I want to provide clarity to one of Ashley's points to while it's directed right now at import oversight generally, we did talk at the last meeting, and correct me if I'm wrong Jenny, but we talked about potentially expanding this to a supply chain integrity kind of viewpoint.

At that time, it seemed like the program was very supportive of that, kind of all actions related to supply chain integrity, domestic or abroad. Is that still the case?

DR. TUCKER: Yeah. I would generally agree with that supply chain dynamic, the supply

chain dynamics. I think that there is a general sense, and it came out in the panel, that when we're talking about import certificates, we're talking about really bringing product in.

I have not seen discussion about, for example, transaction certificates needed for every single domestic exchange. The expense of that, which we have to think about during rulemaking, I mean that is a reality.

So when we think about risks, I think when we think about import certificates, understanding that behind the import certificates there might be a big transaction history leading to that. But supply chain in general should be universal.

MR. CHAPMAN: Yeah, okay.

DR. TUCKER: Sorry, that was probably longer than you wanted.

MR. CHAPMAN: Yeah. Not longer, but yeah, yeah. You got -- you hit what I wanted. So I got Scott, then Dave.

MR. RICE: I think I got what I was

putting across before. Something else will come up.

MR. CHAPMAN: Dave.

MR. MORTENSEN: Yeah. The other thing on supply chains that I was struck by is we heard about a number of models, and I love modeling. Let's not reinvent the wheel. So we hear a lot, Tom, from you today and other times about Clif Barr's model. I was struck by Erin Heitkamp's model, Pipeline.

The EU is a model, and it seems to me that we were hearing about things that are working in these models, and Silke's point that there are -- there's more reward in some of the hot spots of problem in the process of these chains, that perhaps by studying the models we would inform our thinking about how best to proceed and improving.

That might be just something to keep in mind as we continue to enhance the document.

MR. CHAPMAN: Harriet.

MS. BEHAR: So in the past, for

individual producers, they could, under their own farm inspection, have a processor who's only doing their own processing. So I in the past, it's kind of gone away, but maybe we need to bring it back to deal with that issue with smaller scale producers, where they had a cold storage. They were storing their apples somewhere that's only for them, that they could get the certification under their farm.

So they paid a little bit more, but it wasn't the same as having a full certification. The cost was not there, and then that farmer owned the certificate for that outside. I've seen it done for slaughterhouses. I've seen it done for feed mills. But once that mill or slaughterhouse or warehouse was managing more than one producer, then they needed to get their own certificate.

So that might be a model we can look at to address the small scale producers' need for an individual storage area or whatever.

MR. CHAPMAN: I think Scott had

something about that.

MR. RICE: Yeah, real quick. We kind of dealt with -- we reevaluated that in the recent past, and because of issues that assumptions, that somebody else was maybe managing the integrity the -- it was just there was -- it was a little too loose, and I think we got some instruction from the program that that was not -- not as satisfactory as it maybe once was.

MR. CHAPMAN: Yeah, that -- there is an instruction across the board for the program to end that activity, right?

MR. RICE: Yeah, yeah.

MS. BEHAR: But did that include on-site inspections?

MR. CHAPMAN: Yeah. I mean an example that we used to use years ago I think, and I probably shouldn't disclose this, but you know we had -- I mean I used to certify -- when I was a QAI. So you know they -- we went into bakeries when organic was new that didn't do any organics.

So we knew more about it than they did.

So we managed -- we did it in the appropriate manner, managing all that certification on behalf of them. We, you know, instructed them on what the programs they needed to run and set in place, and we owned that certification. The Bakery A would be owned by Clif Barr.

So that was that kind of model, and you know several years ago the program came out because that's certificate's now out there. It's the same issue that Sam brought up with like warehouses, is that certificate's now out there and it can be misused by that bakery to say hey, I'm organic. I can do organic for someone else, even though we're not managing that program on behalf of that person, that second party that they brought in.

So it just created a lot of opportunities and a lot of unaccountability.

DR. TUCKER: I only wanted to comment that we're struggling with some really important

issues here, and I was looking back at 4009, you know, the who needs to be certified instruction. That came out a few years ago. We're still finding non-compliances with certifiers just on who needs to be certified.

That is such a foundational thing. So I do want to encourage everyone to remember 4009 is out there. It is very much in effect, and we do still find some certifiers who aren't all that familiar with it. It's a real challenge. I think closing some of these loopholes will help.

MR. CHAPMAN: Emily.

MS. OAKLEY: I wanted to echo what you said, and I think that Steve addressed it to a large extent for smaller scale producers. Just we need to take somewhat of a risk-based approach as we address this issue and, you know, how much risk do we have with smaller scale producers as compared with some of the much larger operations.

Not that there isn't any but, you know, just take a smart approach in terms of the risk as well.

MR. CHAPMAN: All right. Looks like we've covered this subject for now. Moving on down is, I'm sorry. I scrolled away from my summaries, my everything. Up next was the global national, global and national organic crop acreage information.

In general, and this was true of most things that were commented, most comments we received back said something along the lines of yes, this is a good idea. So this was in that same realm. Some folks put it quite high up on their list, including CCOF and I believe OTA, that good acreage data and yield data was important.

There was definitely a divide between acreage and yield data, and whether or not getting yield data was possible in the short run, or even possible in the long run, and then also just how, how accurate or useful that would be by crop types.

There were some examples of crops with multiple harvests, crops that may have a lot of

quality coals that go on. So how useful that data would be if lots of the crop gets pulled out because of quality or other reasons.

There were some concerns raised around the acreage data and generally around if it could be assembled and what quality it would be. Some of it's that, you know, generally the ERS data right now is, you know, at least a year back looking generally, or maybe that's true for the ERS. It gets accumulated as it goes on. But it's true for some of the organic surveys that happen by NASS in other areas.

So the data is old. There's errors in it. How do you deal with old crop? How do you deal with crop that's never sold off the farm, and what happens when there's discrepancies between data points like if someone brought up a case of acreage reported on the certificate versus acreage reported to the state of California.

There was some privacy concerns raised about reporting acreage by individual operator,

and I had definitely heard that from grain operators in the Midwest as an area of concern when it's connected back to an individual operation.

But a lot of certifiers did say this was implementable at some points, that they had the information somewhere but it may not just be readily available to be reported into a database.

I do want to note that we mostly heard from domestic certifiers. We did not really hear from foreign certifiers on that matter. Some people commented that maybe acreage data could be part of a risk assessment system that a certifier is hired and reporting it, they would be less risky.

If they were not reporting it, then they would be considered more risky and then that would, you know, be used in an accreditation system to kind of designate how often they get audited or how intensely they get audited.

Some people commented on focusing on just risk crops in regions or maybe raw products

or just crops with one harvest. Again, this was somewhat difficult with diversified operations, people that had different varieties and multiple harvests. I just want to point out that the state of California, which is not a small producer of products, used to run a program and it did cause a lot of pain points.

So they've done some refinements to them, but I think that's an opportunity, a model for us to look at to kind of learn from, what went well and what didn't, and what they're doing today. There was concerns around cost.

There was concerns around are we talking about parcel or cropland reporting. Someone also pointed to the reporting mechanism related to acreage and crop production that's used in Italy. So that's another model that we could look at.

And then, you know, some folks raised concerns around not getting this data from equivalencies and recognition of countries. So I'll stop there, and open this one up for

discussion. Harriet, then Sue.

MS. BEHAR: So a couple of things. The data from the certifiers is much better than the NASS data, because that is voluntary and does not capture everything.

As a matter of fact, the last organic survey had I think only about two-thirds of the operations listed compared to the Organic Integrity Database, and you know, it took me less than a minute to look at that and see well wait a minute, they say we only have 650 operations in Wisconsin and I look at the Organic Integrity Database and it's 1,300.

So, but I understand the proprietary. So I'm just wondering too if perhaps there could be some kind of password-protected part of the Organic Integrity Database that would be available to certifiers at least to verify, so if they have a client that wants to verify something, they could be looked at that way.

And lastly, I know I asked about yields too. But there is some publicly available

information by county on commodities of yields for crop insurance. So if you wanted to know how many strawberries somebody's producing, it's not necessarily going to be there. But most of the commodity crops, cotton, corn, soybeans, wheat, oats and there is typically also an organic, which is usually a little less than it truly is.

But that's all publicly available and at anybody's fingertips who's on a computer. So there are some at least based on yield factors.

MR. CHAPMAN: Do they have it by county in the Ukraine?

MS. BEHAR: No. But they do have it here in the United States, but this is for crop insurance. I'm just saying it's a start.

MR. MORTENSEN: There are, you know, it's interesting, we've been modeling and projecting, not me but the U.S. government has been keeping Eastern Bloc grain yields at a pretty granular level since the late 1950s. So we have pretty good estimates of annual yield, even toward the end of the growing season of that

season for Azerbaijan, Kazakhstan, Russia, et cetera.

MR. CHAPMAN: I'd assume those are for conventional production?

MR. MORTENSEN: That would be conventional, but you could adjust it by some factor and just have at least a guesstimate for the country level production.

MR. CHAPMAN: Ashley.

MS. SWAFFAR: So I am a data lover. I do love data, but I don't know where this one could really get -- gain us anything. On the global yes, that could be, you know, knowing out of a country what they would typically yield. But like on a national, you know, if they say like okay, I've got a farm in Arkansas and I have 100 acres of corn.

What's that going to tell you if I sell you something, because I could sell you that. I could buy some conventional and then I could sell it to Sue, and give each of you a certificate that says I've got 100 acres of corn

and I sold you the exact amount.

So without a transaction certificate, I think that data doesn't really get us anywhere, except for the global scale of typically we should be getting X number of bushels of corn out of Ukraine or wherever. So I think domestically that's a challenge there.

MR. CHAPMAN: Have you got something directly to her or -- okay, Emily, then Sue.

MS. OAKLEY: Well I hear what you're saying and I think that's true, but I think that's where the high level financial accounting can come into play. I mean it's still obviously totally impossible to execute fraud in accounting as well. But I think it can help address some of that.

MR. CHAPMAN: Sue.

MS. BAIRD: Yeah, I agree with Emily. I didn't realize that inspectors didn't calculate acreages and yields. I just thought that was part of being an organic inspector, and I do exactly what Harriet says.

I go to county records and I say oh, this area gets an average of 50 bushel per acre soybeans, and you know, I did your calculation and you ended up and you sold 75 bushel? You know, explain to me the discrepancies here.

So, and acknowledging that is a whole lot easier than someone who does diverse vegetable production. Then it becomes a lot harder and a lot more work. I don't agree, Ashley. I understand that you can use a certificate and I've seen people do it, use their certificate and sell over and over again.

But that's where the financial comes in. I think that it's critical that we have that acreage. Do we want to put it in the Integrity Database? Perhaps not, because it is subject to sunshine.

Anything that's out there is subject, and maybe that is an issue. But at least the certifier should have that data I think. Maybe it doesn't need to be reported publicly.

MR. CHAPMAN: So we've got myself,

then Scott. So real quickly, I just want to comment. I didn't hear, I didn't read in the comments myself that certifiers were not doing acreage, yield, mass balance, all that stuff. I read that that was occurring.

What I read was that that might live on a piece of paper in the inspection report, and not in a readily available format that would make it easy to then input it into a database, and that was a big barrier with that piece. I think one of the lessons I learned from my involvement in the state of California program was like, data is great, I love data too, but you've got to use -- there's still a lot of cost and effort involved in accumulating and maintaining that data.

So really what we should be doing is designing whatever this is with the end state in mind. So we need to figure out what we're going to use this data for and then collect it appropriately. You know, some of the problems that caused a reaction in the state of

California, which was really driven at the grower level, was that it was too intensive, the information they were seeking.

It was, you know, Jake noted it was a parcel, crop, crop year. I'm missing something, but there's another slice in that, and maybe even more sales. Yeah, that made it even more intensive. So I think, you know, we need to -- you can't take this data point so low that it's intrusive and unmanageable.

You also can't take it so high that it's unuseful and doesn't give you any valuable data. But one of the takeaways I took from this is we really need to figure out what are we going to do with this, and then design whatever our request is around this to match that. So anyway, that's my thinking. Scott, yeah.

MR. RICE: Yeah, just a quick follow-up on the yield conversation. I think it speaks to inspector qualifications to a degree and sending the right inspector to the right operation, so that you have someone who is

knowledgeable in that cropping system or livestock production or whatever the scope or scale might be, that they can see the yield. They can see the acreage and have an understanding of what makes sense for that, and know when to smell something funny.

MR. CHAPMAN: Jenny, did you have anything to add related to crop acreage, OID, just want to share anything?

DR. TUCKER: We've actually been doing a fair amount of looking at this problem. So what we would like to do and we raised during the call with the certifiers, our sort of acreage working session, is sharing. The Organic Integrity Database already has password protection for certifiers.

Right now, certifiers in the system if they log in, they can see the acreage associated with their own operations, but not the acreage associated with others. Now we have gotten -- so what we'd like to be able to do is make that acreage field available to all certifiers. So

all certifiers can see all acreage in the database.

That information would still be protected as business proprietary information. So for example if there was a FOIA request, for example, as we get FOIA requests, that field, the acreage field is always redacted, because it is business proprietary information, so that field would simply be protected.

So the question is are we allowed to share acreage data between certifiers and so far I have not found a legal basis for not allowing that.

So we have been checking with NASS and ERS because they have very strict data-sharing rules, to see whether there are any rules that would prohibit that acreage-sharing. We also have checked with Office of General Counsel, and we already trained the certifiers in February about the fact that certifiers can share information credibly needed to certify, decertify or investigate an operation.

And so there is a lot of impetus for being able to have certifiers be able to see each other's acreage data. Now when we first did requirements around the Organic Integrity Database back in like 2013, bunches of certifiers did not want that, which is why we protected it at a certifier level only. In the working session, no certifier objected.

So there's really been a bit of a shift in terms of what we're hearing as to how certifiers feel about that kind of data-sharing. So that's just my four and half cents on that one.

MR. CHAPMAN: Thank you. And Jenny, I invite you to hop in on any of these discussions, more so than we normally would have you do, because you know, the perspective of the Program I think is vital as we continue these discussions.

DR. TUCKER: Thanks. I'll try and keep it to a minimum.

MR. CHAPMAN: No, no, don't worry

about that. Steve.

MR. ELA: It's just my -- I think that kind of thing is really critical. I think the public database from NASS or by county is suspicious. I don't know how many times I get the call from NASS as I'm out doing something and they want my peach production report. And I, you know, I get within probably 15 percent from memory, but it's not anywhere near exact.

The other issue is, at least in our area, if there's only one operation that's certified in that county, then it can't be reported because you're actually reporting information that directly ties to a producer. So in Iowa, where you're looking at by county a lot of organic producers, that data's probably pretty good.

If you get into Colorado, we can't even get documentation for organic prices on peaches, even though there's a lot of growers and peaches because it's not enough growers to not reveal who the growers are once you do the

statistics.

And so I think that -- while it sounds good, that county-level data it's -- it's hard to actually pinpoint it down when you have few growers in a county, so.

MR. CHAPMAN: All right. Anything else? I guess we'll move on to the next one, which was equivalency recognition agreements and certified operation databases, like the Organic Integrity Database. And so we were asking about basically all the operators in the world that can sell to the U.S., that aren't part of the OID and what we should do about it, and we got a lot of feedback on this.

We got a lot of feedback on how important the OID has become to handlers and certifiers in verifying the veracity of some of the documents that they get, and that it's an incredibly useful tool for enforcement.

I do want to make a little side kind of editorial comment here that, you know, there's been a lot of critiques of the Program and of

certifiers on being reactive to this issue of fraud and importer issues and oversight.

And I do want to point out that this, you know, when you're in these kind of crisis situations you kind of forget that it could be worse, and that there were some actions taken proactively, maybe not all the ones that were necessary. But this is definitely one that was done proactively. This was in the works for I don't know how long. How long was the OID in the works for?

DR. TUCKER: We did a needs assessment in 2012-13. A lot of people contributed to that.

MR. CHAPMAN: Yeah. So '12-'13 since then, and it has really become a critical tool for everyone to verify, again the veracity of the certification documents. So, incredibly useful tool and we are asking here about how we could expand that.

So there was a lot of information. Generally people agree that there are concerns around being able to verify the validity of

equivalent and recognition partners, because there is no equivalent kind of database out there for people to go out and reference.

I know and maybe Jenny can pipe in a little bit, we talked really briefly in the Subcommittee that this, you know, including them in the OID would potentially be a very large scope of work and potentially difficult to do.

But you know, one of the perspectives that we had taken when we asked them this and there was a lot of agreement was, can this not be part of the equivalency agreement, that the expectations are equivalent partners develop a similar system of their own to manage their own certified operations.

In my personal opinion, that is the right way to go about it with an equivalency because it's really their standard. It's theirs to manage and we're recognizing them as equivalent. That includes the ability to validate the authenticity of their certificates. Do you want to talk a little bit about --

DR. TUCKER: I'll reaffirm your thinking on the equivalency. We don't see it as reason -- it's just not manageable to have equivalent folks in OID. The recognition agreements is something that we actually always saw as a long-term goal. Right now, that's actually more of just a policy question on how to implement it and how to ensure the data quality.

It's not a technical problem. The system's built to accommodate it. We just haven't gotten there yet.

MR. CHAPMAN: Yeah, and that was one of the comments we got back from that, was a lot of folks thought recognition agreements basically require ACAs to still operate under the USDA standards. So as part of that reporting to the NOP it should be one of those requirements, and so they should be held to the same reporting requirements as every other ACA out there.

People like to have it as more robust than paper certificates, but there were still some concerns around like not listing brands or

labels, how it could be verified, the validity of the data and how frequently -- a lot of the comments around how frequently data is reported and how real time it is. Any comments on this section? Harriet, Harriet?

MS. BEHAR: We didn't really cover this, but when one of our equivalency partners flags a certifier as being in suspension or having problems, you know, that we don't have the same risk attention to them.

MR. CHAPMAN: Certifier or operator.

MS. BEHAR: Both.

MR. CHAPMAN: So certifier is in the later sections but --

MS. BEHAR: Oh okay. But yeah. So I'm just wondering too about putting in place some sort of policy, that if one of our partners has flagged a problem operation that we scrutinize it as well.

MR. CHAPMAN: Under their equivalency? But it's there. I mean like the European equivalency for example, or a Canadian

equivalency, like it's a Canadian organic certificate. There is no American organic certificate there. That's --

MS. BEHAR: Right. But if Canada has identified an operation as being problematic, then we should also be somewhat suspect about their sales, and flag them as something to look at, because -- just because -- I mean they're coming in under an equivalency, but their overseeing agency has identified them as being -- as having problems with maintaining integrity.

MR. CHAPMAN: Yeah, yeah. I hear that. I guess my concern right now is we can't even get a full list from Canada as to who their operators are, let along their problematic ones. So yeah, I don't know, baby steps. Anyone else on this subject?

(No response.)

MR. CHAPMAN: All right. Up next was the role of residue testing to verify bulk shipments of grain. A lot of people talked about how this should be part of a risk assessment.

Some of the risk criterias people talked about was if there was an issue with the exporter or the country in the last 12 months.

We asked questions around volume and we got a mixed response, a lot of industry saying that volume should not be a factor in it. But you know, I think Sam had some interesting insight on the panel that, you know, a single shipment can have some dramatic impacts on certain markets, and so volume may actually be a risk factor that should be considered.

People talked about it should be a requirement and checked at CBP for clearance. We asked some questions about how it would be managed and who would be responsible for it. You know, those questions seemed unclear from the answers who, when, who pays, how it should be done.

A lot of people talked about its importance as a deterrent. We also heard that a lot of handlers are already doing this, but that information is not being shared. So it kind of

goes back to that question I asked about the good actors are avoiding it in their supply chain, but it's still allowing that product to be out there for the bad actors.

There was also some comments that the current NOP listing for testing doesn't list that testing screening that's out there, and that guidance document doesn't have common fumigants like aluminum phosphate, methyl bromide, phosphine. And so maybe there should be some consideration about revising that documentation, that advice. If you want to hop in on that one.

DR. TUCKER: We agree. We understand that that is out of date. It needs to be updated, and that's one project. Having an acting deputy administrator from Science and Technology Programs has offered unique insights into that so --

MR. CHAPMAN: Yeah. Some folks talked about, you know, best practices, and how this could be incorporated into an organic systems plan, and that it should be part of a supplier

risk program, and if a supplier, you know, if someone's not doing that in their supply chain, then that should be an indication of higher risk, which then opens them up to potentially more inspections or sampling by the certifier as an interesting way of approaching it.

There was some questions around how useful this data would be, and that we should make sure that requiring this is effective, is an effective deterrent basically. There was a lot of comments around GMO testing as well, and yeah, that's pretty -- that's a pretty good summary I think.

There was also a lot of comments around different product commodity types, that this, you know, may make more sense for certain grain shipments, but could present an issue for fresh produce, although there's other discussion later that maybe it's not good at a proactive way of preventing fresh produce issues.

But it could be a way of identifying again some of those issues where they exist if

you, you know, the produce you test might be released for sale and consumed by that point, but then it would allow you some data points on where to start digging back into that supply chain. I'll stop it there and open it up. Harriet, Scott.

MS. BEHAR: I think it's important that we make sure that we don't go down the path that a clean residue test means it's organic. There's a lot of conventional product that will come back as not showing any pesticide residue. So this is just one tool in your tool box, but that is not -- that it's not necessarily the only thing that proves organic status.

MR. CHAPMAN: Yeah, and that was actually a very common theme, thanks for saying that, that this is a tool. It's a tool that we should use, but again it's not -- like everything else, it's not the sole -- it's not a substitute for a lot of the other things.

MR. RICE: Yeah, and I would just add on that that there -- similar to the -- the

produce testing may not catch it in real time, but it shows that a system might not be working. So a clean test may not show residue, but maybe some risk-based and random sampling of soils would potentially show a similar, reveal a similar broken system or fraudulent system.

MR. CHAPMAN: Yeah, and thanks for bringing that up. Peter brought that up about soil testing as a way. It was kind of outside the scope of this question. We unfortunately scoped this one in about bulk shipments of grain and kind of missed some comments on maybe a wider section. But definitely that was a good comment on, you know, a tool for overall enforcement and detecting fraud at the farm level. Sue.

MS. BAIRD: Yeah. I just agree with Harriet and Scott. I don't think that we -- I don't think that we should require all of the shipments to be pesticide-tested. It's just way too expensive.

You know most feed mills brokers that I do inspections for routinely test every

shipment that they receive for GMO, because it's pretty cheap to run the strip test for GMOs.

But pesticide testing is relatively expensive. But I do think that it needs to be implemented more often, and I agree especially for produce it would be a risk assessment tool as opposed to a product, and we're not supposed to be doing it, you know. Organic certification is a process certification anyway so --

MR. CHAPMAN: A strip test when the truck shows up at a feed mill is cheap, but a strip test when a bulk grain ship shows up at a port in America and gets rejected, it's quite expensive. Yeah, that's what I'm saying. But Emily, Asa.

MR. BRADMAN: I just want to echo those comments, and I think we have to think of testing in two ways. One is compliance, the other is monitoring, and I think the monitoring component can point to problems, and there may be individual case follow-up.

For example, we heard about the USDA

transfer of information if there's a problem measurement. But those samples are usually collected randomly and they're not, you know, inspection-generated. But I think that there could be some general monitoring that could be expanded beyond, as we just talked, beyond commodities to include like soils and perhaps plants themselves.

And then at the same time, a test could assist with a compliance investigation, but should not be, you know, considered necessarily the gold standard. I think there is some utility there.

MR. CHAPMAN: Emily, then Sue.

MS. OAKLEY: The panel also discussed the disincentive around testing because of its cost, and I think we really need to address that, especially when testing reveals fraud, and if there's a way to pass that test on to the fraudulent entity and potentially a fine as well, which could potentially offset some of the other testing.

MR. CHAPMAN: Yeah, that's a good point. Sue.

MS. BAIRD: It is a good point. Unfortunately, it's not written into the rule that way. It says that the certifier has to assume the cost, unless it were an investigation, and then I think you can pass that on. I agree with Asa; it is definitely, should always be done in investigative circumstances. But on a routine basis, and I know that we're required to do five percent of testing, is that correct? Is it five percent that we're supposed to do?

I'm not sure that's enough, you know. Five percent, and I think Sam made that point. Five percent of a whole lot is not very much. So but I'm cognizant it costs a lot of money to run these pesticide tests, and certifiers need some kind of help with the cost of it, because it really does cut down on any kind of sustainability for the certifier.

MR. CHAPMAN: So I'm also pretty sure people are getting tired of me stating the state

of California as an example, but the state of California organic program does have a monitoring program, where they go out and they test and market product and, you know, they sample as part of their own CDFA and CDPH audits of facilities, and I guess I want to lob a question that you, Jenny, just so you're ready.

But I mean clearly like that's funded through a fee that's imposed on all operators in California. But if, you know, what are the hurdles to a similar kind of monitoring program done by the agency instead of certifiers. Clearly cost is one, resources is another. Are there other areas that present roadblocks to looking at such a program?

DR. TUCKER: The cost and resources are always the limit. I think one of the things we've been trying to look into in terms of the way the pesticide residue rule was written in 2013, that was published in 2013, it did make some pretty specific comments about what costs were covered and what costs weren't.

However, certifiers do have fee schedules, and one of the fee schedule items is unannounced inspections, right. If you have reason to believe that you need to do an investigation because you question whether an operation is truly compliant or not, an unannounced inspection is a tool that can be used.

So if you're doing testing during an unannounced inspection, that unannounced inspection should be on the certifier's fee schedule, and therefore should be able to charge for that. So I think we need to -- we've been talking a little bit internally of how could we -- how do we think about certifiers.

Certifiers do need to be able to charge for the services that they do, without it becoming a disincentive. So we're not trying to set up counter and some disincentives here. The question is how do you -- how do you frame it in a way that is also legal with the regulation as written.

So we have been, we are -- we think there may be some sort of misinterpretations on how that is being applied, because unannounced inspections are a part of the allowed certifier schedule of services, and testing should and could be part of that unannounced inspection. So we're working on that.

MR. CHAPMAN: In terms of like a monitoring program, resources, funding, is the authority there? Is that something we need to look into? Do you know --

DR. TUCKER: I don't think we need to look into the -- well, I don't know why we wouldn't have the authority to do that. We have done some work with S&T in the past, in terms of surveillance sampling and testing. We have talked about doing that, you know.

Some of -- Sam during his comments had a lot of ideas on how to spend that extra money, and some of those ideas were very similar to ideas that we have been thinking about how to explore in terms of sampling testing. So we

certainly have done that in the past without a legal challenge.

MR. CHAPMAN: Okay. Asa.

MR. BRADMAN: --as part of the concept of continuous improvement, technologies for measuring pesticides and other contaminants at low levels is changing and improving rapidly. So costs may go down. There may be new technologies to screen at quite low levels for different classes of pesticides.

There also may be the possibility of -- if we think there's a material that's being used improperly and it's say more commonly used on a fruit or on grain, there might be a screen specific to that commodity that might have a lower cost per file than just a standard AMS screen.

So we meet periodically with people who are developing very sensitive detectors for pesticides, and many of these things aren't on the market yet but I think they will be.

MR. CHAPMAN: All right. We'll move

on to number eight. Oops, yep. Go.

DR. LEWIS: One thing that was brought up also is having an understanding of the production practice if you're visiting -- if you're visiting the field and you find the field is clean, clean of any wheat pressure, kind of thinking about maybe there was an application being made. So kind of understanding in terms of the crop production practices, and we heard that from several people as part of the panel.

MR. CHAPMAN: All right. Is the role of certifier operation when certifying commodity in a third country with import controls on the commodity. As part of this, this was basically looking at if a commodity had some sort of import controls, generally a fumigation requirement and it was being certified to the National Organic Program, that should -- should that be a risk factor. Should that be something that gets considered.

We got a lot of comments on this, that this seems to be an emerging area and a need for

more information-sharing and education to basically everybody, on what are the requirements for import of different commodities and then really what are the expectations for different actors and supply chain and their knowledge.

There seemed to be some level of dispute or disagreement over should it be the NOP, should it be the certifier of the importer. Should it be the certifier of the operation in the country, should it be the importer itself or should it be the operator, or should it be all of them who are well aware of these requirements to bring in product within the U.S.

There's also some talk about the NOP could publish a comprehensive list of products requiring mandatory fumigation upon entry into the United States, which would negate the organic status. There was, I think they did some training on this regard recently, and a lot of people recognized the value of that and asked for more.

And then there was just, you know,

some requests around clarification of recordkeeping requirements, especially in regards to the CBP and APHIS and those notifications and who would do it, especially if the importer is not certified.

Jenny, I don't know if you want to touch on it. I know you touched on some kind of relevant or related points to this in your presentation last time about fumigation notices and your follow-ups, and is there anything you just want to --

DR. TUCKER: I don't anything I haven't already discussed.

MR. CHAPMAN: Okay. I was curious about those fumigation notices. Are those, because I dug in. As part of this, I dug into the APHIS manuals to try to understand. I was trying to kind of link together some crops and, you know, something I would see in the APHIS database that required fumigation, that I wanted to find it on the OID. I'd be like what's going on here.

What I actually learned from it is there's a variety of techniques for a lot of crops to be brought in. APHIS allows for a lot of what would be organic compliant kind of cold storage style pest control or hot treatments, CO2. I didn't see any CO2, but CO2 I imagine, in addition to those fumigations.

So I was curious. Those 1,600 fumigation notices, does that include all of those, or does that just include like use of a controlled chemical?

DR. TUCKER: So the fumigation notices we are receiving are the ones when APHIS says this needs to be fumigated, right?

MR. CHAPMAN: Yeah.

DR. TUCKER: We don't know if it was actually fumigated or not. It could have oh, wait. No, I don't want it to be fumigated, so I'm going to do something else with it, or it could be it isn't even organic, or I'm going to sell it as conventional. So yeah, we don't know. We're still -- the fumigation rules are

incredibly nuanced.

I mean when the APHIS guy was doing the training, he did a very nice job with the training, but he was literally training people how to search for terms in PDF documents. The rules change. They're nuanced, and there are lots of different mitigation approaches for it.

That's what makes it hard, is you can't program these business rules very easily, yeah. It's hard. The fumigation thing is hard. That is my main comment.

MR. CHAPMAN: Yeah.

DR. TUCKER: Yeah.

MR. CHAPMAN: I would echo that, having been at that training. It's dense. The organic data sets in the APHIS system, would that have a large impact on this?

DR. TUCKER: What we're trying to do is yeah, we're learning as we go along here. What we're trying to do is the APHIS notification systems are independent of the ACE, of the Automated Commercial Environment that CBP

manages. What we're trying to figure out is does the outcome of that fumigation, what happened, the end of the story. Does that feed back into ACE so we know what actually happened?

That's what we really need to have happen, and so that's part of what we're trying to figure out now. The process does split from APHIS and CBP at some point. The question is where in their worlds do they reconnect, because they've got the same complexities of systems too, and we don't quite have that final piece of the -- we just don't understand how that system feed works, if it even does.

MR. CHAPMAN: Yeah, okay. Steve.

MR. ELA: Jenny, I want to follow up on Tom's question. I mean the fumigation notice, to me fumigation is fumigation and there are other mitigation controls that APHIS might allow, like heat treatment or cold treatment or other things. So does -- yes. Are those fumigation notices actual materials being applied, or is that some kind of control or mitigation need to

be applied?

DR. TUCKER: The notices are fumigation is going to be a condition of entry. Honestly, this is -- we're still learning, and so I'm not entirely, not entirely sure. We're still trying to get our arms around these nuances.

MR. CHAPMAN: Anything else? All right. We'll move on and just to keep you guys on your toes, I skipped number seven.

MR. RICE: I was just going to point that out at a convenient spot.

(Simultaneous speaking.)

MR. CHAPMAN: I'm sure you were. We got the notification from the public, so all right. Moving up the list to number seven, verification of organic status in perishable supply chains. We heard an immense amount of this from Mike Dill on our panel.

Clearly, there's unique issues with the speed and perishability of produce, and there's a lot of talk around the need for supply approval programs, how important that is in

verifying the authenticity of these products, issues around labeling, how they're opened, how they're handled by various operations including retail distributors, the number of hands and transactions that occur in these sales, the difficulty in going back multiple steps, the time it takes to do it, the impacts that testing requirements have on product quality and age.

Some people talked about having multiple certifier certificates for a single product and how to deal with those issues, that the certificate of fumigation is not specific enough, that a fruit or vegetable category is too generic to be able to then say this cucumber is actually organic.

There is talk around the need for standardized certificates and terminology and that that would help. I mentioned it earlier, but the bulk labeling and issues there. Yeah. What did I miss? Any other discussion? Harriet.

MS. BEHAR: I think the rapidity that he needs the information is so important, and I

was impressed that he still had a full head of hair, because I would have pulled mine all out by then.

MR. CHAPMAN: Definitely.

MS. BEHAR: Trying to do what he does. You know, worrying about the, you know, he gets something. He's got a suspicion and now he's got to move it in, you know, four hours.

MR. CHAPMAN: Yeah, and I think another very valid point he made too was that it's not even just the suspicion. It's the lack of documentation he has to pass on the sales on certain product or purchases of certain product that ultimately would be sales for them.

That product that might be very or, you know, organic is just the way the documentation comes in. It just makes it impossible for them to do their due diligence in verifying it. Scott.

MR. RICE: I think just to build on that, the challenge of not only losing that sale but seeing it go to potentially a competitor who

isn't holding that supplier to the same bar, or doesn't have the same procedures in place, and knowing that, as we heard in other sort of areas, this discussion that that potentially non-organic labeled organic product is continuing to be in the marketplace because of just somebody else's due diligence, and why you can maybe file a complaint when there is clear fraud. That's not always the case in these situations.

MR. CHAPMAN: Ashley.

MS. SWAFFAR: Yeah. So I just wanted to bring up the point that he was talking about private label. You know that is not just in produce or in grain or anything like that. It drives me nuts in eggs, because they'll be a grocery store that has a very simple carton and it has their name on it and organic eggs and it's certified by Certifier A, but I know that plant's certified by somebody else, you know, and it's just --

It's a mess, and I think that that's an area that touches all parts of the -- of

products and private labels.

MR. CHAPMAN: Steve.

MR. ELA: Yeah, and I think it comes back to what, I mean you've mentioned way back if once something -- let's say it's fumigated or let's say it's rejected or, you know, we know it's fraudulent. How do you get the organic name off of it? I don't have a good solution. That's a tough one, I mean.

But I think we really need to wrap our heads around that because it is -- I mean we see one of the warehouses we rent space from, I mean they kick a pallet out for a moldy case, and they kick the whole pallet and they'll turn around and sell it to a guy who takes them to the farmers markets for pennies on the dollar, and he undercuts us in price.

But it -- but, you know, there's so many ways to game that system. I think it's a real tough one, but I -- but we -- I think it's a real issue, and you always have to find a home for something. You can't let it sit on the

warehouse dock, because they're going to charge you for that.

And so somebody's going to pick it up and somebody's going to take it down the road, and what happens with that we lose control of.

MR. CHAPMAN: Jenny.

DR. TUCKER: I just wanted to very briefly correct, just clarify for the record. I was looking back over my notes. We get the fumigation notice after it's been fumigated. So there are two notification processes, and I was getting confused on which notification. It's the second notification process, where somebody's actually sprayed the stuff. That's when we get the notice.

MR. CHAPMAN: Thank you.

DR. TUCKER: Thank you.

MR. CHAPMAN: Yeah. I mean that highlights one of the downsides of that increased documentation on the product, right, if you've labeled all your apples with organic stickers and then it gets fumigated. What do you do with it?

Yeah.

On a plus side, I guess in this one area, you know, very clear comments were around those two, the top two issues at least, it seemed from people, and ways to address this is -- despite maybe that threat -- is still clear documentation and then certifying uncertified handlers seemed to be the best two steps, which is the areas that we're already looking at, to also addressing issues and produce supply chains. Harriet.

MS. BEHAR: I think this -- the produce has another unique aspect, and that is the boxes and the storage are open, and then they're stacked on top of each other and they could have ice and dripping, and there's just more issues of contamination and possible commingling, especially when they're resorting and that sort of thing, that you wouldn't find in other commodities.

MR. CHAPMAN: Okay. We'll move on to number nine. Additional controls for origins

with document and fraud and integrity issues. Most people generally agreed this was a useful tool, but there was some concern around bad actors just avoiding those origins or using complex supply chains to obfuscate the origin of the products.

There were some comments around the need to balance the need versus the impact, and I think those were comments kind of looking at what happened in Europe and around their import control process and the burden it lays on people importing products.

There was some discussion about this not being as effective for fresh produce. But we did get a lot of good comments around potentially what risk measures we should use, including spikes in production data, the inability to ID acreage or number of suppliers to match production volumes, the number of positive residue tests for a certain area, issues with political stability or corruption, certifiers losing accreditation by foreign accreditation

operations in that region.

Yeah, that was at the high level. Any discussion on this one? Harriet.

MS. BEHAR: That was kind of for Jenny. Someone mentioned needing like stop import authority, and I don't know if that's possible or not.

DR. TUCKER: Yeah. We've learned a good amount about CBP. They have different levels of ability to stop or hold product, and each comes with different requirements for both authorities and the amount of evidence that you need to have.

And so I think a MOAD, marketing orders program, they have something called -- I think it's called conditional release, where the product is approved for release.

But they can pull it back within 30 days. So the question is can you actually pull that back. But if you -- so you could try and pull it back or notify who it went to and then if they sell it, then they're liable for having sold

it. But they are put on notice.

The stop import or hold intact, that has very, very high barriers in terms of the amount of evidence. The other thing we have to remember in organic, and you were just mentioning it Steve, is this idea that a stop sale, you know, actually stops it. This product could be sold as conventional. So is it really fair to actually stop it when it could be released into the market as conventional.

So our interest is making sure that it isn't sold as organic. We're not trying to stop sale entirely, and that's a really interesting kind of nuance of how do you manage stop sale or how do you think about stop sale in an environment where you're actually not stopping sale. You're stopping sale as organic, and those are two different things.

MS. BEHAR: So I'm wondering if something comes in and it's here, and it -- I'm not sure if it's -- I guess what I'm trying to get at is the fines that we have in place, when

we are aware of something that's fraudulent that came in. I mean I know we have the violation penalties in our regulation, and I'm wondering how do we use those or can we use those? I don't know.

DR. TUCKER: So civil penalties are, that's a really interesting topic. Our primary goal when dealing with certified operations is we care about certification. So we're more interested in getting an operation suspended or revoked. That's what we have the most control over and what we care about the most.

We tend to use civil penalties more with uncertified operations. So if somebody's uncertified and selling as organic, we'll use civil penalties because that's our best tool there. The challenge with civil penalties honestly is that we have the ability to levy civil penalties.

We're not a collection agency, and so the authority to collect is more problematic. So actually we levy civil penalties through

settlement agreements, which means that an operation has to agree to pay it through a settlement agreement.

Now if you're an operation, you're going to say you know what? Sure, I'll pay your civil penalty, but only if I get to keep my certification, right.

And so if we try and do a settlement agreement to levy a civil penalty, any good lawyer is going to say well sure, I'll pay a civil penalty but I get to stay certified. We actually care more about them not being certified than we care honestly about the money. It's about getting them out of the system.

So that is -- that's a challenge for us, is how do we levy civil penalties in a way where we don't have to -- yeah, it's a challenge.

MR. CHAPMAN: Well, is there other agencies in the U.S., other agencies you can point to that have collection authority, or that lacking authority, that you need to make the civil penalty effective?

DR. TUCKER: There are different forms of fines, and this is -- I don't have a lot of background on this. This is something that again, I think is worth more discussion and more research. There are ways that federal agencies can gather money in different ways than our authorities.

But I will go outside my knowledge area if I speculate on what those are. I know they exist. I don't know what they are right now.

MR. CHAPMAN: Okay. Steve.

MR. ELA: Jenny, I'm trying to wrap -- I mean, you know, on some of these additional controls, that it kind of wraps back to the perishable things where we have limited time or we have high risk, and there's lots of -- I mean for the most part, those are -- like on perishables, there's a purchase order issued before they're shipped.

I'm wondering if maybe one way we're dealing, trying to deal with timeliness. When

they hit the dock, what's the certification? Maybe with that purchase order we need to look at on perishables, if there's a risk that the documentation gets submitted with the purchase order, so that it's not a crisis when it gets to the dock.

And that, you know, there's lots of variables in that and I'd have to really think about it. But it's another way of pre-certifying some of this when that order is actually executed, rather than when it hits -- the truck is backed up.

DR. TUCKER: So I bring up the penalties because I think tightening up the system is one deterrence. But knowing that you'll be punished if you're caught is another.

MR. CHAPMAN: All right. I don't see anything else on this subject, so we'll move on to number ten, full supply chain audits. Again, like most other items, there was a consensus on the benefit of this, but there was --

I think I had a question around who

was the right party who had the correct level of responsibility or authority, and it did seem like a lot of people were looking to the NOP at being the right entity with the authority, if a supply chain, you know, has products in there for multiple certifiers from multiple regions across the world.

People talked about the need for cross-checks, and that needs to become a more common practice among certifiers and needed to be strengthened. You know crop and acreage and yield data kind of creeped its way back into this, and that that would be a vital part of being able to conduct these.

Some certifiers noted that in the past, when they have tried to do kind of similar full supply chain audits on their own, they have been told by accreditation authorities that it was outside their authority. So that also kind of leads to, I think, a lot of the certifier perspective that this is a role for government.

There were concerns around costs,

about it being too broad, about the time and the benefit for it. Then there was also questions about how it would work with equivalency and recognition agreements, and how it would work with global supply chains that have steps of aggregation in them. Any comments on this one? Dave.

MR. MORTENSEN: Yeah. I got the sense that in the same way that the uncertified operations were critical, that this was critical. That was my take from the Board and the panelists generally, that it would be challenging but it's critical.

MR. CHAPMAN: We'll just go down the row. Harriet, Scott, Sue, Emily. Harriet.

MS. BEHAR: I think we're going to need some education and training. I don't know, templates, something to just help people through this, because it's so complicated and it's something new that we haven't been doing. So I don't think it's someplace we need to go, but this is not going to be the model.

MR. RICE: Yeah. I definitely know about the need for education and outreach. The other thing I wanted to add, you know Jenny you mentioned region-wide or countrywide kind of full audits and I'm curious if that is going to pull the certification folks into that process, or is that something that NOP is mounting on their own?

DR. TUCKER: We are at early concept on that, even just thinking about what a scope would be on that. So I think we'd be kind of very open to ideas. I'd like to pick a project that could be done. I think somebody mentioned earlier we tend to make things so big that we don't finish them.

So I'd love to find some kind of a pilot study that is small enough, where we could actually figure out how to do this and then apply it at broader scales. But we need a small case study just to figure out how do to it and who does need to be involved. This is new territory.

MR. RICE: Well, our agency would be happy to help; with mangos in Costa Rica if you

wanted to have -- no.

MR. MORTENSEN: And this is an example, in my opinion, of where models would be really helpful, like what Scott's talking about.

Like I was really impressed with what Pipeline was sharing with us. I mean they basically have this in place, I think. But they have it in place for their own chain. But it seems to me there is a lot to be learned from those kind of examples.

MR. CHAPMAN: Sue.

MS. BAIRD: I agree. This is a real education, inspector education issue. I heard from Silke that certifiers don't want -- some certifiers in some instances don't like seeing the inspector taking enough, sufficient time to do full audits, and I've experienced that myself.

I think it's education of our certified entities, and if the certified entity realizes that it's for their protection to assure they're doing full audits, they'll be a whole lot more receptive to the fact that they may have to

pay for eight hours instead of four hours of inspection cost.

And that's what I usually do when I go into these facilities and have to do a full inspection. You know, this is for you. When I was a QA manager for a major turkey processing facility, I expected for a HACCP auditor to come in and be there for a week, because I knew to do a full food safety audit it was going to take that long.

We're expected as inspectors to go into these same facilities and do an audit in four hours. That's a problem. That's a problem, and I know that entities shop sometimes based on pricing. So it's got to be an education for the certified entities.

It has to be an education and inspector qualification training, and I think it needs to be cooperation between -- as much as possible, and I know it's a business -- between certifiers to realize that we need to make the cost a little more equitable so that that

certified entity cannot do shopping of certifiers based on cost of inspections.

MR. CHAPMAN: Emily.

MS. OAKLEY: Jenny already answered my question.

MR. CHAPMAN: Do you -- you were trying to say something?

MR. RICE: Mine kind of bleeds into the bucket of other things, and all of the above, yeah.

MR. CHAPMAN: Anything else on this one? All right. Last but not least, other areas, questions, opportunities and threats. We received a lot of feedback on this. I'm just going to run through a list of the ones I heard. There were others I didn't capture here. I apologize for that, but we will again be going through the comments in more detail.

Research into testing methodologies to detect fraud or determine growing practices and origins. Oh sorry, research into other testing methodologies that aren't currently available,

kind of what Asa talking about.

But beyond just pesticide testing, that would be able to detect again if the product wasn't grown using organic conditions, maybe the presence of synthetic nitrogen or other isotopes that would again indicate growing practices or origins.

There were discussion, and we heard it in the panel as well, about the time and transparency of the complaint process. There was another area is the outdated technology and international trade tracking. There's an area about collaborative investigations amongst investigative actors, so certifiers, the NOP, other government agencies.

There was expanded review of global certification agencies revoked by foreign accreditors. Better training for other government agencies like CBP and APHIS on organic. There was a discussion of using captain's logs as it related to the import of organic products to be another investigative tool

or documentation tool on the organic status of those products.

And there was also a question around insurance, the role of insurance in organic on these bulk shipments and whether or not that's a tool to be used in the documentation or investigation of organic compliance. There was inconsistencies in how in and out mass balance or trace facts are done between certifiers, and if greater consistency there is an area of focus for us.

Again, the role of inspectors and reviewers in this process, the qualifications, the linking of correctly qualified inspectors and reviewers with complex operations. There was a request to prioritize that we work on definitions and terms, so that we are all talking about the same kind of actors and environments that we're working in here. So especially I think this is critical in the arena of uncertified handlers.

There was a lot of discussion around increased oversight and education of certifiers,

especially certifiers with satellite offices, the frequency of audits of these certifiers, especially around desk audits and internal audits.

And I think there was a lot of support around how the accreditation system can be used to strengthen the integrity around kind of making sure certifiers and through them inspectors are consistently implementing the same interpretations of the standards.

What else? What did I miss? If anyone has anything to add, what other areas, what discussion of these -- are any of these areas that we should prioritize as the CACS digs into this pile of work? Asa.

MR. BRADMAN: I just want to repeat what I said earlier and kind of amplify the comment we had from the panel, about the idea of a 332 review. I've been doing a little skimming on their website with the International Trade Commission, and it seemed like that might be a way to perhaps get some, an independent

assessment of where the flows are dollar-wise, economically and in terms of materials.

It seems like that would be important, especially perhaps focusing as a start on grain, as given the importance of that and the enormous loss that went to the organic community, and that might also provide a basis for policy, you know, for the USDA to argue for needed policy changes.

It's pretty interesting if you actually look at some of their reports that they've done. So I think that was a great suggestion --

MR. CHAPMAN: Yeah. Thank you for bringing that up. The ideas that were raised at the panel, my notes predate that.

So unfortunately I haven't captured any of these to bring up here, but yeah, that was a good point as well that we should add to the list. So I have Harriet, Scott, Emily and then Lisa. Harriet.

MS. BEHAR: I want to thank the Organic Trade Association for their Global

Organic Supply Chain -- I have to talk into the microphone. I want to thank the Organic Trade Association for their Global Organic Supply Chain Integrity document.

I'm going to admit that I did not absorb all of the information and just let you know that we will be looking at that again in depth, because it brings so much of the actual trade knowledge and experience there, from what I could read. But excuse me if I can't repeat it all verbatim.

MR. CHAPMAN: And that's a good point. That was raised as well in the public comment section around our role in endorsing or kind of bringing prominence to this document.

There was discussion around, you know, is this -- can this become an endorsed document? What, is that in the realm of possibilities? What's the steps to sort of thinking about that?

MS. BEHAR: You know, it's a great question. It's one we've also been asking about. You know, ACA also does best practice documents,

and so in the past we have not done formal endorsements or other things like that. But I do think because, you know, this is such an interdependent problem, finding a way to be able to do, for the government to say yeah, actually we think these are good ideas out there without having to translate it into a guidance document, which is, you know, has such hurdles.

You know, how do we use the public-private partnership in a different way, that also respects administrative procedure. Because the first question's going to be well, you're saying you endorse this best practice document. Does that mean you're going to enforce against it? Right. That will be the question.

But we can't enforce against something that doesn't have, you know, that -- the APA, you know, sort of process. So those are the challenges. There's got to be a way, and I'd have -- but I don't know right now what it is.

MR. CHAPMAN: Scott.

MR. RICE: I've been trying to think

of how to really capture all of this, but it kind of goes across all of the things that we've talked about in terms of, you know, we hear through all these areas about increased costs, and you can't do multiple full supply chain audits for free much less one, that you know, all of the measures that we've talked about cost money.

Grain or product is seized and pulled out of the market, and prices may and often do go up. It's a reality, and I think it's something that you know, maybe also ties back to Mr. Ibach's comments on you have some people that look for cheap food and some that are willing to spend some money on knowing where it comes from.

But what does that threshold look like and what does that space look like, and are we going to -- is there a breaking point, and another broken record here, but that education and outreach of just explaining what these increased costs are coming from.

If we start seeing more of that,

certainly to the consumer, certainly to the trade, but just something I've been thinking about through all of this.

I don't have an answer right now, but just simply to add to the discussion, I guess.

MR. CHAPMAN: I have Emily, Lisa, Dan, then Harriet.

MS. OAKLEY: To your question as to what the CACS should do next, I think we have a very complicated situation that's going to take long-term approaches, but we also have an immediate crisis that needs as many short-term solutions as possible, and I think really it's a dialogue between the NOSB and the NOP at that point.

But as a farmer myself, I definitely sympathize with the critical issues that farmers are addressing, especially in the grain imports area. I think as much partnership as can occur between those with information and sharing between the NOP for the immediate relief, as much as is possible, I think is something that should

be looked for.

But you're going to have to take both that short- and long-term approach as we prioritize our priorities for the future. And anybody who wants to join the CACS, I'm not the chair, but I keep thinking Dave, you've got a lot of good insight. You might just want to come on board.

MR. CHAPMAN: CACS is accepting applicants. I have already coerced people into joining the CACS, so and speaking of such, Lisa.

MS. DE LIMA: Emily kind of touched on what I was going to say. You know, from the retailer perspective, of course it's a complex issue. We're going to need long-term solutions. But then put yourself in the shoes of a retailer and you've got customers asking you questions about the products on the shelf, and like how much discussion is happening here and like how in the world does a retailer boil that down into something to make the consumer feel better?

I don't have an answer to that, but

just so we keep thinking about. We heard a lot about how this is impacting the farmers of course, and then also, you know, how are consumers going to react and continue to react to this sort of publicity?

MR. CHAPMAN: I have Dan, Harriet, then Dave.

DR. SEITZ: So in terms of how to move ahead, Tom I think you mentioned and it jumped out at me that there were a couple of things that seemed to be very much a matter of consensus, like extending a requirement for certain entities within the supply chain to also be certified.

I wonder whether the CACS could find a couple of things that they feel are pretty straightforward, focus on crafting a proposal around those while -- and then that would have some impact. While at the same time as many comments have acknowledged, there are these more subtle questions that will require conversation, research and so forth that can also be worked on.

So that way, in addition to actually

having some impact, it also I think sends a good message that we've heard a few things we can take care of, and we have these other things that we want to do right.

MR. CHAPMAN: Harriet.

MS. BEHAR: So I think we need to prioritize and part of that prioritization process will be what is achievable in the shorter term, and then look at the longer term. But for now, my achievable is what is a GGN number. Jake was talking about that, that people and no, we never really asked what that was. But that's where you can follow an entity as they change ownership or names or something.

MR. CHAPMAN: It's a centralized place where entities register and they get a number. You know, for imports, a classic number like that is the DUNS and Bradfield number, D&B number, yeah, Bradstreet. You know, that's used in importing now. That's a recognized number for identifying who an entity is via a number. Dave.

MR. MORTENSEN: I'm dragging, sorry.

I have three thoughts on the cost issue that Scott raised, and I definitely there's -- you know, it is clear there's going to be a cost. On the grain side of things, it seems to me that the people that are bearing the cost right now are the American growers, where the grain price dropped to half.

So somehow maybe some sort of, you know, look at what's influencing the price and then the price, the cost of having integrity in the commodity grain supply system is how we could figure that out I think, and I think there's a lot of money there. The grain price fell in half or something.

To Harriet's point about what's achievable, I was really struck by Silke's idea of this 80-20 Pareto analysis idea, that you know, what -- so it's not what's just achievable; it's what's achievable and matters, and I think her approach to that, there's a lot there that could be unpacked and she -- anyways, so I think that's worth looking at.

And then other thing I was struck by, and in large research projects these days, in interdisciplinary large things, we are always required now to have an advisory board mostly of our stakeholders, farmers and folks like that. I was incredibly impressed with our industry people today, and through the public comments over the last several weeks.

A number of times they've talked about we need to enhance the private sector-public sector fusion here to chart the path forward. It seems to me there's enormous untapped potential here or not tapped as fully as it could be, to bring together the deep knowledge and practical understanding of where the places are working great, and where the places are sort of broken a little bit, and start from there.

I don't know if we have an advisory panel or a committee of best practice practitioners that could be working with NOSB/NOP to ensure that we are on the right path. But I really was really impressed by the panelists.

MR. CHAPMAN: Steve.

MR. ELA: I think the other thing that we need to continue to be aware of and focus on, and it does come back to education and its oversight, is that you know this, that -- and I don't know how to say this well, but we see areas where our accredited certifiers differ on things and what they think should be certified and what they shouldn't, and you know, under the NOP it's supposed to be equal.

And so I still think we also need to pay attention that within the certifiers and within, you know, NOP oversight of certifiers that we really try and promote consistency, so that it's not okay to shop around. You know, I mean if I was going to -- somebody that wanted to commit fraud, I'm going to shop for the lowest hanging fruit.

You know, I'm not picking these certifiers out, because -- but you know I probably pay attention to who's going to do the most thorough audit and who's not. So I think

making sure that we're really promoting certifier consistency should be a high priority, so that we're all playing on the same level playing field.

MR. CHAPMAN: Scott.

MR. RICE: It's hard not to respond to that. I wanted to share that in the Accredited Certifiers Association, we've got about 50 of the -- nearly that number in the -- of the domestic certifiers, and certainly some international as well, and that I think is a reflection of the collaboration and effort at consistency.

So I think while there's always, you know, tweaking and work to do, in the years that I've been in certification it's been amazing to see that cooperation grow and that real just commitment to making that an even playing field and lot of good discourse there so --

MR. CHAPMAN: Right. I think we're coming to an end on the subject. So to wrap it up, like people said we will take this back to the Subcommittee and then again focusing on the

areas of the most importance and the most impact, and then also keeping into consideration the speed of which we can work on those as well.

I think there's a good opportunity for us to take this back and do an analysis on where, you know, a high level analysis on where the opportunities are, where are the threats, where are the weaknesses, where are the strengths of the program as it is now.

I just did a spot there for you business folks. But you know looking at it at that level and then really identifying what are the areas, what are the mitigation steps for those areas, and taking all this information we gathered here today. This is what we needed. We need this exposure, and then digging in and prioritizing those.

So don't expect a 75,000 page documented proposal coming back out of this in the fall meeting. But I now would expect that this going to get split off into more bite-sized chunks for us to address piece by piece, and

we'll continue to work on this as a priority area in the CACS and on the NOSB as a whole.

I do have to say the expert panel was just an incredible resource for us, and I look forward to opportunities of which we can use expert panels at meetings, and maybe even in between meetings in the future, to be able to address and assess and get input on items that we're working on. I hope we can find a way to make that happen.

With that, it's six o'clock. I would normally hand this back to the CACS chairman, but I'm thinking right now we will break for the day, and start up tomorrow with the remaining items on the CACS agenda, and continue on with the remaining subcommittees. So without objection, we'll go into recess, convening tomorrow at 8:30 in the morning.

(Whereupon, the above-entitled matter went off the record at 6:10 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: Spring 2018 Meeting

Before: National Organic Standards Board

Date: 04-26-2018

Place: Tucson, Arizona

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

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NATIONAL ORGANIC STANDARDS BOARD

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SPRING 2018 MEETING

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FRIDAY,
APRIL 27, 2018

The Board met in the Sabino and Pima Rooms of the Tucson University Park Hotel, 880 East 2nd Street, Tucson, Arizona at 8:30 a.m., Tom Chapman, Chairman, presiding.

PRESENT
TOM CHAPMAN, Chair
HARRIET BEHAR, Vice Chair
SCOTT RICE, Secretary
SUE BAIRD
ASA BRADMAN
JESSE BUIE
LISA DE LIMA
STEVE ELA

DAVE MORTENSEN

EMILY OAKLEY

A-DAE ROMERO-BRIONES

DAN SEITZ

ASHLEY SWAFFAR

STAFF PRESENT:

MICHELLE ARSENAULT, NOSB Advisory Board Specialist, National Organic Program

Dr. RUIHONG GUO, Acting Deputy Administrator, National Organic Program, Agricultural Marketing Service

DR. JENNIFER TUCKER, Associate Deputy Administrator, National Organic Program; Designated Federal Official

DR. PAUL LEWIS, Director, Standards Division, National Organic Program

DEVON PATTILLO, Materials Specialist, National Organic Program

T-A-B-L-E O-F C-O-N-T-E-N-T-S

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

(8:31 a.m.)

MR. CHAPMAN: All right. Looking around the room we have everyone but two members so we have a quorum and we'll come back into session.

Lisa will be joining us a little bit later this morning, she wasn't feeling well, and so I think she will be missing the very first part of this morning's agenda, but we still have well over a quorum.

We will be starting up again with CACS and I will hand it right back over to Scott.

MR. RICE: Thanks, Tom, and thank you for that digest of our import panel and the comments yesterday. That was both useful and overwhelming as to our list of things to do, but it was all good information.

We are turning this morning to inspector qualifications. In our discussions over the last couple days we continually heard the important role that inspectors play in

upholding organic integrity.

The inspector serves as the eyes and ears and often the only face-to-face contact between the certifier and the certified operation, responsible for verifying and documenting the many control points of what can be very complex operations.

For these reasons we need an inspector pool that is highly qualified and equipped to competently evaluate all of those control points. The proposal that we brought forth for the spring meeting it drew from the excellent work that was completed by the International Organic Inspectors Association and the Accredited Certifiers Association best practices document.

As we noted in the proposal, and this is not a new topic, there has been a lot of discussion, a lot of good work on it, but there has been an absence of a formalized recognition of sort of what do those qualifications look like and should we have minimum qualifications or what those standards should be.

The proposal divides the qualifications into several distinct areas, knowledge, skills, experience, training, and evaluation, the last being one that the NOP has approached and come out with some guidance for certifiers and inspectors in terms of in-field audits and whatnot, which we have talked about here.

The proposal recommends that the program draw from the existing body of work that I mentioned to establish qualifications and training and continuing education guidelines to ensure that we do have a professional and competent inspector pool.

We received a number of great comments on this, very engaging and informative. I think it is safe to say that all agreed with the need for the strong qualifications.

Commenters supported the ACA best practices document that lays out that criteria for determining those abilities and capacity to inspect.

Many commenters urged caution in drafting overly prescriptive qualifications, or inflexible minimum qualifications noting that any qualifications should allow some flexibility for the certifier to consider previous experience, such as academic experience and/or mentorships.

Qualifications should be mindful of scope and scale, ensuring that inspectors are assigned to the size and type of operations that they have experience with, not merely just a scope in which they are trained but able to approach those complex operations thoroughly and competently.

There was a very common thread of commenters expressing a need for greater mentorship opportunities to bridge that gap between initial training and as a novice inspector entering the field as a capable independent inspector.

Some certifiers facilitate that relationship, but that's not always universal. A lot of commenters supporting a licensing system,

as we noted in the proposal, but expressed some caution in establishing a system that would be either too burdensome or too expensive and highlighting particularly part-time inspectors that would be potentially impacted and might not have the capacity to become licensed.

And I think it's important to note that those independent inspectors in general carry a burden that is greater than other say staff inspectors.

There is a cost of maintaining vehicles, insurance, health insurance, liability insurance where they opt to do so, just a host of expenses that are already there and licensing could be helpful but potentially some of those same results could be achieved through mandatory inspection requirements and accreditation audits via the existing system to ensure consistent implementation.

A number pointed to the need to have any such licensing body be accredited, pointing to ISO-19011 as a basis for that as well as

existing USDA accreditation for certifiers.

And to Dave's earlier comment, those are all examples of models that we can capitalize on and not necessarily re-invent the wheel on this.

There was some concern expressed that turning this over to NOP to establish requirements would prevent a participatory process at the NOSB level.

And I think I can totally relate to that and understand and want it to be really clear that is was my and our intent I think bringing this forward that we continue that dialogue with the community and with the program and that we're not just kind of brushing our hands and handing it off never to see it again until its final.

I think the it would really -- I think the expectation is that we will have that dialogue and that input so that we come to an agreement or an understanding as a community of what those qualifications look like.

And with that I think I would open it up to discussion. Emily?

MS. OAKLEY: Yes, I want to echo the last point you made and maybe this would be a good time for us to discuss how that kind of NOSB stakeholder and NOP dialogue could occur as those guidelines are developed.

I am not entirely sure myself how that would play out, maybe someone with more knowledge could give some thoughts on that.

MR. RICE: Yes, I would love to hear from the program as well, so maybe I will turn it over to you, Jenny, to share your thoughts on that, is that --

DR. TUCKER: Yes, so a couple of thoughts. There was the work that was attached to the proposal that got posted. That was work that NOP had contracted for, in I think 2011 or so, it was actually just as I was getting to the NOP.

I think that the challenge ended up being, well it was sort of just like the

conversation yesterday about best practices, well if we put it out there what does that mean.

The next question, of course, is, well are you enforcing against that. So that's always sort of the challenge of how do we deal with these things that are really good ideas but when you look at them in terms of how they relate to the exact regs and do you have the authority to post that or how are you going to deal with that from an enforcement perspective.

So one of the things that we have been thinking about, we think this topic really needs to move forward and it feels like there are just different ways of hosting things now and, yes, we're in a bit of different environment now so I think that it is worth re-visiting, you know, how do we really encourage these public, private partnerships in a way that perhaps we haven't been able to in the past.

One of the things we are considering for this incremental funding that we have gotten is, and so I am sharing it so we can get some

feedback from the Board here, is there is already an AMS program that has a learning management system and so we have talked to them about could we set up an organic section of that learning management system where actually certifiers and inspectors could sign up for an account, it would be a federal system, so they would sign up for an account and we could construct different learning paths for, for example, folks who are involved in compliance, you know, how to write, somebody suggested this morning, a non-compliance that holds up in court, sampling and testing, how do you actually go out and collect a sample, so some of the very core sort of learning paths.

And so we are thinking about using some of the incremental funding. We are pre-contract phase so I can talk about this publically at this stage where we are still trying to formulate what the requirements would be.

And so maybe actually we start with that, you know, start with providing the

training, which would be a really useful service, and then in parallel really think about, okay, well here is some of the training we think everybody needs, what does that say about the skills and qualifications, and so use them as sort of parallel paths.

So that's not a licensing program but we certainly would have access to all of the folks who registered and completed certain training paths.

So, yes, we are sensitive to not necessarily wanting to compete with private sector firms that are already providing training, so we would be looking at, yes, what are services we can provide that are right now a gap that no one is doing, and how could we serve that market.

It does feel like there might be a role for government to play in providing some of that shared resources that no one certifier may be able to create on their own.

So that's a sort of a sketch of what we are thinking. The idea of sort of

crowdsourcing or getting community input on the training content with some kind of executive technical advisory board that would vet all the content for accuracy before it went into the system so we'd know it was great content.

Those are all things that need to be thought through in how to construct this, but right now that's sort of some of the concepts we have been playing around with.

Sorry, probably more than you were looking for.

MR. RICE: No, not all, that's very helpful. And in that development as you go down that path of contracting or seeing what that looks like is that something that you would be able to share that ongoing process with the TACS Committee or Subcommittee?

DR. TUCKER: Yes. There are certain things that we can talk about before we release, it's just like rulemaking where once you release a proposed rule you can't talk anymore, contracting is sort of the same way, where you

can talk up to a certain point.

And this kind of thing that is big enough, that what I have been trying to talk to contracts about, pretty successfully so far, is can we release like some kind of, you know, request for information, which would allow everybody in the community to, you know, we think if you did a contract it should like this.

So during that phase we could absolutely talk to CACS and anyone else who wanted to talk about that, and then we would use that to create some kind of a contract vehicle where there would be in theory some kind of a steering organization that would have the ability to contract with the government and then they would reach out and contract with other entities.

Does that make sense? So bottom line, yes, we can talk to CACS until a certain point and then we would have to go into the formal contracting phase.

All of this has to be done before about the beginning of September, not the whole

project being done, but the whole contract process.

Money must be put on contract before the end of the fiscal and then with government deadlines that's usually early September. So we've got a lot of work to do in a fairly compressed timeframe here.

So, yes, I want to talk and at some point we're going to have to just sit down and write so we can get it out there. Does that make sense?

MR. RICE: Yes, thank you. I think one of the challenges in the certifier community that we have had is when we talk about developing guidance or instruction, wanting to have an opportunity to see where that's going and understanding that we are the regulated party with USDA in a sense and we can't necessarily, as you in the past have described, have direct sort of shaping of it, but at least if we can have that partnership to reach an end product that is something we can implement and much less agree

with, or in overall principle anyway.

DR. TUCKER: Right. Yes, in theory it would be a fairly narrow period of time where we couldn't talk about it because once it was awarded we would build into the contract that the contractor shall have, you know, community listening sessions, shall have certifier working sessions, that would be built into the project to facilitate that open dialogue, so it's only the contractual window.

This is why I kind of like the idea of, you know providing a training capability because then, you know, just looking down the road, if we ended up having like a qualifications or skills it would be very normal in a learning management system to have a, you know, here is your training road map or here are your, you know, every agency has, here is your leadership competency road map, or something like that.

And so then that could become a companion to a training system, you know, rather than having to be something like an instruction

or directive, but there is still the question of are you enforcing against it, and, again, we got to figure that dimension of it out. Does that make sense?

MR. RICE: Yes, absolutely. I think that offers an interesting way forward. Dave and then Harriet?

MR. MORTENSEN: Jenny, when you described some of these things and the end phrase "Does that make sense?" a lot of that doesn't make sense to me.

And that's not intended to be some sort of a cut, I just don't know this area that deeply so it's hard for me to judge if that makes sense or not, and it raises the question in my mind, is there some sort of external body would this be the sort of thing that would be good to vet with the accreditation step that happens with NOP so that you've got this is our plan, we have an extra "x" dollars, we're going to think about using it in this way and then measure the progress against the plan and, you know, really

look at the whole plan, because sometimes we are talking about things in pieces, like this is a piece, the panel yesterday was a big piece, this is a big piece, right, accreditation, I mean the certification is a big piece.

But then we have to see the pieces together, the whole of the pieces in order to like determine if that makes sense to me. So I'd just raise the question would this sort of big picture decision-making step be best evaluated by having the whole plan laid out with its component pieces and then sitting with a group that can reflect on the whole plan and provide some meaningful input.

And I don't know if that's the accreditation process or some other process, but I am just responding to your response with that idea.

DR. TUCKER: Do you want me to respond to that?

MR. RICE: Sure.

DR. TUCKER: Okay. It's a great

question and I know that in the past the Board has asked for, okay, you know, more insight into, you know, budget decisions and things like that.

So what I just shared is sort of one element of how we would consider spending the increment of money. That is obviously something I would not have shared with a group that hadn't been signed off by our leadership.

And so the Board that makes that decision is our leadership, so Bruce is the person that we report to in terms of funding decisions, and we have shared our plan of thought, obviously, with Mr. Ibach who spoke on Wednesday.

So I already mentioned -- So we talked about this training thing, I mentioned yesterday our interest, or the day before, our interest in getting funding to CBP in order to build organic import certificates.

Those are two very large initiatives. Another area where we are considering putting some spending, and some of it is we are

constrained by time, right, the appropriations was signed, you know, almost mid year and so we have a fairly narrow window to commit funding.

We have more time to spend and do the work because it can extend into the next fiscal year, but we are actually under very, very tight timeframes in terms of making decisions.

And so some of the other ideas that we're exploring are things like right now the entire Compliance and Enforcement Division is run off an access database which collapses with some regularity.

So anyone who has an access database running their organization probably understands what that is like. We really need to invest in stabilizing that so, for example, we can code complaints as being high priority, being low priority, you know, seeing a dashboard of how long complaints are there. So that's one other element that we are looking at.

So there are a number of other smaller projects, those are right now the biggest ticket

items that we are right now thinking about. We've talked about, there has been a lot of talk about risk-based accreditation, so perhaps contracting with a firm that does that kind of systems design, how do you design a risk-based accreditation management program.

That would seem to make a lot of sense in the context of the challenges that we have talked about. You know, what we will have to do is when October comes we're going to get a letter from Congress saying how did you spend that $3 million and show us how it related to enforcement.

So everything that we are doing with that incremental funding will support enforcement. Does that make sense?

(Laughter)

DR. TUCKER: Sorry. You know, I end that a lot and when I say "Does that make sense?" it's usually is what I just said clear, so that's different from do you agree with it.

MR. MORTENSEN: No, it's actually for

me --

DR. TUCKER: But sometimes I just don't make sense.

MR. MORTENSEN: For me it's -- No, for me it's not either of those things actually.

DR. TUCKER: Okay.

MR. MORTENSEN: For me it's --

DR. TUCKER: You've made me very aware of how often I end a sentence like that.

MR. MORTENSEN: -- you know, for me to -- I can follow, and I don't want to belabor the point, I can follow a thread, I can follow a concept, right, the thing that Scott was talking about that you responded to is a concept.

I think the challenge that the Board faces, I certainly feel it as a Board member, is seeing the threads in the hole. It's like organic farming and organic eating to me is a fabric, it's like a woven fabric.

And it's hard for me to see the whole fabric when we are parsing things out into the individual strands and then not frequently enough

coming back and assessing the fabric, what is the integrity of the fabric, where is the fabric weak, you know, and is the plan that we have collectively in the organic community, and NOP being part of that, is the plan articulated clearly enough that we agree that, you know, we're using the right fiber, the pattern of the strands is right, the integrity of their strength and whatever is correct.

So that's where when you say does that make sense for me your thread made sense, seeing the hole wasn't making sense to me because I am struggling to see the hole.

I am not meaning to bog us down here, I know we have a lot of work to do, but that's kind of where I am coming from when I am thinking about what's the broad plan and then we see the threads in the plan. Thank you.

DR. TUCKER: Can I make one final quick comment on that?

MR. RICE: Sure.

DR. TUCKER: Yes, I love the metaphor

of the fabric. Right now we have a rug that has some very significant coffee stains and some very significant holes, and so we are investing where we believe we can have the greatest impact in a way that makes sense given -- and this discussion, we've been talking about qualifications obviously back to 2011, that's not a new topic.

CBP, that seems very, very clear. So we are really putting our investment where we are absolutely sure it can have the greatest impact based on everything we know.

I agree about that need for the greater strategic plan in terms of moving forward. We are in our final year of our strategic plan, it was 2015, I think, through '18, so we're going to need to do a new strategic plan. I think that will lay out the fabric, the broader fabric more clearly.

MR. MORTENSEN: Thank you, Jenny.

MR. RICE: Harriet, would you like to crochet us into the next thread?

MS. BEHAR: I actually am a weaver and for 15 years made my living selling woven garments, so I know a lot about fabric, natural dyes, spinning. You want to know any of that?

MR. RICE: Not right now.

(Laughter)

MS. BEHAR: So I had two comments. One is it's an inspector qualification document but we did build into their discussion as well of the certification review team, so I just want to make sure that we are not losing that even though it's not in the title.

And speaking of threads and fabric, I would also hope either in the future or at some point that we don't forget the next step, which are the auditors who work for the accreditation system and that they need to be able to understand what they are looking at when they are doing the accreditation of the certifiers.

And so I am very interested in what Jenny was talking about with the federal government training. I have gone through quite a

bit of that as a technical service provider for the NRCS, so I am familiar with it.

I felt the trainings were very comprehensive, but I will say I did not find them very nimble as far as ease of getting in, ease of using, and so I like the idea.

I'm not sure, and maybe it's too late or maybe we can't do it, but the possibility of having an outside entity that could maybe take on this training might eventually be more nimble than working within the federal government and be able to respond more quickly when something comes up where we need some training right away.

I just -- I mean no offense to the federal government but there are times that it moves pretty slowly and Richard Matthews has taught me those reasons why it moves slowly, but in this area we may want to be thinking about having a little bit more nimbleness and responsiveness and that maybe the federal government might not be the best use, or maybe we would start with that and move to something

later.

MR. RICE: Ashley?

MS. SWAFFAR: So the certifier that I work for has a really great online database of webinars that they have hosted and I think that is something similar to maybe what you are talking about, Jenny, and I think as an inspector I go and I reference those when I have questions and I think that's very, very helpful to have some type of database of like policy positions on certain areas and things like that.

So I think that could be a good option, especially for small certifiers that may not have the staffing resources to create those type of webinar housing type things.

I just want to touch on a couple other things on this document. We talked about skills and experience, and I think that's critical when it comes to inspectors, you know.

I am a livestock inspector but I am not -- I don't do dairies because I don't have the experience and the skills to do that and I

don't think all livestock inspectors are qualified to do a poultry inspection just based on they may have experience like we put in here with small flocks but they may not have experience with commercial-sized flocks, you know, going through a feed audit looking at methionine, calculating those things, you know, and then on the dairy side the dry matter intake.

I don't know how to do those calculations and I don't want to, you know. So I think those are critical pieces and in inspector qualifications is even though someone is qualified to do livestock they may not be qualified to do all areas of livestock.

MR. RICE: Other comments? Harriet?

MS. BEHAR: I would just like to recognize that there are many highly qualified inspectors and reviewers out there. The point that we see that there is room for improvement does not mean that there aren't those out there that are doing a really good job, too.

MR. RICE: Yes, and I would just add

with -- I appreciate you bringing up the reviewer staff as equally as important.

I think sometimes there is a different scene for good reason, but also in terms of those reviewers are working in an environment where they are generally more closely supervised and have more hands-on training with existing staff whereas most of the inspection staff we see are in the field much more independent and are not getting that sort of day-to-day peer-to-peer experience that maybe the reviewers are, not to say that it's not at all, but some of the differences I also see. Sue?

MS. BAIRD: I appreciated the section that you talked about apprenticeship and I think that is critical that we -- and I appreciate IOIA has now added that ability for the inspector to do some apprenticeship.

I think it's critical, I think it's something as an experienced, or at least I have a little bit experience as an inspector, I've been doing it quite awhile.

At my age I am a little bit ready to turn loose of all the travel. I do about 200 a year. I used to 300 and 400 a year. So I have done a lot of inspections in my life.

I would love to take, and, in fact, last year I did take three under my wing and so, okay, replace me, you know. I feel like I'm so good it's going to take three to replace me. No.

There is a critical need for inspectors, but -- and it was a point I made to Scott. I could go out and do the inspection and cut the full inspection fee or I can go out and do an apprenticeship and be expected to take maybe one-third of that price.

And I feel like if I am going to be out there traveling I need, I would like to get the full price for the inspection fee. So I think there needs to be a structured methodology for the inspections to do apprenticeships.

I think it's critical. You go through your initial training but without that eye to see things perhaps, and that comes from just being

apprenticed, having somebody to take you under the wing and show you all these things.

Just an observation as someone who has tried to do apprenticeships.

MR. RICE: Thanks, Sue. Harriet?

MS. BEHAR: And just to speak to that, as we mentioned yesterday there was also different inspection models that can be used to not just apprentice new inspectors but to bring further, bring up the qualifications of existing ones, and that could be kind of peer-to-peer, two experienced inspectors do an inspection together, or one watches the other, or there is tag teams going on to make the more complicated inspections take less time because one person is looking at this, one person is looking at that, so there is quite a few different models to get the job done.

And depending on the size and type of operations sometimes just the single inspector working there on their own may not be the best model, so I think we need to kind of open our eyes and be open at looking at other ways of

doing these things.

And one more thing, about the qualifications of inspectors, it's not just understanding the rules, but there is a lot of skills.

There is interview skills, there is writing skills, there is kind of connect-the-dots kind of skills as a lot of times where someone says something and it's not necessarily germane to what you are talking about but it's a thread that you want to follow, so there is those investigative skills as well. MR. RICE: Thanks, Harriet. Sue?

MS. BAIRD: Harriet is absolutely right. It is -- Many times I say things and I know what I mean when I say them but I am not real good at perhaps conveying what I mean, and that's writing skill, and so I love somebody coming behind me and critiquing what I have written.

That is a critical skill as an inspector because we are the eyes out there and

if we do not have the skills to convey to the reviewer and to the certifier what we actually saw it does no good to write something.

So I agree with Harriet. You need verbal skills, you need written skills, you need investigating skills. It's one of the most fascinating -- and I've done it for 20-something years now.

I love doing inspections because you never get bored. There are so many facets to being an inspector if you are a good inspector and we really critically need new, young people coming in and taking over our jobs, or enhancing our jobs or whatever. Don't take it away completely.

MR. RICE: So lots of good discussion and some ideas from the program on what that next step looks like for them. In terms of our recommendation it's, you know, somewhat purposely general and with the suggestion that the program use existing resources to shape the path that they take and I think we have a lot of detail

that we have touched on here and I just wanted to emphasize that it wasn't our intention to present a fully-structured this is what the program should do as far as establishing qualifications or training or whatnot, but to just move this forward as an indication of something that is important to the community.

I feel like we are in a position that we can move this recommendation and there is one correction to the motion that we need to make if we are ready to do so.

We did move to approve this in subcommittee as a discussion document and --

MR. CHAPMAN: In subcommittee we approved it as a proposal in word, but the written document contained an error that called it a discussion document.

MR. RICE: Right. Thank you.

MR. CHAPMAN: Do you want to make a motion to --

MR. RICE: Yes. So I would make a motion to -- where did my notes go here -- to

amend the motion that referenced it as a discussion document and move it to a proposal.

MR. CHAPMAN: I have a motion, is there a second?

(Simultaneous speaking)

MS. SWAFFAR: I'll second. We all want to.

MR. CHAPMAN: Ashley. So I have a motion by Scott and a second by Ashley to revise the motion to say motion to approve the proposal instead of discussion document.

It's already been changed on what's on the screen here, but in the written packet it says "discussion document." Any discussion on this item, otherwise we'll move to a vote. Yes?

MS. BEHAR: I just -- As a possible friendly amendment, or maybe it's not needed, to just put in there that there will be continued discussions with the NOSB on this because this very clearly recommends the National Organic Program do the development and we did want to remain engaged.

So either on the record that we will still be working with the National Organic Program or put it in there in writing in the --

MR. CHAPMAN: Well we advise the National Organic Program, we work with them on all things, but --

MS. BEHAR: Okay, all right, just as long as it's clear that we are not passing it off because that was a lot of the concern, so I am putting that on the record.

MR. CHAPMAN: Okay. So, no -- You're not making a motion?

MS. BEHAR: As long as everyone agrees that that's what this means then I am okay with not changing it.

MR. CHAPMAN: All right. So I still have a motion to amend to replace the words "discussion document" with "proposal." It's motioned and seconded.

A yes vote on this, this is a simple majority since it's an amendment, a yes vote just clarifies that we intended the words to say

"proposal" and the voting will start with Scott.

MR. RICE: Yes.

MS. BEHAR: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

MR. ELA: Yes.

MR. BRADMAN: Yes.

MS. ROMERO-BRIONES: Yes.

MS. OAKLEY: Yes.

MS. BAIRD: Yes.

MR. BUIE: Yes.

MS. SWAFFAR: Yes.

MR. CHAPMAN: The Chair votes yes. All right. Twelve yes, one absent, the motion passes. We will now move on to the main motion.

So this is the motion to approve the proposal which includes the recommendation -- The subcommittee recommends that the National Organic Program develop minimum qualifications and training and continue to educate and continuing education guidelines to ensure a professional and competent inspector pool to meet the demands of

an ever-evolving complex organic supply chains.

These should include considerations of the criteria included above in the discussion area of the document. The subcommittee encourages the program to use existing resources in this area.

And without any further discussion on this, the motion was made by Harriet and seconded by Ashley and the voting will start with Harriet. A yes vote is to approve the proposal.

MS. BEHAR: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

MR. ELA: Yes.

MR. BRADMAN: Yes.

MS. ROMERO-BRIONES: Yes.

MS. OAKLEY: Yes.

MS. BAIRD: Yes.

MR. BUIE: Yes.

MS. SWAFFAR: Yes.

MR. RICE: Yes.

MR. CHAPMAN: The Chair votes yes.

Twelve yes, one absent, the motion passes. Scott, back to you.

MR. RICE: Thanks, Tom. The next item on our agenda is a proposal for eliminating the incentive to convert native ecosystems into organic crop production and I will turn that to Harriet.

MS. BEHAR: Okay. So the National Organic Program and numerous National Organic Program policy documents, the NOSB recommendations and principles, include a clear bias towards the prediction of natural resources present in our organic program, including the physical hydrological and biological features of the farm.

The bias towards ecological and ecosystem preservation is also found within the organic marketplace with consumer expectations that organic farms and ranchers will be examples of excellent land stewardship.

There is, however a requirement that land cannot produce organic crops or livestock

until 36 months has passed between the application of a prohibited substance and the harvest of an organic crop using land that has not had any prohibited substances applied to it would then provide an immediate entry into the organic marketplace for the production of organic crops or livestock without any 3-year wait period.

The lack of the 3-year transition timeframe is an incentive to convert native ecosystems, some with fragile or endangered habitat to immediate agricultural production that would carry the organic label.

Over the past three years the National Organic Standards Board has received substantial public comment describing loss of native ecosystems when farmers have transitioned to organic production, and I continue to hear about this as well.

Many certification agencies around the world have addressed this issue in their standards by banning converted native ecosystems

that are now growing organic crops from using the certified organic label at any time after this conversion, so a complete ban.

These certifiers were listed in the previous discussion document and proposal. The National Organic Standards Board is not suggesting an outright ban.

There may be issues such as the area may have been converted by a different operator. That should not keep the current operator from choosing to use the environmentally beneficial practices of organic production and then being able to be rewarded with the use of the organic label.

The NOSB feels the 10-year wait period between a conversion of a natural ecosystem and subsequent organic certification proposed in its August 2017 proposal if all other requirements are met is a strong incentive to convert precious native ecosystems to organic production.

So we have suggested some regulatory changes, a change to 205.200(a), "a site

supporting a native ecosystem cannot be certified for organic production as provided under this regulation for a period of ten years from the date of conversion," and then we also gave a definition which I will speak to after I say some other things.

So I am going to summarize the public comment, let me get to that area. Sorry, still scrolling here. Okay, here we go. The significant number and depth of comments on this topic illustrates how important this issue is to all stakeholders within the organic community.

The NOSB thanks the public for their helpful input and engagement on this issue. I was especially struck by the numerous farmer commenters who stated how important this issue was to them personally.

The lessening of bio-diversity on the landscape can have long term negative impacts. I even know of farmers in my region who have cleared non-native areas to increase their field sizes but then see the result of less birds

nesting and eating insects and rodents due to the lack of purchase and habitat that had been destroyed.

The organic farmer, as are all farmers, are part of a larger ecosystem and protection of bio-diversity is not just required in our rule but essential for success on all of our farms and for the future of a healthy and productive planet.

These native areas are repositories of precious plant, animal, bacterial, invertebrate, and other life forms, and their destruction should not be considered an acceptable method of quickly bringing organic crops to the marketplace.

While most commenters supported this proposal either wholeheartedly with no changes or with some reservations due to specific impacts, the NOSB Subcommittee understands that continued work would need to be done on this issue to bring clarity through further guidance to foster consistency in its implementation should the

proposal pass.

Examples of possible organic system plant questions were included in this proposal to aid certifiers and producers in the determination if land would fall under the native ecosystem oversight and to illustrate how this requirement might be tracked in an organic system plan.

These were just examples and were not suggested as regulatory language. The basic requirement that land entering organic production not have had prohibited substances for three years previous to the harvest of the first organic crop would not require on-ground physical review of the farm beginning at this 3-year period.

That's the way we do it now, the farmer just puts in their organic system plan what has happened for the three years previous to their first organic certification.

We only require the inspector to be present the year that the first organic crop is going to be sold as organic. We also do not

anticipate organic inspectors visiting farms to assess if native ecosystems are about to be converted to agricultural production.

Instead, the questions within the organic system plan, similar to the basic 3-year requirement, could narrow down which small number of operations would be subject to this native ecosystem oversight.

The intention behind the term "converted" is to change the native ecosystem, is the change the native ecosystem has experienced so that it is no longer containing the diversity of plant and animal communities present, nor the regenerative capacity to maintain these communities which occurred through an intentional human activity.

I know there was some questions about what we meant by conversion. The subcommittee also believes we have justified the addition of this, the oversight of this subject to our regulation under the Organic Food Production Act in two previous discussion documents.

For both the integrity of the organic label in the marketplace as well as the promotion of ecological health and the maintenance and improvement of the natural resources present on the operation the work on this subject area is justified.

Providing the tools both domestically and internationally to help operators and certifiers determine if a native ecosystem might have been present on the land will be provided in subsequent proposed guidance for the NOP.

Certifiers would only need to use these tools if, based on a short list of organic system planned questions, they are prompted to search further.

Certifiers will be able to modify, improve upon the questions provided in the guidance in their own OSPs. The number, ease of use, and information present in online tools, government and non-profit websites, and personnel, will continue to increase over time as information becomes more easily accessible

through the internet.

Additionally, information describing how to use the research tools to determine what type of ecosystems were present on that land in the past could be developed as well as helping inspectors assess the diversity and regenerative capacity of any remnants that might be present on edges or on adjoining property of that native ecosystem that had been converted.

Finding the line between a recovering ecosystem that is functioning at a high level of bio-diversity and regeneration as unaltered land would also be the focus of this guidance.

There were significant comments from a variety of regions stating that farmers need to be able to access land close to their buildings in order to facilitate grazing or add on to production capabilities and the only land available to them could be a native habitat.

We are also considering a description of management of native ecosystems that would allow grazing animals as long as this management

practice would meet the wild harvest definition in our regulation.

These changes we are making to this proposal below do, and I believe, address the concerns of the farmers in the Carolinas and New England that they would need to access some regrowth areas to increase production on their farms.

It is not the intention of this proposal to cast a broad net and prevent any type of non-agricultural land from being used for agricultural production.

Instead, the intention is to disincentivize the destruction of the unfortunately very rare ecosystems left on our planet that has led to loss of endemic plant and animal species and the lessening of their populations, as well as the accompanying increase of invasive plant and animal species which then further endanger the capabilities of those native communities to survive and flourish.

We recognize that an operator can

destroy a native ecosystem and then farm it non-organically with all of the associated use of problematic materials and practices that are not allowed in organic.

This will happen whether or not this rule is adopted, but instead this proposal will give pause to any operators who wish to quickly enter the organic market and avoid that 3-year transition on either their own or leased non-organic land through the destruction of a precious intact native ecosystem that has not had the application of any prohibited materials.

The Certification, Accreditation & Compliance Subcommittee has modified this proposal which we believe addressed many of the concerns expressed by the public, and Michelle will put that up on the screen. Thank you. That's your -- That's me. Okay, there it is.

In response to numerous public requests it is unclear how the National Organic Program could provide incentives through our regulation to the conversion of non-organic land

to organic land other than perhaps developing some targeted research priorities that would aid farmers with that transition to organic.

It is also a good idea to obtain information, there was a commenter through NAS surveys, and we encourage our organic stakeholders to make this request to the appropriate federal agency.

In addition, we will continue to work on the proposed guidance to go along with this proposed rule, should it pass, which would provide the information needed to assure the organic community that this proposal is implementable and provides the disincentive we seek that results in the protection of those precious ecosystems which the vast majority of commenters stated was a necessary addition to organic regulation.

So up on the screen you see the change that we have removed. I don't know the best way to do this. Read it? Well, I want to just make it clear we have removed the words "and semi-

natural vegetation."

So now it reads "Native ecosystems can be recognized in the field as retaining both dominant and characteristic plant species as described by established clarifications of natural vegetation.

These will tend to be on lands that have not been previously cultivated, cleared, drained, or otherwise irrevocably altered. However, they could include areas that have since recovered expected plant species composition and structure."

We have discussed this with the National Organic Program. We do not feel this is a substantive change and so we are moving forward with this. I am finished. Thank you.

MR. RICE: Thank you, Harriet. Any discussion?

MR. CHAPMAN: And just a point of order, to make that change we will need an amendment, a motion to amend.

MR. RICE: Do we have a motion to

amend?

MS. SWAFFAR: I would like to make the motion to amend the definition of native ecosystems to read as follows, "Native ecosystems can be recognized in the field as retaining both dominant and characteristic plant species as described by established classifications of natural vegetation.

These will tend to be on lands that have not previously been cultivated, cleared, drained, or otherwise irrevocably altered. However, they could include the areas that have recovered expected plant species composition and structure."

MR. CHAPMAN: I have a motion. Is there a second?

MR. MORTENSEN: I second.

MR. CHAPMAN: I have a motion and a second. Is there any further discussion on the motion?

(No audible response)

MR. CHAPMAN: Seeing none we will

proceed to a vote on the motion. So, again, this is an amendment so it's a simple majority to adopt this amendment.

A yes vote is to amend as shown on the screen to strike the words that are crossed out and revise the definition as read by Ashley. A yes vote is to approve, a no vote is reject the amendment, and the voting will start with Dan.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

MR. ELA: Yes.

MR. BRADMAN: Yes.

MS. ROMERO-BRIONES: Recuse.

MS. OAKLEY: Yes.

MS. BAIRD: Yes.

MR. BUIE: Yes.

MS. SWAFFAR: Yes.

MR. RICE: Yes.

MS. BEHAR: Yes.

MR. CHAPMAN: The Chair votes yes. Just a clarification, A-Dae, did you say you abstained or you recused?

MS. ROMERO-BRIONES: Oh, abstained.

MR. CHAPMAN: Abstained?

MS. ROMERO-BRIONES: Yes.

MR. CHAPMAN: Okay. Eleven yes, one absent, one abstained, the motion passes. Any further discussion on the proposal? Scott's kind of in charge of this piece.

MR. RICE: Discussion? Harriet?

MS. BEHAR: I just want to thank everyone for remaining engaged on this issue and for the work done by the National Organic Standards Board in reaching consensus so we can move forward. Thank you.

Well, I don't know if it's full consensus, but we --

MR. RICE: We have Ashley and then Emily.

MS. SWAFFAR: Yes. So I was kind of a lot of the driver on making those changes because I feel like that addresses a lot of the concerns that we heard from several of the growers that wanted to expand on land, so I feel

like, you know, this was a great compromise for all parties involved in protecting our native ecosystems.

And I just want to say that, you know, through the guidance process or the rulemaking process I would like to see a definition of conversion clearly spelled out because I think that's one thing that is just a little bit missing from this and, you know, also stating that grazing can occur on these lands.

As long as native ecosystems are still maintained grazing can play a real factor in making sure those ecosystems are sustainable. So I just want to say, you know, with this amendment I feel like we alleviated a lot of the concerns that we heard from a lot of farmers. Thanks.

MR. RICE: Emily?

MS. OAKLEY: I can let others go before me if they want to.

MR. RICE: Excuse me. Tom was next on the stack.

MR. CHAPMAN: Yes. I mean I

appreciate -- It took us awhile to get this right. I think this was the third time since we've brought a discussion document or a proposal forward and I think we got it right this time.

So I really appreciate all the hard work that the subcommittee put into getting this right and the comments from the public.

I do want to, you know, I do think this is critical that this goes forward and I hope the program can find a way to move this forward after it leaves our hands.

I also want to make sure that we don't miss some of the comments made by CCOF that this is one way of addressing this issue but there is other ways of addressing it through incentivizing the conversion of conventional crop land and, you know, that's an area that we should also keep under consideration, especially as ideas are put forward in that avenue.

MR. RICE: Let's see. I had put myself in the stack there briefly to just touch on -- I agree with the comments that have already

been made and just to emphasize the need for guidance around this, especially when it comes to the role of the certifier in determining the status of a particular field or site.

I think guidance will be critical to kind of fill in some of the detail and the resources and other tools that we can use. Sue?

MS. BORENER: I grew up in the Ozark Mountains, and I still love the Ozark Mountains. And we have a lot of native forest in Arkansas and Missouri.

Some of those have been we have Missouri Pecan Growers Association, I don't know if I can name names, that have taken native pecans that have been they say planted by Indians 300 years ago, and they are harvesting native pecans and selling them now all over the world. They're a wonderful pecan.

But by doing that, over time not only are the organic farmers doing it but also conventional farmers because it's a very lucrative crop. So those trees are going to be

used one way or the other. They're either going to be sprayed or they're going to not be sprayed and treated organically.

You would say that would be wild crop harvesting except over time they have started using, doing some cultivation underneath it, putting alfalfas and other -- so now they're crop lands instead of wild crop harvest.

We have a group down in southern Missouri that have connected with the elders in that area, and they do essential oils, ginseng and Echinacea, and they're doing essential oils, and they sell them over internet.

And you would say that's wild crop harvesting. And it started out wild crop harvesting, but at one point then they started adding fertility products. So now it's crop planning.

And essential oils are very expensive, and so they either do it organically or somebody does not. That's my concern. It's not that we don't have love of biodiversity, we do. We're

connected with our Earth.

And I appreciate the changes that were made. I think this does address some of that. But I fear for those people who might lose their certification or perhaps could not get certified. Nevertheless, that being said, and I think valid fears on my part, I think that we have to, as an organic industry, make a statement that we have to preserve our biodiversity.

MR. RICE: Thank you, Sue. Emily? Oh, excuse me, Harriet.

MS. BEHAR: I would like Emily to get the last word. I just wanted to tell Ashley and Tom that the items that you mentioned were mentioned in my summary and will be covered in addition to wild harvest not just of grazing but any wild harvest out there that meets our rule on sustaining the resource would be allowed in the native ecosystem.

So that will be part of the -- once they change that ecosystem, then it would not. But I'm just saying we're going to try to come

through to help find those lines and make it easier for both operators and certifiers.

MR. RICE: If Emily still wants the last word, we have Ashley. You want Dave? Dave?

MR. MORTENSEN: Yes, I also would like to thank all the hard work that people on the Board did listening to the stakeholders and then working out an agreement. This is the first time I've seen this kind of activity in the time I've been on the Board, and I'm delighted to see it.

I'm delighted to see it for a number of reasons, but when I'm not on the Board, my research actually measures biodiversity in what we call the agro-ecological matrix, or the landscape.

And it's interesting, Silke's comment about the 80/20 rule, that 20 percent of some activity results in 80 percent of the benefit is exactly what we see when we measure biodiversity on the landscape.

It's the small slivers of natural habitat that give rise to 80 percent of the

biodiversity, and that's not just for the environment. That's for our farming activities. We're measuring 160 pollinators in these slivers, wild bees and Apis as well as natural enemies.

So I think it's just the perfect thing that we should be moving forward. It stewards the environment, and it stewards the ecology of our agricultural production system.

MR. RICE: Ashley?

MS. SWAFFAR: Yeah, I forgot to mention in my earlier comments I was the no vote on this. And I just want to see justification for changing my vote to a yes was these amendments I feel like can alleviate a lot of my concerns. So I just wanted to state that.

MR. RICE: Emily?

A-dae?

MS. ROMERO-BRIONES: This vote is really hard for me because I am going to be the no vote on this, and I just wanted to give pause to why I'm going to vote no.

And part of it is I think biodiversity

is incredibly important. I feel like the biodiversity standards or matrices that may be in effect now don't necessarily encompass some indigenous practices that are just now becoming on the forefront of what we know as science and they're just being researched.

For example, we have controlled burns in the Yurok Nation in California where they do do controlled burns of some natural species based on generations and generations of knowledge. You can't have an influx of endemic plants in a certain area based on indigenous knowledge that has yet to be documented scientifically.

In addition we have, aside from this proposal or this recommendation will also affect people trying to enter into the organic industry. Right now we're in the political climate where we have pipelines going through indigenous communities.

We have the Dakota Pipeline, we have the Keystone Pipeline, we have the Atlantic Pipeline, and these are all pipelines that are

going through indigenous communities. And one of the single rays of hope is that in Minnesota we see mitigation plans that protect organic lands.

So it's a strong argument to avoid lands that have been defeated in court -- so there's tribal communities that are interested in protecting their lands by entering the organic industry.

And so, and again, tribal communities are the second largest landholder in America. They have over 100 million acres of land in this country, 58 percent of those are in agricultural titles or agricultural businesses.

And I don't feel we've had enough of their voice in determining whether this is beneficial to them. And also this will affect international players in the organic industry.

And I feel like the international agency or sovereign nations of both international agencies and tribal agencies weren't clearly articulated in making this recommendation. And so these are some of the reasons I'm voting no.

MR. RICE: Thank you, A-dae. Sue?

MS. BAIRD: Thank you, A-dae. I appreciate that. And I think it's something that we need to consider, at least in the future, is that we reach out to some of those voices that perhaps would not normally be reached.

I truly fear that this will have the opposite effect that we want it to have. I really do. I think that we're going to increase uses of chemicals that we don't, wouldn't have without putting this period of ten years from time of conversion to organic.

The only reason that I would vote, and will vote yes is because if we don't, they're going to say well organic don't even care about biodiversity. I actually saw that on a slide that was presented, which I suppose is the take-home. If A-dae didn't vote for it, we don't care about biodiversity. So thank you, A-dae.

MR. RICE: Emily?

MS. OAKLEY: I don't mean to have the last word. Sorry, I don't mean that. So please,

others, speak after this. First, I wanted to thank you, A-dae for that comment. And I'm in a state with a very large number of indigenous communities and tribes.

And to the point of burning, I just also wanted to say that that is definitely a tool that's used in Oklahoma for native prairie lands, also by the Nature Conservancy and isn't seen to be at odds with sustaining native ecosystems, and in fact is incorporated in many cases as a tool for trying to keep out invasive species and to promote native species, and is seen as part of that natural, integral part of the ecosystem.

And it's even done, although you have referred to the Ozarks only in Missouri and Arkansas, but Oklahoma has a sliver, and that's where I am. And there has been burning done there, as well in the forest lands to try to maintain the native ecosystem and address invasive species that might be creeping in.

So I do think it is an important tool that many people recognize as being complementary

to maintaining native ecosystems. So I just wanted to make sure that that was clear.

I wanted to say that even though we had a lot of the rationale for this proposal in previous discussion documents and proposals, there's just one thing that I wanted to be sure that we read into the record for this which is 205.200.

And I won't read the whole thing, but the section that addresses must maintain or improve the natural resources of the operation I think is really critical. I think it could be argued that that alone already addresses this proposal.

And if you look at 205.2, terms defined, natural resources of the operation, the physical, hydrological, and biological features of a production operation including soil, water, wetlands, woodlands, and wildlife.

So I think when we are taking native ecosystems and converting them directly into organic production, we're already in violation of

the rules that we have before us.

I think that this compromise that we've reached as a group is a really positive one. I know it doesn't include everyone's concerns, and I wished that it could. I also think that A-dae is correct.

And I think there should be a broader dialogue between the National Organic Program and the USDA in general, and native communities. And I know that's part of the regulatory framework and I, you know, hope that that is always a good dialogue that occurs through the rulemaking process in general.

I think that as a farmer, I actually was really naive and didn't realize the extent to which this was happening. And when I first came on this board and learned of the issue, I was really upset and really glad to see that this board was working on it.

As a consumer who buys everything organically that I possibly can, meaning basically everything, I also feel that I wear

both those roles as a farmer and a consumer.

And as someone who came to farming out of a love for the environment, and seeing organic agriculture as a means of complementing environmental issues, I think that this issue is critically important. I think we owe it to the integrity of farmers who carry this label and consumers who eat our food to put this forward.

And I hope, as Tom said, that the NOP will be able to go forward with rulemaking on it if we're able to pass this proposal today. So thank you, Harriet, for that excellent summary, and thank you to all the stakeholders in the room who have worked very hard on this and have helped us obtain this language that is hopefully satisfactory to the vast majority of the community, and for all the work that's gone in on this issue for a number of years.

So I just wanted to say thank you and hope that we can successfully pass this. Thank you.

MR. RICE: Harriet and then Dan.

MS. BEHAR: I think in the guidance we could address the burning, prescribed, controlled burns of native prairies because they would, it's not irrevocably changing them. If anything, they are enhancing then.

So I think that the burning and having a native prairie -- I shouldn't say, I don't have a native prairie on my farm, but I am trying to mimic that and have done numerous burns myself and seen the benefits to that practice to increasing the basically waking up the plant species that have been held dormant for I don't even know how long.

MR. RICE: Dan?

DR. SEITZ: I too appreciate A-dae's comment, and I think it points actually to a broader challenge that we have, and that's the law of unintended consequences. And almost inevitably something we do, no matter how well meaning and how logical and thoughtful, it may have an unintended consequence.

I think ironically, the unintended

consequence of the organic standards was to create an incentive to develop native habitat. And when you read through the regulations, it talks about improving fertility of the soil and so forth.

I think that the people who formulated at were really aiming at the 99.9 percent of land that's in conventional agricultural use as being where we would hope to see organic methods introduced. So that conversion of land from conventional to organic I think is what was very much intended.

So I feel comfortable with addressing, with accepting this proposal to address what was a major unintended consequence that people might develop some of the most valuable, important habitat out there at the expense of ecological diversity.

But I think we have to remain very mindful, and I think I've heard that from a number of people, that this too could have an unintended consequence. And if it does, we need

to stand ready to address that at the time that that happens, and also to use the flexibility within the language where we can if there seems to be an unfair result that -- if there's an unfair result from any change that this leads to.

MR. RICE: Steve?

MR. ELA: I think I would just like to echo Emily's comment. I mean, coming from the west where land isn't developed because water isn't available, you don't just go out and break out a new set of ground because it just doesn't happen.

My eyes have been opened. I've lived in the Midwest and seen those native ecosystems. I think it's incredibly important to protect them. And I completely respect A-dae's comments, and I think we really do as a board, whether it's indigenous peoples or it's small farmers that, you know, don't really know what the NOSB does or don't have access to.

And I think the webinar comments are really important on that for people who can't

travel or don't have time. I think we do need to continue to actively think as a board of how do we engage those communities that don't have ready access to our -- and public comment is readily accessible but the system by which they engage is not there.

So I think your comments are really valid. But I do think this is an important topic that we do need to address and, you know, I would hope for a yes vote as well.

MR. RICE: All right, I think we are ready to move forward. Okay, seeing no further discussion we will move on to the vote. So the vote will be to adopt this proposal that contains the amendment to Section 205.2 to add the definition for native ecosystems as it's currently displayed on the screen.

It also contains a recommendation to amend 205.200 and to add a Paragraph A that states a site supporting native ecosystems cannot be certified for organic production as provided under this regulation for a period of ten years

from the date of conversion.

The motion was made by Harriet and seconded by Emily. This requires a two thirds vote. And a yes vote is to adopt the proposal and the wording seen here as amended. The voting will start with Dave.

MR. MORTENSEN: Yes.

MR. ELA: Yes.

MR. BRADMAN: Yes.

MS. ROMERO-BRIONES: No.

MS. OAKLEY: Yes.

MS. BAIRD: Yes.

MR. BUIE: Yes.

MS. SWAFFAR: Yes.

MR. RICE: Yes.

MS. BEHAR: Yes.

DR. SEITZ: Yes.

MR. CHAPMAN: Chair votes yes.

Eleven yes, one no, one absent. The motion passes.

MR. RICE: Thanks, Tom. That concludes our work this session on the CACS

Subcommittee, and I turn it back to you.

MR. CHAPMAN: Thank you. We will now take a quick break. It's 9:50, we will reconvene in ten minutes at 10 o'clock. We are now in recess.

(Whereupon, the above-entitled matter went off the record at 9:52 a.m. and resumed at 10:12 a.m.)

MR. CHAPMAN: If people can get seated, we will come back into session. I see all the Members present, with the exception of Lisa. So we do have a quorum. If members of the public could take their conversations outside, we are coming back to order. And I think Paul had a comment he wanted to make.

DR. LEWIS: Right. Thank you, Tom. I just wanted to follow-up on Dave's very helpful comment. The USDA has an Office of Tribal Relations. And part of their responsibility is engaging with the Tribal community but also in terms of consultation between their office and the Department on any regulatory activities.

So I wanted to at least let you know about that activity. And one thing that we're constantly asked in terms of are there any topics we want to share with them as part of a consultation.

So I applaud you in terms of kind of raising this issue. And this is something that we can, that you and I can kind of talk about engagement in over time.

MR. CHAPMAN: And that's a step in the regulatory review process, right? So if this went through rulemaking, consultation with the office is mandatory.

DR. LEWIS: Correct. Right. The consultation is required.

MR. CHAPMAN: Okay. So as printed on the agenda, up next would be the beginning of the day, it would be 8:30 in the morning. And we would be starting with Handling. As our Handling Chair is still feeling a bit ill, she will be joining us shortly.

But unless there's an objection from

the Board we will reorder the agenda and start with Crops. Any objection? Seeing none, we will reorder the agenda by consensus. And Crops is up now. And I will hand it over to Steve Ela, the Crops Chair.

MR. ELA: Thanks, Tom. I think we'll jump right into sunsets. We have a number of sunsets. And we also have two proposals that we will vote on today and discuss.

Just as Ashley mentioned yesterday, a couple of these, several of these sunset reviews are early reviews. And so if they were to be voted to be removed in the fall they would still sunset on the original sunset date. So same kind of disclaimer that Ashley pointed out.

With that, I think we'll just jump right into sunset reviews. And, Devon, do you want to --

MR. PATTILLO: Thank you. We will start with Section 205.601(a). That's algicide, disinfectants, and sanitizer, including irrigation system cleaning systems. One

alcohols. And two listings here, one ethanol, and isopropanol. Thanks.

MR. ELA: Jesse.

MR. BUIE: Okay. On the ethanol, agricultural uses of ethanol include the disinfection of production tools and surfaces, topical disinfection, and plant regulation, include ripening.

Both fermentation and chemical synthesis procedures are used in the commercial production of ethanol for the preparation of disinfectant solutions, spirits, and industrial sources.

Ethanol is readily biodegradable in air, soil, and water. According to the US EPA, ethanol is practically non-toxic, based on acute oral and inhalation toxicity tests, as well as primary eye and dermal irritation. There were no public comments April 17 through 19 or in person. Are there any questions?

MR. ELA: Is there any discussion? All right. We will move on to the next item.

Devon.

MR. PATTILLO: Next up in the same section is algicide, disinfectants, and sanitizer, including irrigation system cleaning systems. We have Paragraph 8, sodium carbonate peroxyhydrate.

Federal law restricts the use of this substance in food crop production to approved food uses identified on the product label. Thanks.

MR. ELA: Emily.

MR. BUIE: Okay. Isopropanol is used for a variety of industrial --

MR. ELA: So, Jesse, I think we lumped the two alcohols together, did we not? I'm sorry. I was --

MR. PATTILLO: Sorry about that. Yes, we did lump the two together.

MR. ELA: Yes. So --

MR. PATTILLO: Going back.

MR. ELA: Do you have anything to add, Jesse, given that we --

MR. BUIE: No.

MR. ELA: -- put those two together.

MR. BUIE: Not at this time.

MR. ELA: I'm sorry. It wasn't clear on that. Okay. Emily.

MS. OAKLEY: Thank you. So this product, sodium carbonate peroxyhydrate, is used as an algicide in rice fields, ponds, ditches, and irrigation lines.

It was added to the National List in 2007 with the hope that growers would use it as an alternative to more problematic materials, such as copper and chlorine.

The material is produced by drying hydrogen peroxide in the presence of sodium carbonate. It rapidly dissolves in water, and disassociates into hydrogen peroxide and sodium carbonate. It decomposes to leave only water, oxygen, and soda ash.

As part of its most recent review, the lead on this, who was I believe Zea at the time, said that, did some additional research. And a

2007 report of the California Rice Research Board studied the efficacy of this material, and found it did not work well enough to recommend it for rice paddies.

I did do a brief search on the California pesticide use report database regarding this material, just for their most recent data set of 2016. And it is being used in a number of counties on rice.

It's impossible to tell from that database if those are organic or conventional producers. But it is a tool that is being used at least by some.

Probably the biggest stakeholder that would have a producer using it for rice among our community would be CCOF, or other certifying growers in California.

And I think we'll look to the future material in the fall to determine if organic rice growers are using this, and a great deal. But it is being used, as a number of stakeholders commented, in irrigation cleaning.

So although it might have been added to the list initially for rice, or ideally as a rice material, it has become incorporated for other purposes as well. And it is listed under those purposes.

So there was, you know, a variety of comments to this. Some telling us that they didn't have producers using it. And then a number telling us that they did have producers, and who they were.

There were some organic dairy producers that requested this material stay on, but didn't tell us how they were using it.

We did put forth some questions, trying to identify if growers are using it on rice systems and, if so, describing its efficacy. We didn't really get that yet. So it would be great if we could get that for the fall meeting.

Although at this point I'm not sure that would affect our action on this material. Because it is being used by people for one of its listed purposes, which is irrigation cleaning.

Are there any questions about this? Or discussion? All right. Yes.

MR. ELA: Harriet, and then Dave.

MS. BEHAR: Do you know any brand name products that contain this material?

MS. OAKLEY: Oh, yes. Is it, GreenCleanPRO, perhaps? It's a biosafe product, I believe. And yes, I would have to, I could look up the product name if we need to.

But that's, if you look under the pesticide use report database, under the chemical, you will also get a listing of the products that incorporate that chemical.

MR. ELA: Dave.

MR. MORTENSEN: Emily, it strikes me that it's possible that use in irrigation equipment could be bigger than even use in rice. I'm just guessing. So that might be, could be helpful from the community to hear if that's the case. Or just, it's, I could imagine that might be the case.

MS. OAKLEY: I think it also just

speaks to a bigger issue, which is that if we allow a material for a specific use, but it has a listing that includes multiple uses, we have to expect that it will be incorporated for those other uses as well.

And stakeholders will then become dependent on that material. Or if not dependent, at least accustomed to using it. So, you know, if people are wanting something, for example, strictly for rice. Then that needs to be more specifically described.

If not, and I don't know, you know, what the Board's thinking was at that time, then, you know, I don't, we can't apply that scrutiny post facto.

MR. ELA: Other comments, discussion? All right. We'll move on to the next. Devon.

MR. PATTILLO: Next up are two listings for newspaper or other recycled paper without glossy or colored inks. They're listed at 205.601(b)(ii), mulches, and 205.601(c) as compost feed stocks.

MR. ELA: Thanks. Harriet.

MS. BEHAR: Thank you. During the last sunset review the National Organic Standards Board indicated that they would like a technical report for the review of this material. And it did come through. We discussed it I believe two meetings ago.

And the question was, were there more benign colored inks or glossy materials that were put on the paper that would maybe necessitate changing the annotation and possibly maybe reviewing, removing one or the other or both.

We did review this when the technical review came through. It was kind of nice to see a technical review, even though it was the sunset material. But it had been, what, 15 years I think since there had been a technical review.

And we received it the summer of 2017. We reviewed it. We discussed it in public, in front of the public here, two meetings ago, I think.

Even though there's some movement

towards the use of less toxic color inks in newspaper, it is difficult to almost impossible to determine when those inks are actually present in the newspaper and -- versus which ones are the more problematic colored inks.

There's also no methodology in place to separate if someone is getting recycled newspaper that would have, these are the more benign inks, and these are the less benign inks.

And so we decided in previous discussion and in subcommittee that we were not going to change the annotation. I know we don't change annotations at sunset. But we didn't change the annotation in between sunsets either.

We asked two questions. Does it perform an essential function? Is it used regularly? The public commenters, there was quite a few. And most, actually all, approved the continued listing with the current annotation. These included certifiers, grower groups, and individual growers.

Some noted that there's not a lot of

use of this material in their region but felt it should remain to allow those who are currently using it to continue that use.

There were no comments that stated it was difficult for producers to meet the annotation. With the recent TR we also agreed on the subcommittee that the annotation should remain.

And one certifier noted that newspaper at times ends up in manure that's being cleaned out of a livestock barn. And it may end up on organic land.

MR. ELA: Comments, discussion from the Board? Harriet.

MS. BEHAR: I believe I will be asking the Crops Subcommittee, who, if they decide they would like to, will be asking the NOP to work with us on possibly looking at adding the pots to -- as an annotation. Or just to, or we're waiting for a petition from the public to include the, those paper pots, and try to deal with this somehow.

Because there was quite a few comments, while not necessarily germane to this specific sunset material, we did hear from the public on those paper pots. And so, I didn't want that issue to get lost. And it seemed like this was the place to bring it up.

MR. ELA: Tom.

MR. CHAPMAN: And it would seem to me that the proper procedure would be to bring it forward in a petition, given that we just had a recent TR on a similar substance. I would imagine that it's a substance that we could review very quickly.

But the petitioning process is how items get added to the National List. And I highly encourage someone to petition the substance if its need as high as it's been stated.

MR. ELA: I would echo that. I think that would be the cleanest, most straightforward one that could -- so, and I agree with Tom. I think it probably would be a fairly

straightforward petition.

I also want to say that from my own perspective, I know as we got the TR, and we were looking about the colored inks, I think there were a few comments of how ubiquitous colored newsprint is now. And that in some ways why we were hoping to expand the annotation.

There may be some indications that it's in -- that because colored inks are used so widely, that it's difficult to sort. And so, we're not, it's not entirely clear if, when newspaper is being used if it actually is without colored inks.

And so, I think that becomes a -- it's a little more problematic, especially for certifiers, to verify that the annotation is being met. That's just my own observation.

So, I'm comfortable with the way it. But I think we need to be aware that the industry has changed in many ways. So, Harriet, do you have --

MS. BEHAR: Yes. No one made that

comment. There was no certifier or operator who commented that they could not meet the annotation. And -- but there were numerous that commented that the annotation should remain.

MR. ELA: Anybody else? All right. With that we'll move on.

MR. PATTILLO: Thanks. Moving on to Section 205.601(b), that's herbicides, weed barriers, as applicable. Paragraph 2, mulches, (ii) plastic mulch and covers, petroleum based other than ploy vinyl chloride, PVC.

MR. ELA: Harriet.

MS. BEHAR: Sorry. There were numerous comments that these plastic mulches and coverings are an important part of organic production for weed control, for moisture management, for shade cloth, and coverings on greenhouses, high tunnels, low tunnels, and other season extension activities.

I would like to talk a little bit about the burning of the plastic. This was one of the questions that we asked, about burning of

the plastic. And many noted that this is already banned under the Federal Clean Air Act, as well as, I know, some state and local authorities also review that.

However, I have heard from some certifiers that there is concern that there is little to no enforcement of this burning ban on organic farms, or any farms.

And that they would support this going on our work agenda to add to the annotation at some point, this burning. So that if it was added to the organic regulation it would then become a question on an organic system plan that all certifiers would review. And would be asked and verified that this was not occurring on organic farms, and would lead to the enforcement.

Many noted that there needs to be movement to the biodegradable mulches. That there is a significant impact of land filling. I think we all are aware of that, of plastic mulches and covers. We're not even talking about silage bags or bagged hay bales that I believe

are used ubiquitously around the country.

But we have gone through that, and we're still waiting for the research to give us the information we need to then approach the National Organic Program with possible changes to their policy on the amount of biologically based ingredients in those mulches.

Certifiers also answered the question about the woven plastic landscape cloths that are then allowed to remain in place over numerous seasons. This is a plastic mulch. But that they do monitor the possible degradation of it. And that once it is seen on inspection to be degrading, they then tell the operator that it must be removed.

One advocacy group stated that they had concern about the solarization that occurs under black plastic especially. That it kills off beneficial soil biology, especially when it's in continual use on the land for numbers of years.

But as I said, there was strong

support for relisting among many commenters for this material as listed. Although, as I said, many also urged at the same time for further research to find an acceptable biodegradable mulch to convince the NLP to modify their guidance.

There is some compelling information -- oh, sorry. Some compelled us, as the NOSB, to find a way to address the issue of landfilling. I do know, at least in my region, I don't know in others.

But there is -- are a few different companies that are working on the recycling of plastic, but not usually the mulches. But you can usually recycle the coverings of high tunnels, and the silage bags, and the wrap bales.

In my region there's a company that will leave a dumpster on your property. And you can, and then you fill it up. And actually a variety of farmers can even use it. And then they periodically come and get it. And you, and the farmer doesn't pay anything. So, that's in

Wisconsin, and I believe they also operate in Iowa.

But that's not everywhere. So, I don't think that we should take this off the list. Although there were some commenters that said that the producers should stick with organic mulches, such as hay or straw.

Or there should be a commercial availability clause that only use of plastic mulches when the organic mulches cannot meet their function. That's it. Oh, and just two, someone commented that shade cloths were also important.

MR. ELA: Comments, discussion from the Committee?

MR. BRADMAN: I just want to echo that summary in a sense. Because I think it raises a lot of concerns among the Board. And I know I have a growing discomfort with the enormous amount of plastic waste from plastic mulches. We see this in California a lot.

There are similar programs in

California where high tunnel and other materials that aren't contacting the ground are recycled. But the problem with the material touching the ground is that often you have soil and other contaminants that makes it difficult to recycle.

Also, when we think about burning, there's a new company in California, there's also one in England, that are trying to develop pyrolysis devices to basically convert plastics into fuels, by vaporizing them and re-condensing diesel or other fractions into fuel.

And I think pyrolysis in some environments has been controversial, particularly as a way of handling municipal waste. But when we think about burning, and limiting burning, we should make sure we're clear on whether we want to include pyrolysis in that, which is not combustion. But it is a very, you know, it's a conversion process. And some people consider it a form of incineration. So, it's something to consider.

And I think plastic is just a growing

issue, with all the new information about plastic waste, and marine plastics, and also impacts on terrestrial and freshwater ecosystems.

MR. ELA: Scott.

MR. RICE: Just another thought on the burning annotation. As much as, you know, I don't think any of us wants to see plastic burned, if there -- I question using the organic regulation as an enforcement tool for regulations that are already in existence. And just something to think about as we think about annotations in general.

MR. ELA: Harriet.

MS. BEHAR: Is the pyrolysis type burning something that would be done on farm? Or is that taken somewhere else?

MR. BRADMAN: Probably somewhere else. But this company wants to build small units. So there can be kind of smaller, local processing facilities. One issue they have though with the mulches is that if there's soil on them there can be sulfur that impacts -- that they need an

additional cleaning step in any emissions. But so, there's some of the same issues with recycling. But they want to build small, portable units that could be done on farm potentially.

MR. ELA: Emily.

MS. OAKLEY: Scott, I had a similar thought that perhaps the way to address this is to ensure that certifiers across the board are making sure that producers aren't burning. And making that part of the annual question and review. How are producers disposing of this material?

And I personally have been on a farm while it's been burning. So, it is certainly, as we've heard from public testimony, a problem. And we should make sure that organic producers are following the law that's already out there.

MR. ELA: Ashley.

MS. SWAFFAR: Yes. I just wanted to say, this material, I use this on my farm. And it's critically important for me to control weeds

in my tomatoes.

As an inspector I'm gone for four to five days a week. And there's no way I can weed everything. So, I just want to advocate that for me, landscape fabrics are critically important.

MR. ELA: Harriet.

MS. BEHAR: The organic regulation mandates the maintenance and improvement of the natural resources, which includes the air. And the burning of plastics releases dioxin, a very serious carcinogen.

And I think that even though it's not necessarily -- it is covered by other regulations, I think you could probably find other parts of our regulation, that it's also covered in other places.

So -- and I think that many times growers would burn plastic just out of ignorance. That they don't realize the issue. Because I've said this to them.

And I've said, you know, you've got, you're burning right next to where your calves

are, you know. You're like giving them dioxin. This is not a good idea. And they go, really? And I say, yes.

So, we can discuss this in the crops subcommittee. But there was quite a few just comments on it. And universal agreement that organic farmers should not be burning plastic.

MR. ELA: Asa.

MR. BRADMAN: Just one last, not to belabor the point. But I've also been on farms in Chile and other areas where there was a lot of plastic burning going on, both ground mulches and greenhouse covers, and stuff like that. So, it may not be burned in the U.S., but it's definitely burned around the world.

MR. ELA: I just would like to say in adding to that, I think that international point is a good one. And I also think, I mean, we hear talk about how it's just acted on in the hedge row, which, I mean, at least landfills have environmental policies in effect.

I mean, they may be landfill, but

they're supposed to be monitoring leaching and this and that. And just piling it out in the hedge row, I personally don't feel that that's a great disposal mechanism.

So I think adding a question at least that kind of puts all of us that use it -- I use it -- on the spot as what we do with it is probably valid.

And I also would like to say I think we had one public comment, you were talking about the research area, from the researchers themselves saying they had a lot of the data but they hadn't had a chance to compile it yet.

And so just at least for the public, I think it's important to know that we're hearing the need for biodegradable mulches. We recognize the issues with the NOP. But we really would like to see that research come out and some of the European research as well so that we can make not a knee-jerk reaction, but an informed reaction based on actual data.

So, we're not ignoring people, but

we're kind of waiting for some of this longer term research to come out so we can be informed. Emily?

MS. OAKLEY: I was going to echo and appreciate Asa's comment. And I was going to essentially say what you said, too, that in addition to burning, we have on farm disposal, which surely can't be compliant either. So maybe we include an annotation that does address burning and disposal.

MR. ELA: Anything else? I think we hit here that woven versus non-woven should be treated similarly. And I will just say on our farm where we have used woven fabric multi-year then where we were doing soil studies, the comment that it does affect the soil structure and biology is very valid.

It was very clear -- we have clay loam soils, but it was very clear how hard it was to take soil samples under fabric because, you know, you're basically not adding organic matter. So I would echo that from a personal experience.

Nonetheless, it is a very important tool for some people, and I recognize that as well. Any other comments on this? Devon.

MR. PATTILLO: Moving on to two listings for aqueous potassium silicate. Both carry the annotation of silica used in the manufacture of potassium silicate. It must be sourced from naturally occurring sand. And these are listed at 205.601(e) as insecticides, including acaricides or mite control in 205.601(i) as plant disease control.

MR. ELA: Dave.

MR. MORTENSEN: Yes. So aqueous potassium silicate is synthesized by combining high purity silica sand and potassium carbonate at very high temperatures. The resulting fused material is crushed into very fine powder that is then suspended in water.

And it's a crystalline tetrahedron formed structure that is sprayed onto plants or applied to the soil for the purpose of insect, mite entities management in veg crops for almost

exclusively -- well, veg and fruit crops.

Formulations of aqueous potassium silicate then once on the plant or in the soil are, as far as we could tell, and we did a fair amount of reading of the technical report and published literature on this, taken up and incorporated in the boundary cells of both the roots and the leaves so that it actually represents a kind of a physical barrier to feeding or to disease when the inoculant hits the leaf or root, that that early phase of disease development is suppressed.

We have quite a history to reflect back on this compound. We had a technical review from 2014. The crop subcommittee looked at this in 2007, during which time there was a split vote on the re-listing of it.

Some of the concerns that we had on the crop subcommittee this go around that are reflected in the questions, the six questions that we had listed to solicit some feedback on these, some have to do with human health effects.

There is data in the technical report that indicates that the compound can -- does have dermal irritation, result in dermal irritation. And I'm sure if it results in dermal irritation, any oral inhalation would also not be favorable.

We also were unclear on the extent to which this is used. And this was also a problem the last time the subcommittee looked at it for re-listing and hence the questions about use. Are we using it? If so, under what conditions? And do we have alternatives, et cetera, et cetera.

We got 14 comments back on this. About half of them indicated that certifying organizations hadn't reviewed any uses, quote, unquote. That was about half of the comments.

We also had comments, and I would say just kind of in a generic sense, like we use it for insect, disease and mite control. Those comments were coming from western sources, California, the Pacific Northwest and for vegetable and fruit plant production.

And I would say they tended to be on the generic side. So it would be really helpful if we could get more specific data than that or more specific case study accounts of where it's actually deemed used and to what extent it's being used.

I would say the middle and eastern part of the country, the comments coming back were that we haven't seen it. We haven't seen it in any plans or that kind of thing.

We also had a detailed comment from Beyond Pesticides that opposed the re-listing due to the skin irritation, due to potential effects on nutrient uptick by the plants affecting the roots and questioning the essentiality of the compound.

And so that's the current status of that one. Steve.

MR. ELA: Comments, discussion?

MR. BRADMAN: I just have one comment, which we mentioned in our subcommittee discussions. And I know I'm a little

uncomfortable with this material because it's essentially acting as a systemic pesticide.

And even though I think the mechanism is probably fairly benign, I just have some concerns or philosophical issues with the idea of, you know, systemically altering the plant by absorbing the material into it as opposed to creating a barrier or other kind of pest control.

MR. MORTENSEN: And Asa, as you know from our many discussions, or number of discussions about this, I share that concern. And it also just raises the question that we don't have the data, really, to assess this, you know, what happens.

And the Beyond Pesticides group raised this question as well, you know, what happens when we ingest these tetrahedron as part of the fruit or vegetable? So I also share that concern.

MR. ELA: Anybody else? I think I would just echo what Dave said of the stakeholders that specific comments, this is

obviously, if you read through the record, is not a material that has achieved consensus on the board. And so it's somewhat controversial.

So I think those that are using it probably, it would be great to hear from specifics on how it's being used and why there aren't other alternatives to help justify why it should or should not stay on the list so.

And if there's nothing else --

MR. MORTENSEN: Steve, could I just add one more point. With some of the things that we've been reviewing for the crops subcommittee things, including our proposals that we're going to vote on, several commenters have raised the point that you really need to have efficacy data, performance data in side-by-side trials where, you know, you're comparing it to the standard practice or to the natural alternative.

And I would say right now we don't have that kind of information on this compound. And we would certainly welcome seeing it if it's out there. We've been looking for it, and we

would welcome seeing it.

MR. ELA: All right. Anything else? Emily, under the bill.

MS. OAKLEY: Sorry.

MR. ELA: That's fine.

MS. OAKLEY: I just actually want to echo what you said, Dave. And I think that that's a bigger research priority that the materials subcommittee should add, if possible, under crops.

Because, you know, I think we're comparing so many materials in somewhat of a vacuum. And I think if we could see more trials and data on the efficacy of the proposed materials before us with other organic methods that are currently approved, that would make a big difference in our deliberations.

MR. MORTENSEN: And, Emily, I couldn't agree more. And the other thing that we talked about yesterday is the importance of context. So if we have insight only about grapes in a high rainfall, high humidity area, and we're trying to

evaluate something for spinach in the Pacific Northwest where it's dry and drip irrigated, it's very difficult to, like, infer across that vast space.

MR. ELA: And I just reiterate, I think what you said, too, it's not just efficacy, but efficacy in comparison with other organic materials would be very useful. It's not absolute, but it would be nice so.

All right. We will move on to the next material. Devon.

MR. PATTILLO: Thanks, Steve. Next up are three listings for elemental sulfur. They appear at 205.601(e)(5) as an insecticide, 205.601(i)(10) as plant disease control and Section 205.601(j)(2) as a plant and for soil amendment. We have a recently completed technical report on this from 2018.

MR. ELA: Asa.

MR. BRADMAN: Okay. So sulfur, I think, is going to be hard. There's a lot of discussion here. There's three uses we're

talking about here as an insecticide or acaricide, disease control, mainly fungal disease control and as a soil amendment.

I think as a soil amendment the use is very clear, and there's not too many issues with that because it's a plant nutrient and that use is really distinguished from use as a pesticide.

In California, sulfur, and probably even worldwide, is probably the most heavily used pesticide and has been used for centuries and ages. Some people call it the oldest pesticide.

And it has a long use in many settings, both in conventional and organic and is important for organic. It is certainly very clear from the public comments both written and some of the testimony we heard over the week.

You know, I counted in the various comments thousands of users, probably at a least a couple thousand, that reported using sulfur for one of these three uses with really a big emphasis on its importance for managing soil fertility and high alkaline and also sulfur

deficient regions, but also as or more importantly for pest control.

So I think there's a lot of interest in this compound. And it's also clearly important and many would say absolutely essential. It also has potential impacts, especially, I think, on human health.

Sulfur is a natural part of the environment. It is part of normal human and other biology. It's an important component of the world we live in. That said, when using agriculture, there's definitely potential impacts on health.

There's a new technical report that came out just, I think, it was posted in the last week. And I encourage everyone to read that. I think it's a pretty good review and reflects that there are, you know, known effects in terms of impact on farm workers, ocular, respiratory and usually dermatitis.

In fact, it's one of the biggest causes of occupational related pesticide

illnesses in agriculture. Of course, most of that use is in conventional settings. There's very little data that narrows it down to organic.

And then in my group we've done some work on sulfur related to respiratory functioning kids living near fields where it was used. And I want to explain that a little bit too because there were some public comments about it and also written comments.

In our study, it's not just really one study. We looked at three outcomes. So we looked at sulfur use up to several kilometers away from where young children lived. And then we looked at the relationship of that sulfur use in the past year to a number of respiratory related outcomes.

One analysis, which you could almost look at as one study, looked at symptoms. So reported symptoms by the mother about cough and wheeze and things like that. Then another part of the study looked at whether there was any relationship between nearby sulfur use and

reported use of asthma related medications. So I could get out my inhaler here. But, you know, people who are using either a steroid or albuterol or other respiratory medicines.

And then a third piece of the study, which is standalone analysis, was we actually measured lung function in the kids. So in this case we're looking at nearby sulfur use and whether there was a relationship between less lung capacity, so your ability to breath out air in a second or a full breath.

And in all cases, there were significant positive relationships between higher sulfur use and poor respiratory outcomes in all three categories. And that's also consistent with case studies that have been reported and animal studies.

And so it has -- our study, you can look at it as one study. But really it's three separate analyses using one population, but it's also consistent with the animal literature and case reported literature for farm workers.

So there is some internal consistency. I'm kind of just responding to the critique that this is one study. And it's true. It would be good to look at this in other populations, although there's really no one else doing this and no other place to actually look at those kinds of outcomes.

I've thought about ways to study this. And I do have some ideas, but not with the granularity that we were able to do it.

So one of the limitations to a lot of the case reports and occupational illness reports that have been published is that they're relatively old. And there are newer and better application methods that probably reduce exposure. And there was some discussion of that yesterday with the use of sulfur, for example, in grape and strawberry production.

In our discussions in the subcommittee, you know, one thing we considered was whether there could be likely higher exposures due to using it as a dust versus a

wettable solution.

And OMRI provided good information about a number of products that they approve and including both dust and wettable formulations. And, you know, there's been a series of comments back, just to give the briefest summary. A lot of vineyard growers are very emphatic that they still need dust applications.

We heard yesterday in terms of strawberry production that it's very important to use the dust to access the whole plant. And also that wettable solutions don't work or are potentially damaging at different life stages.

However, I do kind of anecdotally have some information from growers, several ag commissioners in California, that using a wettable, say, versus a dust formulation could potentially reduce exposures.

But I do admit and say that our study didn't really look to distinguish between, you know, application method. And I think there's a need for more information on this.

Another point that came up by Juan Hidalgo, the ag commissioner in Santa Cruz County, and I've spoken with at least five other ag commissioners on this. And this was highlighted in comments and also yesterday about new laws in California regulating pesticide use in their schools and child care facilities. And I apologize to some because our work bears some responsibility for that rule.

But that rule is really designed to prevent acute exposures whereas we're trying to look at chronic use and outcomes in children. And these are subtle outcomes in children in lung function, not acute illnesses that would result in a visit to a hospital or something like that.

So I know that was kind of a long, perhaps not too top level summary of what's going on with sulfur. But with that said, it is one of the most important materials used in organic agriculture, and I think warrants a lot of evaluation and consideration.

MR. ELA: Comments, discussion from

the Board. Harriet?

MS. BEHAR: We did have someone comment that there is a mined version which would then be considered an unnatural sulfur versus this listing, which is a synthetic. I wonder if you have any thoughts on that.

MR. BRADMAN: Well, in terms of, you know, what I know about soil fertility and things like that, I don't think there would be a difference. I don't think there would be a difference on potential health or other environmental implications.

From, you know, a regulatory point of view, I can imagine that there could be a difference in terms of the way we list things.

But, certainly, going back to the very beginning, most of the sulfur we use now is recovered from combustion or other petroleum, fossil fuel consumption as kind of a cleaning step in limiting air emissions. But I don't think the environmental and public health or other health issues would be mitigated by a

natural source.

MR. ELA: Emily.

MS. OAKLEY: I appreciate that comment. I also think it would be helpful if the public comments or who made the statement that there were adequate amounts of naturally mined sulfur could provide us with some more information to that effect because right now we have that as a listing as a synthetic so it would be great to get more data on that.

MR. ELA: Dave.

MR. MORTENSEN: Asa, I haven't done a deep dive on the public comments on this. And I was just curious on the questions some of the first three have to do with human exposure, worker exposure, you know, what mitigating steps are being taken. Was there much helpful feedback to those questions?

MR. BRADMAN: Yes. There were some comments, and they were kind of a little over the -- they ranged from some problems to no problems. Many users said that they had had no problems

with workers or with family. And then some did talk about problems with ocular irritation.

You know, I have one quote here from Jacobs Farms that they really found it difficult to keep the dust, in particular, to keep out of eyes and sore throat and things like that. In their case, shifting to a wettable sulfur eliminated the problem.

And then, of course, you know, many comments on the need to use appropriate personal protective equipment. And that, of course, has to be part of any, you know, pesticide use program and, you know, ensuring compliance with the worker protection standards.

MR. ELA: A-dae.

MS. ROMERO-BRIONES: I just wanted to remind the Board that we have this also in livestock that we talked about last fall.

MR. ELA: That is correct. And I would just throw my own two cents in that I know in the committee we talk a lot about wettable versus dustable, or dust forms. And I think

within the committee we thought, yes, the dust form had been pretty well -- not many people were using it because none of us were aware of it.

And I was surprised by the public comments, especially in California, I think, really is where it came down to how much it was actually used. And I think, you know, with vineyards, there is no doubt when you mix sulfur with water it gets heavy.

So I was struck by those concerns and comments. It surprised me. There again, this is where public comment was really informative as to use patterns and informed the committee of, you know, I think, pretty important information.

MR. BRADMAN: Yes. I agree with that. And to highlight some of those comments, there were some vineyard growers who didn't use any irrigation water. And they didn't have a water source.

And others talked about having invested a lot of money in application equipment. And that is a significant investment and an

important part of their operation. And any changes would have big implications on that investment.

MR. ELA: And I would also say we use a lot of sulfur on our farm. And there is no doubt that the personal protective equipment is important. I know what it's like to have sulfur in my eyes. And it's not a very comfortable feeling. So I think that, you know, using it appropriately is very important.

So any other comments from the Board? Discussion? All right. Devon.

MR. PATTILLO: Thanks. Moving on to lime sulfur. This is listed under Section 205.601(e) as insecticides, including acaricide and mite control. That's paragraph 6, lime sulfur, including calcium polysulfide. It's also listed at Section 205.601(i) as plant disease control.

MR. ELA: Thanks. All right. This is my own material. And just like elemental sulfur, it's another old, old, old material that's been

used for a long time.

In the public comments, there were a number of comments in favor of lime sulfur for a wide variety of uses, control fungal and bacterial diseases as well as for various insects.

You know, it certainly has widespread and historical use across many crops and regions. You know, there was no doubt in the public comments of its essentiality for many operations and certainly it comes with its own set of potentially adverse effects on human health.

You know, amidst all the very widespread positive comments, there was, you know, a couple notes again, the personal protective equipment and then, you know, noting that the available literature suggests that large volume releases of lime sulfur will adversely affect the viability and reproduction of non-target microorganisms, including beneficial soil bacteria and fungi.

It's highly probable that some non-

target plants, insects and mites will be impacted by lime sulfur treatments. So it is a broad spectrum material in the sense that it has wide applicability, but it also is widely used in organic agriculture.

And I think we certainly had comments from foam fruit growers in terms of fire blight with the removal of streptomycin, tetramycin from the list that along with proper lime sulfur was an integral part of the fire blight control as well.

We could go on and on about its uses. But I think that's a pretty top level summary. Does the Board have any discussion, comments on it? All right. We'll move on.

MR. PATTILLO: Next up is sucrose octanoate esters, which is listed at Section 205.601(e) as insecticides, including acaricide or mite control at paragraph (10) sucrose octanoate esters in accordance with approved labeling.

MR. ELA: Sue.

MS. BAIRD: Yes. Sucrose octanoate esters, SOEs, are listed as an insecticide. They belong to the organic chemical family of sucrose fatty esters. They are manufactured from sucrose, table salt, sugar and octanoate acid ester, which is commonly found in plants and animals.

They are a surfactant and their mode of action is to dissolve the waxy protective coating of the targeted, pest, which causes the pest to dry out and die.

And this mode of action is different than most of the other commonly used pest control materials, which are allowed for organic systems. Its mode of action makes it most useful against soft bodied insects, such as mites, thrips, white flies, et cetera.

It's an effective adult miticide, which can be used in all plant growth stages. It's not found to be harmful to fish. It's not considered to be a hazard to bees, and it's not phytotoxic.

There were very few comments on the use of SOEs. But there were a few that said, no, we don't really know. We don't use SOEs.

There were four positive public comments that stated it was an effective tool used in rotation because it does use a different mode of action than other pesticides. There were no negative comments.

MR. ELA: Comments, discussion from the Board? All right. We'll move on. Devon?

MR. PATTILLO: Moving on to Section 205.601(I) as plant disease control, paragraph (4), hydrated lime.

MR. ELA: Dave.

MR. MORTENSEN: Yes. So hydrated lime is used as a foliar application in combination with copper sulfate to form a Bordeaux mix or Bordeaux mixture. Its principal use is for managing and preventing mildews and other pathogenic fungi on a range of fruits.

Predominantly, it's a synthetic substance that's produced by mining limestone and

heating it and going through a series of processes in those steps.

It's widely used. And we had really -- we had 27 comments on this. And I would say most all of the comments were supportive of re-listing and raised a few questions about concerns about its use.

One of the environmental issues that we discussed in the subcommittee were actually more to do with the synthesis of the actual mining process and the kind of dust problem with inhalation that Asa was talking about. But this would be actually during the mining operation itself so.

But in any case, I think the general take on this one is that, you know, it's very widely used. It's very important. And, you know, there aren't red flags that we're seeing that we would be concerned about.

MR. ELA: Comments, discussion? All right. Devon?

MR. PATTILLO: Next up is Section

205.601(j) is plant or soil amendments, paragraph (7), liquid fish products can be pH adjusted with sulfuric, citric or phosphoric acid. The amount of acid used shall not exceed the minimum needed to lower the pH to 3.5. Thanks.

MR. ELA: And this is one I know we had a lot of public comment on. Asa?

MR. BRADMAN: Yes. I thought this one was going to be easy. So, okay, sorry.

So liquid products, I commonly know them as fish emulsion, as we know are widely used as fertilizers. And they're quite heavily used in production of organic crops as I've come to realize.

They're basically made by chopping up fish products often byproducts and then they can be enzymatically digested and stabilized with an acid, usually phosphoric or sometimes sulfuric or other acids, although I think that most often it's phosphoric acid. And for that reason, they're considered as synthetic because there's some processing and with the use of these acids.

There are some production techniques that bypass the synthetic acid and use fermentation processes to produce lactic acid and to stabilize it and with kind of an end goal of not having the pH level, the final pH level below 3.5. Or, in some cases, although there seems to be some variability in that, not having the material ever go below pH 3.5 during the manufacturing process.

As kind of a top level summary, there's a lot of very wide use and support for liquid fish products and continuing use of them.

You know, I'd say support was almost universal. There were some concerns raised by Beyond Pesticides and, I think, one other about the use of synthetic acid, particularly in the manufacture and stabilizing in that there's kind of a dependence on this material in lieu of other sources of fertility. Overall, on the farmers' side, there was really a lot of support for these materials.

One of the discussions that came up in

our subcommittee was questions about sustainability and whether similar to what's gone on with other marine materials, there was use of wild harvested material and what are the potential impacts on marine resources? And are we essentially nutrients out of the ocean or other places with potentially adverse impacts on the environment? And there's been surprisingly little work done on this for liquid fish products.

OMRI provided a summary which was really very helpful. Thank you. They have 110 OMRI listed fish fertilizer products, not all of which are liquid. And I might mention here that when we're talking about fish meals, which are not considered synthetic, those don't, of course, go through the same review process with the national list.

But of their 110 materials, 70 were derived exclusively from wild sources. About two were exclusively from farm services. Thirty-eight were derived from a combination of wild

farmed and unknown sources.

Of the 70, there were 39, close to 40, that were derived exclusively from waste from processing wild market fish. So if you're, you know, fishing for salmon or tuna and there's waste material from that, then they were using that as the source material. But then they note here that 30 -- and this is a quote, what they provided, 30 are derived exclusively from whole fish, solely harvested for fertilizer. Species include, and there's a number of species listed, sardines, menhaden, some others I'm not familiar with.

It also mentions tuna, salmon, finfish, skate and other unknown species. It's hard for me to imagine that people are catching salmon to make fertilizer without using it as a human food source.

But this information, I think, provides some preliminary info in that there are manufacturers who are using wild harvested fish solely as a source for fertilizer and that this

potentially raises issues similar to the challenges we're facing right now with marine algae and those other marine fertilizer sources.

There were some of the questions we asked -- I feel like I'm talking too long. Sorry.

I'm not going to go into the pH issues. But we wanted to ask about whether we would consider some sort of annotation or limitation related to the use of -- limiting the use of wild fish, harvesting wild fish solely for fertilizer purposes.

And there was some general support for that. Crop Valley supported that. Let's see, Center for Food Safety also, you know, raised some concerns about depleting or degrading marine environments. There was one note that really after this review process, if we're considering an annotation, we really need to dig deep into this issue.

Another recommendation also is that if we do consider limiting use of wild fish that

there would be an exception for invasive species or other species that are causing problems where there may be attempts to eliminate these populations to actually encourage the native populations. And that if we're going to exclude potentially wild fish, we should be careful how we frame it. So I think that's the key issues.

MR. ELA: Okay. Discussions from the committee? Emily.

MS. OAKLEY: Before joining the NOSB, I definitely was one of those farmers that didn't really follow this process in-depth and just sort of trust that the materials that are on the list reflect some of the values that I have.

And so I was extremely surprised to learn that there were fish harvested exclusively for the use of fertilizer because as a farmer, I often used fish emulsion. And I'm really proud of that thinking I'm using this, you know, resource that's sort of a recycled byproduct. And I know there are other farmers who share that same assumption.

So I think it's definitely worth exploring and asking that we can get the potential for an annotation put on our work agenda to explore the option of an annotation that would restrict use to byproduct or invasive species catching, but eliminate wild bull fish harvested exclusively for the use of fertilizer.

MR. ELA: Sue.

MS. BAIRD: Yes, we have in the Missouri River an invasive Asian carp that has come in. It came in by way of the Missouri -- I'm reading it -- Missouri flooding prior to 2009.

It has taken over the whole ecosystem. And the Missouri Department of Conservation has partnered with different people to remove, and it says 47,000 Asian carp.

I know that Missouri Department of Agriculture and Rural Economic Development has actually funded someone to put in a plant to render these and make fish emulsion. So that would be considered wild, but absolutely invasive

and something we do need to consider. And I'm glad to hear that.

MR. ELA: Harriet and Dave.

MS. BEHAR: There was discussion about confusion, about at what point the 3.5 pH needed to be maintained. I'm just wondering if we were going to be trying to address that or would the program address that just to help the manufacturers with that issue.

MR. ELA: Yes. That's a good question. I talked with Devon and I haven't had a chance to talk to Paul. But I think we need to find out from the program that was from certifiers asking questions from the program. And so we need to find out what the program needs to proceed with that. And we'll have conversations on that.

But I think I would want to the say to the public that the information submitted was really helpful in understanding a lot of this issue. So we'll come up with how to proceed, you know, after this.

MS. BEHAR: And for the manufacturers, just so they understand that they're doing the right thing and that they are maintaining the correct documentation for the materials review organization so the product can continue to be used in organic production.

MR. ELA: Yes. Dave.

MR. MORTENSEN: Just very quickly, it seems to me another thing that we need to look at kind of carefully is by catch. Because I've been out where they'll bring in their dip net catches, and they sort by what they can commercially sell and they catch a lot of stuff that they don't sell.

And so the same would be true for the carp. If you do some sort of netting for carp, you catch other things in the Great Lakes and the river systems that you don't want to catch.

So I think this point that, I think, Dan made about unintended consequences we should look at very closely so that we're not encouraging folks to actually have a lot of

bycatch or something like that or be sloppy with it.

MR. ELA: Yes. And I just want to be clear, Sunset review separate from potential annotation issues. And the annotation issue actually isn't on our work agenda, but we're considering whether that should be or not. But really, so I think it's a valid discussion. But this is also a Sunset review discussion as well.

Any other comments from the Board? A-dae.

MS. ROMERO-BRIONES: Yes. So this is a hot topic for indigenous communities. We have current Supreme Court cases about the management of fish in the Pacific Northwest. There is a slew of Atlantic salmon, genetically modified salmon, that have been released into the Pacific Ocean. So I think this is a very important topic, and I hope I can get tribal input on this specifically.

MR. ELA: That would be great. Thank you.

MR. BRADMAN: And thank you for bringing that up. And there was also one comment about concern about GE fish being used for production.

I know in Florida there's a new plant going in to produce genetically engineered salmon. And it's going to be a growing source potentially of waste byproducts that somebody may want to put into a fertilizer.

MR. ELA: Anything else? All right. Devon.

MR. PATTILLO: Thanks, Steve. Next up is Section 205.601(j) as plant or soil amendments, paragraph (10), sulfurous acid for on-farm generation of substance utilizing 99 percent purity elemental sulfur per paragraph (j)(2) of this section.

MR. ELA: And this is my material as well. Yes, basically very briefly used on farm sulfur burners, directly injected into the water to adjust pH. There were public comments basically pretty much completely in favor of it

with a couple question marks.

There were several comments that the materials only associated with over-irrigated or degraded soils so that for that reason it should not be allowed.

And other comments saying that, kind of refuting that, but just saying that, you know, these were alkaline soils that, you know, actually the sulfurous acid does make nutrient availability.

And one of the comments was in the Western United States, many waters and soils have naturally elevated pH. And the common practice of applying elemental sulfur isn't always effective as it's limited to soil applications.

So many fresh vegetable crops are pH sensitive. And one of the few effective ways to keep the pH optimal is to control the bicarbonate levels in the irrigation water.

So comments on both sides there, but the majority of comments saying that it was needed.

There was one comment that the potential adverse effects have not been evaluated by the NOSB and the technical review raises the question of environmental impacts of sulfurous acid, particularly on soil microorganisms.

I know we had one comment, I believe it was -- I'm not sure if it was CCOF that it's limited to on-farm use and whether it could be moved between farms. But I think we would need more information on that before that would become a consideration.

I know, and again in my area, there are a number of growers that use it on marginally -- I mean, we have alkaline soils around 7.88 and it's a night and day difference of how the crops respond with a very small addition of sulfur.

But any comments from the Board on this? All right. Moving on.

MR. PATTILLO: Section 205.601(k), as plant growth regulators, ethylene gas for regulation of pineapple flowering. Thanks.

MR. ELA: Emily.

MS. OAKLEY: Thank you. This product is used to induce uniform flowering in pineapples and is applied 7 to 15 months after planting. Application can be repeated two to three times after the initial application.

It's made from hydrocarbon feed stocks, such as natural gas, liquids or crude oil. This was a really controversial issue in 2015 in the fall meeting. And we received a number of comments from stakeholders that wrote in at that time to express the essentiality of this product for commercial viability of the organic pineapple industry, particularly in Costa Rica.

There was some concern raised by some stakeholders that this material doesn't actually fall under an OFPA criteria because it's being used for economic purposes. It's not a production material that the plant will flower. It just won't flower uniformly without this material.

However, it's been on the list for so

long that an entire industry has grown up around the use of this material, which makes it a very challenging and fraught discussion.

I think if it were to be looked at today under that expectation of use solely for economic purposes, I think it might get a different degree of scrutiny at least from me, but I also think it's very difficult to pull out the rug from an industry.

So those are my takes on the public comments. But we did receive a wide amount of comment both from large, medium and somewhat smaller scale producers. And those came from large corporations all the way down to cooperative producers.

Do people have comments or questions about this material?

MR. ELA: Harriet.

MS. BEHAR: I sat through the last Sunset in the gallery. And it is somewhat controversial because it is kind of a flowering aid. And I felt that many of the comments this

time from the smaller producers that it was not just for the production of large scale monocultures. That it really did aid in the producers having enough pineapple at one time to justify shipping the product or getting a truck there to pick it up.

And so I see its necessity from a crop production angle to allow for the commercial production of this crop of any size.

MS. OAKLEY: Yes, thank you, Harriet. That is the question that we asked in our review because it was asked in the previous review and addressed by the TR. Does the use of this treatment disproportionately affect any particular size scale of operation or disadvantage smaller scale producers?

And, you know, much of the public comment is not coming from the smaller scale producer who doesn't use it. So it's a little bit difficult to get that feedback. But I think it's probably likely true that most of those growers not using this product are selling for a

local market and are not trying to induce flowering and are able to harvest as the plants become ripe.

But, yes, I don't think that we have any evidence also that alternatives are being used. We were given quite a bit of information that ice or other methods, smoke, are not adequate and are not commercially used and do not produce the same uniform results.

MR. ELA: Other comments? Anybody else? All right. Devon.

MR. PATTILLO: Next up is Section 205.601(o) as production aids, microcrystalline cheesewax for use in log grown mushroom production. It must be made without either ethylene-propylene co-polymer or synthetic colors.

MR. ELA: Sue?

MS. BAIRD: Microcrystalline wax is a type of wax that is derived from the refining of heavy petroleum distillates during the petroleum refining process.

It's recovered from crude oil through a series of filtrations solidifying insolvent extraction steps.

The byproduct is then de-oiled at a wax refinery, which results in the components of cheesewax.

All the solvents in the process is recovered, with none remaining in the final product. The microcrystalline wax is used by shiitake mushroom producers. It's placed over the mushroom inoculated spawn hole to seal the plug hole in the log. The original petition stated there is no contact with the growing mushroom at any time.

This time we had 10 public comments received. And most of those commenters stated that their constituents were not using microcrystalline cheesewax.

They stated that most of the commercial whatever scale, but commercial shiitake mushroom production is no longer done using whole logs. Instead, the mushrooms are

produced in sawdust and wood shavings, intimating that there was no need for the microcrystalline wax.

Others commented that there's a natural soy based wax available now and again stated the substance is no longer needed.

Nevertheless, we did see some comments that stated that smaller family shiitake mushroom growers are still growing the mushroom on whole logs, and they are still using the microcrystalline cheesewax.

In fact, I know, again, two producers in the Ozark Mountains that do grow shiitake on oak log, branches and things, and they still do use the microcrystalline cheesewax.

One commenter did ask that the Sunset process involve some testing to determine whether you identified the contaminants in the wax actually are transferred to the mushrooms or not. But then they continued their comment to say that it was their guess that after two years it was no longer a risk at all, if there was a risk at all

so.

MR. ELA: Comments. Harriet.

MS. BEHAR: So I did not do a scientific study. I only have anecdotal experience with this. And even though the technical review stated that it's biodegradable, I have seen it remain -- I've been to shiitake mushroom commercial operations where the logs are stacked out in the woods, under trees, in the open, wildlife can come around. And then after they're done fruiting, the logs are just left there to decompose.

MS. BAIRD: Sure.

MS. BEHAR: And then there's still all these little plugs of wax everywhere. And although, again, I don't see any scientific studies, but I just wondering about effects on birds and other wildlife. We do have an issue with plastic. And paraffin, you know, is a paraffin petroleum based product negatively affecting wildlife as they ingest it.

So again, it's just anecdotal. I

don't, you know, the TR said it was biodegradable, but that's not what I saw. And this was microcrystalline cheesewax, I would guess, at least five years out in the elements because it takes a couple years for it to fruit. And these were just about the way decomposed logs look and yet the little piles of cheesewax.

So I really would like to hear more from the public on how necessary this is. I think it is somewhat of an environmental -- I don't know if you would say the word contaminant, but a concern because it is being used out in our forests where wildlife could choose to wonder maybe it's a little egg or who knows what they want to eat.

But we do have sound tech evidence that plastic has been hurting wildlife where they can ingest it. So I hope the public -- I mean, I would like to see it come off the list, especially if it's not needed. But I don't want to take it away from people who are using it and if it's kind of minimal. But I do have that

concern although it's not really supported by anybody's science.

MS. BAIRD: Thank you. And we did ask that question, and we got no answers to it, no responses to that question. I did find it interesting that commenters did say that this new natural soy based wax is now available. And I think that needs to be a valid consideration as we do consider this to be listed back on again.

MR. ELA: Emily.

MS. OAKLEY: Yes. I think this harkens back to what Dave was talking about in terms of communities that may not always follow our proceedings. And being in the same region as Sue, I know growers that are growing shiitakes on whole logs.

I don't know the extent of their use of this product, but it is very hard to reach out to smaller scale growers. They are not tuned in to many of the organizations, even represented here, and may not be members of them. They may not even know what's fully going on.

I mean, that's something that we have to consider when we talk about substances that they use. They're not represented by large organizations. So just putting that out there.

MS. BAIRD: That's absolutely right.

MR. ELA: Other comments. All right. Devon.

MR. PATTILLO: Moving to Section 205.602, non-synthetic substances prohibited for use in organic crop production. Paragraph (e), potassium chloride must be derived from a mined source and applied in a manner that minimizes chloride accumulation in the soil.

MR. ELA: And this was material I think Francis had and now Harriet has.

MS. BEHAR: I think Joelle had it. Well, potassium is required for human health in plants as well as a microorganisms.

While potassium is found in many soils, it may not be naturally high enough in enough concentration or may not be present, but may be present but may be in a bound format

rendering it unavailable.

The public comments. One certifier noted that another source of potassium, potassium sulfate, at times may be difficult to find in a form without a prohibited dust suppressant and asked us to please put this item on our work agenda to look at potassium sulfate, which is the more benign form of potassium. But because there is these dust suppressants that are synthetic that are not on the national list, then the farmers have to use the potassium chloride instead.

There was also concern that maybe not all material review organizations and certifiers are going into the same detail on a review for potassium sulfate. And I see the certifier is not here right now who put this in.

I have gotten phone calls from farmers and suppliers of potassium sulfate about this issue. But the reason why I'm talking about it is because it then pushes people to the potassium chloride, which is technically on the prohibited

list unless they meet this extra annotation.

So just another thing, Steve, to put on the possible discussion on the work agenda for the crop subcommittee.

Okay. CCOF did mention that 49 producers were using or have potassium chloride on their organic system plan. And that compliance to the annotation is verified at the inspection but no specifics were given on how this verification is done, although we did ask in oral public comment and they said that they were doing testing.

There was strong support by the public to release this material with the current annotation as written. That's it.

MR. ELA: Comments from the Board? All right. That finishes the Sunset materials, and we will move into petitions, excuse me. And the first one is polyoxin D zinc salt. Devon, do you want to read it in and then we'll allow discussion and such?

MR. PATTILLO: Polyoxin D zinc salt

has been petitioned for use as a synthetic fungicide for organic crop production.

The petition was submitted by Kaken Pharmaceutical Company Limited in May 2016 with addendums provided in 2017 and 2018.

This substance was previously petitioned in 2012. In support of the NOSB's review of the latest petition, an unlimited scope technical report was obtained in 2017 to supplement a 2012 technical report on the substance.

MR. ELA: All right. Discussion on the petition. And as you can see, the vote to list it, we did vote to classify it as a synthetic and the vote to list it was 3 to 1, so it was not a unanimous vote. Comments, discussion?

MR. PATTILLO: Who was the lead --

MR. ELA: Oh, I'm sorry, Jesse. Yes, you should -- excuse me.

MR. BUIE: Just let me say a few comments about it.

MR. ELA: Yes. No, please. I'm sorry.

MR. BUIE: Polyoxin D zinc is such exciting, I know how it is. Polyoxin D zinc salt is categorized as a biofungicide or biochemical pesticide. While the polyoxin D might be considered as a non-synthetic, the addition of the zinc salt makes it synthetic.

The zinc salt makes the product more useful by lessening its water solubility and prevents the product from washing off the application area. In other words, it enables it to stay in place and increases the effectiveness of this particular product.

The petitioner has made it clear that there are few to no alternatives for some fungal diseases on various species of plants such as cotton ball disease on cranberries, black rot, downy mildew, powdery mildew, bunch rot on grapes, mummy berries on blueberries and on and on.

While this material is of low toxicity

than some of the other products used in similar treatments, the crops committee expressed various concerns regarding the essentiality of this particular compound.

During the April 2013 NOSB meeting, the Board was unable to list polyoxin D. And at that time it was based on non-essential and there were concerns over the broad spectrum mode of action as well as environmental concerns for soil bacteria, fungi and overall environmental health.

But the TR review of polyoxin D that on December 17 states that there is very low acute toxicity to humans by oral, dermal or inhalation routes, and it did not demonstrate mutagenic potential.

And this TR goes on further to state on lines 218 and 230 that in general low toxicity was observed for polyoxin D zinc salt in all investigations.

There was much public comment on this particular substance. Ninety-three percent in favor. The dissenting comments were based on

essentiality, adherence with the criteria and cellular, the effect on cellular organisms.

So what I want to do now is just kind of basically summarize the public comments that were received.

Public comments received from polyoxin D zinc salt show the substance being utilized by conventional farmers across the entire U.S.

It is presently being utilized in the Eastern U.S. where the climate is humid as an alternative to copper and sulfur.

For example, the Eastern organic grape growers need help to control black rot. Polyoxin D would be an alternative to copper fungicide where copper accumulation in the soil is of concern.

If we go to the Western U.S., polyoxin D zinc salt, according to Washington State University, has good efficacy against the causal agent of gray mold in several crops.

And gray mold constitutes the number one threat to pear and it's the second threat to

apple fruit. In Wisconsin, the community states that cranberries are produced on approximately 21,000 acres and that the cultural control methods are not very effective there.

The approval of polyoxin D zinc salt according to this commentator may encourage farmers to consider organic production because the price of cranberries are very low now and normally the price of organic cranberries are higher. And they feel that this may be a means by which to encourage more growers to convert to organic.

The public comments I feel pretty well demonstrated the essentiality of polyoxin D and also it showed how the efficacy also of polyoxin D. Are there any questions?

MR. ELA: Jesse, I want to apologize for not letting you go first. My humble apologies for my mistake. Harriet.

MS. BEHAR: I'm on the crop subcommittee and at first we really wondered about the necessity of this product and looked

back at the previous National Organic Standards Board decision that it was not essential.

However, in the public comment the wide ranging need for this product to me became quite clear and the use across so many regions and so many types of crops.

And I was especially struck by the cranberries. I am from Wisconsin, and we are the largest producer of cranberries in the United States. And I have visited numerous organic cranberry operations, and I know they struggle with not having sufficient control as well as not being able to meet market demand.

And so cranberries are coming in from Canada to meet the organic demand while the conventional cranberry growers don't have the tools they need to convert to organic.

So I feel like we have been answered in our question about its essentiality. And I think that we've been shown that it is.

MR. ELA: Tom.

MR. CHAPMAN: I agree with what was

said by Jesse and Harriet that producers clearly made the case of the essentiality of this substance.

I also would just want to point out to everyone that this shows cases where, you know, when we review a substance and the burden of proof is not met against the OFPA criteria, the substance can come back before the Board with sufficient criteria.

The first time we rejected it. It was not clear that it was essential. You know, the petitioner went back and got the appropriate evidence that it is essential and came back. And that's really the appropriate way to approve substances here.

So I know there's often the critique that it's hard to get substances on the national list and some of that burden is in providing sufficient evidence to meet the criteria. And this is a good example of that happening in the right way.

MR. ELA: Thanks, Tom. Emily.

MS. OAKLEY: Thanks, Tom. Another one of the criteria that I believe is mentioned in the original review is its effect on soil. And I do want to note that we had a very long time to wait for this technical review. And it was a supplemental technical review.

It was over 14 months. And by the time it was returned, there was also a certain amount of urgency to get it on our docket and to review the material so that it could go forward at a meeting.

I do feel that there is a limitation to the supplemental, technical review that is pretty significant. And that is that it relies on the petitioner's own studies of the effects on soil and on insects.

And I know that that might be a difficult thing to overcome, but I think it's also inherent of importance that technical reviews look beyond the petitioner's submitted information to help us make those determinations.

So I also have experience personally.

Tens of thousands of dollars of loss from botrytis in strawberries. And it is a very difficult, you know, issue to deal with.

And I understand the need that growers are expressing and the desire for this material. But at the same time, I don't feel fully satisfied in my understanding of third-party or fully unbiased review of the effects on soil. So I just wanted to express that.

MR. ELA: Dan.

DR. SEITZ: So I do think this is a tougher decision than maybe some of my fellow Board members feel.

I definitely understand that there's a problem with growing quite a multiplicity of crops in different environments and so forth.

And I have to, you know, first make a confession. It probably would have taken a good 20 hours or so to really do the research on this substance to do it justice. The petition itself was 747 pages long. And I would say that's a truly jumbo petition.

But, you know, in trying to go through it, it also seemed to me that Emily's observation is correct that a lot of the science, if not all of it that was cited, really was based on industry funded studies.

And that always does raise a question of conflict of interest. And even editors of the New England Journal of Medicine and the British Journal of Medicine have raised issues with medical studies where things are industry funded.

That's not to say that such studies would not be acceptable, would not have good results. But it's really helpful to know that there are potentially some studies out there that were funded by other sources.

And, again, I didn't have the time to go through carefully, check every citation to make sure that that's the case.

A couple of other things. A lot of the comments, I think it's important not to base our decision on just if there are tons of comments in one direction and relatively few

comments in another direction. I think we all have seen situations where you can get people to lobby on your behalf. So it's very just important for us to make sure that we make the decision on the right basis.

A lot of the letters that came in from academic departments were, at least from my read of them, simply assertions that this will be beneficial. It will help these different growers in different regions be more successful, lead to conversion of land to organic. I'm all for more land to be converted.

So I'm not saying those again are poor points to make, but they were of an assertion type of comment. A lot of comments came from grower associations that included both conventional and organic growers.

And so you don't know how strong the commitment is, necessarily, to the organic side or the understanding there. It may be that people are looking on the conventional side and saying, God, that solves a problem. Why don't we

use it over here without necessarily understanding that it's a whole different system approach to making the organic process work.

And then as Emily said, and this also was evident to me, there is a question of whether there is harmful effects on beneficial fungi in terms of its use.

So I'm very interested in hearing other people's points. Yes. I'm interested in continuing to hear people's points of view on this. But I do feel that there are some questions that make this a more subtle decision.

And then just a general question. I may have looked at the older TR. You were saying that TR just came out and somehow that -- okay, I actually, somehow that slipped by me and I only saw the older one.

And in that older TR, it was indicated that this wasn't approved in other countries in Europe or whatever. And I don't know if that situation has changed, but it would be interesting, at least for me to know, if this is

something that other organic standards have adopted as being useful and consistent with their organic standards.

MR. BUIE: And I think at this point it hasn't been approved. But like in Japan, conventionally, it's been used for over 40 years, but organically.

MR. CHAPMAN: Did we receive comments from the public about other studies available that were not included in the TR?

MS. OAKLEY: Oh, Jesse, sorry.

MR. BUIE: There are other university studies that were included. I just didn't --

MR. CHAPMAN: I mean, so the TR had -- there was a series of studies. There's now a critique around the funding of the studies that were completed. I'm curious to know, did we receive comments from the public around other studies that weren't included in the technical review?

So, I mean, I think that -- I see heads shaking no. So, I mean, we have to base

our decisions on the totality of the evidence present.

And, yes, I agree. I prefer studies that aren't funded by industry as well. However, in the lack of other information and the mounting evidence in the previous reviews by this own Board, I think it's quite clear that this is a substance that meets the criteria as listed in OFPA.

MR. ELA: Dave.

MR. MORTENSEN: Yes. I think on any of these petitions and proposals, Dan, we all are conflicted to one extent or another. So I don't think any one Board member is more or less conflicted. None of them are clean. And it's kind of wading through the gray area to determine what influences each of our perspectives.

The question, and I'm not going to make light of it, but the question or the comment that this compact could influence fungal communities, so too does tillage profoundly influence fungal communities. So the very nature

of farming influences fungal communities profoundly.

I mean tillage undoes fungal communities in severe ways. So, and again, I'm not making light of any of these comments. But taken together, the problem with the disease was laid out I thought in a compelling way for lots of different crop species, particularly in the West.

And I think coming on the heels from me personally on the very painful hydroponic debate and vote, you know, folks growing in soil have challenges like this that folks growing hydroponically under plastic don't have or have much less pressure to deal with.

And so I think those are the sorts of things that were influencing my thinking as was the fact that it's a natural product from a microbially produced compound that's altered at the end of the synthesis process.

MR. ELA: Thanks, Dave. Emily.

MS. OAKLEY: Yes, I agree. I mean, I

think that there are a lot of nuances. And I think I have expressed in our discussions my conflicts for myself with the substance. What makes it synthetic is the zinc salt and yet it is a synthetic because of that.

I think that certainly the argument that it could reduce the use of more toxic products is a very compelling one.

I still feel that we can't ignore the fact that we got comments from universities, as Dan was stating, but they weren't supplemented by, and here's a link to my study and the published results as a result of it that indicate that I have, you know, grounds for the basis of my assessment.

The petitioner himself or itself acknowledges that it can kill beneficial soil fungi. And you're right tillage absolutely does as well. But I don't think we want to increase the ways in which we're affecting soil fungi.

But I think that this is a very nuanced and very complicated topic. I don't

think there's a clear right way or wrong way. And I don't think that if we wrote differing opinions that isn't of itself a bad thing either. I think it just reflects our differing views and interpretations of this product.

MR. ELA: Harriet.

MS. BEHAR: We all know that the climate is changing, and we have a lot of extreme weather events. At least I know where I live, you know, where we used to get an inch rain, it will be a four inch rain.

And so I think the fungal issues are magnified in that type of situation and environment. So I almost hear, like a cry of help me from the organic producers out there to deal with the issues that they have that really, I think, are becoming more extreme due to the extreme weather that we have.

MR. ELA: Ashley.

MS. SWAFFAR: Yes, I just want to say that I am going to vote in favor of this based on essentiality from a lot of farmers that we heard

that was simply overwhelming comments that they sent in.

It was across multiple, you know, berries and cranberries, different things, or blueberries. You know, it's not just a one crop issue. It's across many, and I feel like they're asking for a tool. And, you know, that we can give them this tool for their tool box then.

MR. ELA: And I'll throw in a comment to kind of help my comments off this chair. But I tend to agree, I mean, I was probably pretty negative on this actually is initially thinking it's just another synthetic.

And in reading the public comments to where I think, you know, I mean you brought up the hydroponic discussion of expanding organics. But I think what I read was in these wet climates where there are fungal diseases, where there are no other tools at this point, there are no other alternatives.

Sulfur doesn't work. Lime sulfur doesn't work. That this could give some of these

growers a tool to expand organic production into wetter climates. And I think, you know, it's one of those that it isn't a synthetic, but it's a fermentation product. So I like that.

You know, Emily and I have talked about, you know, here's the fence and we may come down just barely on either side of the fence post. But I do see it. I thought the public comments really swayed my opinion as to the essentiality in that it could be a very useful tool for a subset of growers that do not have those tools right now.

Sue, you had a --

MS. BAIRD: I'm just reiterating the same thing. The amount of public comment that was asking for it swayed me to vote yes. And, you know, we have a lot of great wine production in Missouri. You guys might be surprised about that, but we do.

And the comment has been for years we can't grow grapes for wines in Missouri because of fungal diseases. Maybe I'll get to have an

organic wine in Missouri.

MR. ELA: Emily.

MS. OAKLEY: I do think that Ashley's point that this covers a broad range of potential crops is an important one. But it raises the level of scrutiny even higher because it means that it's potential application and adoption could be very high as well and cover, as Jesse stated, a wide geographic range and crop range. Not to try to, you know, sway you one way or the other, but just to note that I do think it brings our level of analysis to another playing field.

And, I mean, of everybody at the table, I probably grow the most array of crops that this product is applicable for. So I just want to put that out there, too.

MR. ELA: Tom and then Scott.

MR. CHAPMAN: Yes. And I agree with that, but that's also its strength. And the strength of that allows for more sourcing and production of crops in the U.S. We heard from American growers.

So if we want to get our blueberries from Washington State instead of from Chile or other origins, this is the tool that can help increase that. And that is another tool that helps reduce the fraud issues we're dealing with.

MR. ELA: Scott.

MR. RICE: Yes. I wanted to just remind also that when we look at growing practices, we look first before an operation is using any sort of material, we're looking at preventive and cultural practices.

And it's not just a blanket, here's your toolbox and your shelf, grab whatever. You know, we're looking for what's been implemented and true effort at controlling disease before we just reach for a material.

And that said, you know, I think somebody mentioned earlier that it's dry in Washington. Well, in parts of Washington, but in many other areas, it's quite wet. And we have a lot of issues with fungal diseases and down through Oregon and California as we've heard. So

I think this is an important tool for those folks.

MR. ELA: Anything else before we -- Paul.

MR. LEWIS: Yes. Just one remark. It's interesting the discussion that occurs in terms of the availability of data and the data that was provided generated by the submitter and balancing that with the comments.

And what's interesting in terms of the comments that came in from the university community, from faculty that may have experiences with the product that, I think, some of the limitations they may have experienced, but maybe haven't conducted field trials.

So, I mean, I'll just kind of -- it's interesting kind of how do you balance information that's available, that's privately funded, as opposed to research and extension plan pathologists and others. You know, the experience of material, but how do you kind of weigh that? So that's something to think about,

positive and negative.

MR. ELA: Yes. I think that's always a challenge. There's limited resources as the NOP knows that conduct research. So that is an issue. Dave.

MR. MORTENSEN: Very quickly, I totally endorse Emily's comment earlier that, you know, we really need to have more of these kinds of trials conducted. We don't have them being conducted.

And frankly, the Langara University has quite a cottage industry of these trials being conducted with synthetic pesticides all the time.

I think the problem is we don't have enough outreach applied researchers with an interest in organic production and that's why we don't have the trials, honestly.

MR. ELA: And I tend to echo, you know, Emily's comment on that and as a specialty crops grower, too, where we deal with -- I mean, and we have a dry climate so we're darn lucky.

But I see back east, you know, the continued comments from growers that it's really hard to be an organic grower.

And I generally don't like adding materials to the list, but this is one that swayed me. Anything else before we take the vote? Tom.

MR. CHAPMAN: Okay. So we have two motions before us. The first is a classification motion. So this is a motion to classify polyoxin D zinc salt as a synthetic substance. The motion was made by Jesse and seconded by Emily.

This is not the motion to list. This is purely the motion to classify it as synthetic. A yes vote is to classify it. A no vote does not classify the substance. And the voting will start with -- I'm sorry. I'm on the wrong material. I hear you, but I need to get to the Excel sheet. We'll start with Steve.

MR. ELA: Yes.

MR. BRADMAN: Yes.

MS. DE LIMA: Yes.

MS. ROMERO-BRIONES: Yes.

MS. OAKLEY: Yes.

MS. BAIRD: Yes.

MR. BUIE: Yes.

MS. SWAFFAR: Yes.

MR. RICE: Yes.

MS. BEHAR: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

MR. CHAPMAN: Chair votes yes. Thirteen yes, the motion passes.

The next motion is the listing motion. So this is the motion to recommend that this item be placed on the national list. It reads motion to add polyoxin D zinc salt as petitioned to 205.601(i). Is that right? I don't have my glasses on. Did I get that right? Yes, (i), all right. There we go.

The motion was made by Jesse, seconded by Sue. So this is a motion to list. A yes vote is to recommend the listing of this substance. And the voting starts with Asa.

MR. BRADMAN: Yes.

MS. DE LIMA: Yes.

MS. ROMERO-BRIONES: Yes.

MS. OAKLEY: No.

MS. BAIRD: Yes.

MR. BUIE: Yes.

MS. SWAFFAR: Yes.

MR. RICE: Yes.

MS. BEHAR: Yes.

DR. SEITZ: Abstain.

MR. MORTENSEN: Yes.

MR. ELA: Yes. How does the chair vote, Tom?

MR. CHAPMAN: Chair votes yes. I wrote it down. Eleven yes, one no, one abstain, the motion passes.

MR. ELA: All right. Moving on to our other petition, Devon, for sulfur.

MR. PATTILLO: Synthetic sulfur has been petitioned for use as slug and snail bait or molluscicide for organic crop production. The petition was submitted by OR-CAL Incorporated in

May 2017. A 2018 technical report on elemental sulfur is available on the NOP website. Thanks.

MR. ELA: This time I will try and get this right. Asa.

MR. BRADMAN: So this petition is to add sulfur as a molluscicide -- I just lost my notes here. Sorry. To add sulfur as a molluscicide -- sorry. To add sulfur as a molluscicide under 205.601. Currently, we've had a lot of discussion about sulfur so far, and it's approved for plant disease and as an acaricide and miticide.

The formulation here would be to produce a pelleted form that would be used in plants, row crops, other settings, potentially in garden settings, to attract and kill snails and slugs.

This petition -- there's a few, I think, discussion items here, and I'll review them for you and perhaps we can then dig deeper in how we want to move ahead.

But in terms of support, we've had

support from the OWPC and the Organic Trade Association and then on the other side NOC and Beyond Pesticides have objected to this.

And I think they raised some important points and concerns about this. We also have this issue of efficacy studies. The efficacy studies that were reported with the petition were supported by the petitioner. We don't have independent efficacy studies.

This does not have the level of attention that even polyoxin D is. So I'm sure there's no one else out there in the world doing efficacy studies.

Another point to make, and there was a phrase I included in this proposal, that noted that in the petition they did not specify a specific mechanism of toxicity. And there may be some mechanisms that are similar to what may happen in livestock in terms of digestion and the production of sulfuric acids or other sulfur related gasses that may be toxic.

And, you know, I think there's an

interesting issue there in terms of do we need to have that for this proposal to be accepted?

Sulfur, when I was looking at this proposal, sulfur is already on the list. It's widely used. We've just reviewed a lot of issues related to it.

And interestingly, the new technical report on sulfur that was just posted in the last week notes that there's actually not a defined mechanism toxicity for sulfur, even for fungus.

So we have a situation where we have this material that has low acute mammalian and other toxicity, but we're actually not exactly sure how it works in a few different settings.

When we're reviewing this petition and the need for molluscicides, one thing that was noted was that there is increasing interest in no till agriculture, particularly in organic. And there's a lot of challenges with that. And that implementing no till practices provides a more stable environment for snails and slugs to build up in population and that new tools to control

that are potentially very beneficial.

We do have ferric phosphate, Sluggo, which is manufactured in Europe as currently an organically approved material. And this would essentially complement it.

And one thing I want to emphasize here is that NOC raised some concerns about approving a new material. We're not approving a new material here. We approving a different use of an existing material on the list.

And the application method might be a little different because it's a pellet. I think the use of it raises similar issues to other sulfur uses in terms of potential exposures to workers and the community. But it doesn't -- I think those uses are separate, though, from the fact that we already have existing uses of this material. I don't think this would add a new hazard based on the use of it.

I guess the last thing to mention is that the only people who really commented on this were organizations and advocacy groups or

nonprofits. There were no actual, other than petitioner, there were no gardeners or farmers or no other commenters on this. Thanks.

MR. ELA: All right. Questions, discussion. Emily.

MS. OAKLEY: Yes. So when we were discussing this in subcommittee, it seemed like a very straightforward material, as Asa said, given the fact that it's already listed.

After reading the public comments, I went back and looked a little bit further at the petition. And they specifically referenced their Appendix D in terms of its effectiveness and compared against some other materials.

And it's basically effective a little bit faster than what's currently listed under ferric phosphate. And so I think, you know, it does a question of essentiality and its necessity as Asa has brought forth.

And then we also weigh that against the fact that it's already a material that's listed for use. And as someone on our

subcommittee said, they could just apply some sulfur for soil purposes and also address slugs in soil.

So, yes, I don't think it's as straightforward as we initially considered it in the subcommittee. But I'm also not certain that it precludes our listing of this material.

MR. BRADMAN: I agree. I mean, one difference, though, between, say, the other uses is that it's formulated with the bait, so there's an attractant in it. So it probably wouldn't be used as just another soil application.

In the label they provide, actually we don't know exactly what those inert bait materials are, which, I think, is worth noting. And if I do it again, I'll make sure that doesn't slip by.

That said, if this were to be approved by OMRI, of course, any of those materials would have to be consistent with the inerts and other live ingredients.

MR. ELA: Yes. And I think this comes

back to we're just approving the use of sulfur. We're not approving the use of the product. So I agree if it's not pure sulfur, then it would have to go through another review process before it was actually allowed.

Dave, did you have?

MR. MORTENSEN: Yes. I was just thinking, Asa, when I think one of the reasons why we would not have heard from as many farmers about this is that I think we're on the very early part of the adoption curve on reduced and no till organic.

Kind of last summer and this summer in Pennsylvania there were on-farmer conducted trials of various no till practices. And the loss of corn plants and their poor yield was something on the order of 40 to 50 percent from slug damage.

So I know that, you know, there is almost certainly a need, but it's probably a smaller handful of folks that are experimenting with this at this point.

MR. ELA: Other comments.

MS. ROMERO-BRIONES: With ties to Hawaii, there is a current infestation of rat lungworm disease that is pretty much devastating a lot of the produce farmers, both on the Big Island and Maui, I think, and this would be pretty helpful to some of those farmers.

Something like 80 percent of the slugs found in Hawaii have the disease. And so they're kind of scrambling to figure out how to prevent and control the incidences of rat ring lungworm.

MR. ELA: Tom.

MR. CHAPMAN: I just also want to point out from my more historical and other perspective that several of the commenters who commented that sulfur as a molluscicide was not -- that we have alternatives, like ferric acid, also commented in the 2016 Sunset review of ferric acid that ferric acid wasn't effective and so we shouldn't re-list it. So just something to keep in mind.

MR. ELA: I think my own take is it's

so widely listed, sulfur, anyhow. I mean, it's soil amendments. It's an acaricide. It's a fungal agent. It's almost -- I kind of have a hard time saying no to it because it's like this really isn't a different -- I mean if it's formulated with a bait, it's different. But it's really not another use of sulfur. And it's going to be put on the soil.

So it's almost like we're -- to me in some ways we're in the weeds on sulfur of approving every potential use of something that is just widely used. So, but, I still appreciate that we're being specific, and we're making sure uses are specific. And I think that's important.

You know, I can see growers going out and using it regardless as a soil amendment. But I would rather not see -- I think Scott mentioned the other day you don't want growers to start being creative. You want to just say use it or don't. So I think that's important. Emily.

MS. OAKLEY: I also just wanted to say that getting such a wide diversity of comments,

having such a diverse and broad stakeholder community is so essential to organic integrity.

And I wholeheartedly appreciate, as I've said before, commenters who try to comment on most, if not every, material that we have regardless of, you know, where they may fall on the spectrum.

So it's essential that we have debate over everything we do. And nothing is just a simple decision. And I appreciate all your points.

MR. ELA: Scott.

MR. RICE: Just in terms of using a material for a use other than it's listed for, that is something in the certification process that we look at in an OSP, or organic system plan, and how material is used in records at inspections. So just to clarify.

MR. ELA: Anybody else? It's in your court, Tom.

MR. CHAPMAN: All right. So this comes to us as a motion to list. You will notice

there is no motion to classify. As has been stated, this is listed elsewhere and has been classified synthetic in the past. Therefore, it is just a motion to list.

The motion is motion to add sulfur as petitioned at 205.601(h) to the National List of Allowed Substances and Prohibited Substances. Motion by Asa and was seconded by Harriet. So a yes vote is to adopt this motion as a recommendation to list. The voting will start with Lisa.

MS. DE LIMA: Yes.

MS. ROMERO-BRIONES: Yes.

MS. OAKLEY: Yes.

MS. BAIRD: Yes.

MR. BUIE: Yes.

MS. SWAFFAR: Yes.

MR. RICE: Yes.

MS. BEHAR: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

MR. ELA: Yes.

MR. BRADMAN: Yes.

MR. CHAPMAN: Chair votes yes. Thirteen yes, the motion passes.

MR. ELA: With that, I'd like to thank the crop subcommittee. We have a pretty extensive list of Sunsets, which makes it always difficult to review petitions and other things when many of our calls are occupied with just the routine matters of what we have to cover. But it's a great committee, and I think we have more fun things to do that's coming up. So, Tom, I'll turn it over to you.

MR. CHAPMAN: Thank you, Steve. And a round of applause for Steve. This was his first chairing of the meeting and really good job, Steve. So I appreciate it.

(Applause.)

MR. CHAPMAN: All right. We'll take a break for lunch and reconvene at 1:30. So you have an hour and eight minutes. At that time, we'll take up the handling subcommittee.

We are about an hour, maybe an hour

and a half, behind schedule. I do think we will conclude around our published time of 3:45. But we will probably be using the entire time today. And with that, we will go into recess.

(Whereupon, the matter went off the record at 12:23 p.m. and resumed at 1:32 p.m.)

MR. CHAPMAN: All right. It looks like we're missing two members, but we do have a quorum. So we will come back into session.

Lisa, are you ready? All right, we're back into session and starting back up with the handling subcommittee. And I will hand it over to Lisa de Lima, the chair.

MS. DE LIMA: All right. So we're going to start off with 2020 Sunset materials, jump right into it starting with calcium carbonate. Devon.

MR. PATTILLO: Thanks, Lisa. We'll start with Section 205.605, which includes the non-agricultural substances allowed as ingredients in or on processed products labeled as organic or made with organic.

The first five substances today appear in Section A, non-synthetics allowed. And the first substance is calcium carbonate. Thanks.

MS. DE LIMA: Scott.

MR. RICE: Thank you. Calcium carbonate is widely used as a dietary supplement, antacid, dough conditioner and acidity regulator in wines. It is also used as a food stabilizer, anticaking agents, gelling agents, glazing and release agent, thickener, bulking agent and as a nutritional fortification additive.

Notably, as pointed out in the comments, it is used in soy cheese, yogurts and beverages as a source of calcium and also as a stabilizer.

We did receive a new TR for this in January. This is material that has been in wide use and is quite common in food processing.

A number of commenters expressed continued support for the inclusion of this. It's used in -- one moment -- excuse me. It's manufacture is -- it's a fine white

microcrystalline mined powder, which is stable in air, a mined mineral of at least 98 percent purity that is then ground and screened.

In terms of environmental or health issues, the mining and processing, as with any mined material, can have negative impacts. The inhalation of its dust may cause upper respiratory irritation. However, with personal protective equipment, one can avoid these issues.

Generally, all of our comments expressed that this is still in use and quite widespread.

MS. DE LIMA: Any discussion from the Board? All right. Moving on. Devon.

MR. PATTILLO: We're still in Section 205.605(a). And the next substance is flavors. It has an annotation of non-synthetic sources only and must not be produced using synthetic solvents and carrier systems or any artificial preservative.

MS. DE LIMA: Tom.

MR. CHAPMAN: Natural flavors. These

natural flavors are derived from natural sources and are compound substances derived from plants, herbs, spices, botanicals and other substances.

They are typically used in very small amounts in products that contain less than the optimal amount of flavor necessary to give the finished product the desired flavor profile.

Natural flavors are often proprietary formulations developed specifically for their intended purposes and functionality of that finished product.

Flavorings, significant function must be flavor rather than nutrition. And the FDA defines a natural flavor in 21 CFR 101.22.

We heard from several interest groups that encourage the adoption of the 2015 proposal to change the annotation to apply commercial availability to natural flavors.

There was support for further requirements of organic flavor usage. Some commented on the need that the flavoring constituents in the flavor be organic. And we

also received some objections to the fact that flavors were a categorical listing.

Several businesses and trade associations commented on its use and essentiality. In one of the surveys by one of these associations responding manufacturers rated flavors as a 9 or 10 on a scale of 1 to 10 of essentiality, 10 being the most essential. And in this they noted its critical essentiality.

Certifiers also reported a very wide usage of flavors amongst their clients.

One retailer asked about further restricting of flavors when their use is to replace the natural source of foods advertised flavor, stating that natural flavors should not be allowed to be used as the only defining sources of a food's advertised flavor.

And I just wanted to note that this is already addressed and regulated by the FDA, particularly under 21 CFR 101.22 and 21 CFR 102.5 that define characterizing flavors based on the label, including words and pictures,

advertisement or consumer expectations.

If the characterizing flavors are not present without the use of a natural flavor ingredient, then the product would need to be labeled as naturally or artificially flavored on the front panel even when natural flavors were used depending on formulation.

It should also be noted that flavors are under early review as part of our efforts to reorganize Sunset dates. Flavors are also part of the proposed rule that came out in January.

So in compliance with our 2016 proposal to reorganize Sunsets, if the proposed rule comes back as a final rule prior to the fall meeting, then we will remove flavors from our work agenda as the new rule will have effectively reset the Sunset date. Questions?

MS. DE LIMA: All right. Seeing none, we'll move on. Devon.

MR. PATTILLO: The next substance is gellan gum. Thanks.

MS. DE LIMA: All right. So gellan gum

is a hydrocolloid and useful as a thickening and gelling agent in food production, including bakery fillings, confections, dairy products, glazes and personal care items.

Typically the use of gellan gum is at less than .5 percent of a finished product. Some of the unique properties of gellan gum are that it has a high viscosity at low concentrations and forms thermoreversible gels.

In public comment, there were a number of manufacturers who wrote in support of the material with multiple of those stating that they were using gellan gum as a carrageenan replacement.

A couple different organizations and interest groups requested that the CBI from the original petition be disclosed and requested the material be de-listed until that happens.

And one retailer commented that the use of gellan and all other gums diminishes the market for organics. Any questions? Asa.

MR. BRADMAN: Do you have a sense of

their essentiality and integrity?

MS. DE LIMA: Yes. I mean, at least from my seat in the retailer's seat that it is something that's used as a replacement for carrageenan and CORC. It's used more and that consumers are happy to see the carrageenan taken out. And I haven't heard any concerns around the gellan from a consumer perspective.

MR. CHAPMAN: Just a reminder to members to speak into your microphone. It's sometimes hard when you're talking to the person next to you. But use the microphone so the transcriptionist can get what's discussed on the record.

MS. DE LIMA: Emily.

MS. OAKLEY: Yes. Thanks. I noted in a couple of places this mention of confidential business information that was previously allowed and is now not. And I'm not sure how we can address that. But I wanted to know if the program had any thoughts on that? If all of that is sort of, you know, in the past or if it's

something that could be looked at going forward?

Do you want me to explain that a little bit better? Okay. There were some comments that there were materials approved -- I don't know who I'm directing this to. But when confidential business information was allowed to be kept and now that it's not, how do we address those materials as they come up for Sunset? Am I capturing that correctly?

MR. CHAPMAN: If I can try to field the question, under the old petition policy, petitioners could provide confidential business information to the program, but it wasn't provided onto the Board for review and consideration. So the Board would make its determinations based on whatever information was available, not that.

The current policy is basically because that was never used as part of the Board's consideration, we just don't accept confidential business information anymore.

So we would make our decisions based

on the same availability of information. It just makes it quite clear that that information provided -- there's just no need to provide it given that we're not going to receive it. So we just don't accept it in the first place.

Does that make sense? It was really to clarify to petitioners that providing this additional information, if you called it confidential, it would not influence the outcome of the criteria determinations.

MS. DE LIMA: All right. Next material, Devon.

MR. PATTILLO: Thanks. We're still in Section 205.605(a) and the next substance is oxygen, oil-free grades.

MS. DE LIMA: According to public comment, oxygen is used by wineries, breweries and manufacturers of carbonated beverages. One certifier reported that it's listed on 14 OSPs. One winery commented that they use it for microoxygenation, a process where oxygen is added to red wine at a controlled rate and flowed to

stabilize color, improve astringency and aromatic components of the final product.

One organization wrote in that it should be de-listed unless it's use was shown in the industry, which I think that was shown this time around in the review process. Questions? All right. Devon.

MR. PATTILLO: Thanks. The next substance is potassium chloride, Section 605(a), non-synthetics allowed.

MS. DE LIMA: A-dae. Is it okay if we come back to A-dae as she looks for her notes and then keep going down the list? Yes.

MR. PATTILLO: Okay. Well, moving to substances that appear in Section 205.605(b), which includes synthetics allowed as ingredients in or on processed products labeled as organic or made with organic. And the first substance is alginates.

MS. DE LIMA: Steve.

MR. ELA: All right. So alginates, I believe, if I have learned something at this

meeting is a hydrocolloid, and it kind of goes in the whole gum category. It's widely used.

And the public comments for the alginates are necessary for textures, melting quality, et cetera. Everybody rated them as, you know, pretty critical to their product.

I think the main issue with alginates that we read kind of goes back to the marine materials thing. I mean, one of the users of alginates, you know, basically said that, you know, these are harvested in a sustainable manner without use of pesticides or other chemicals.

It's not expected to cause any harm to the environment. It's aligned with organic principles. And other commenters really came back and said, you know, how do we -- I can't think of the right word.

How do we actually know that's true? You know, it's a great claim, but is that really true? You know, I think National Organic Coalition says, you know, they're opposed to the categorical listing of alginates and want to see

it broken down by source and the specific allowed species, which kind of goes back into the whole marine materials issue.

So it's not so much an issue of the use of the alginate itself, but a question as to the source of the alginates.

MS. DE LIMA: Any discussion? All right. Next up, Devon. We're going to go back to --

MR. PATTILLO: Go back to --

MS. DE LIMA: -- potassium chloride.

MR. PATTILLO: Okay, 605(a), potassium chloride.

MS. DE LIMA: A-dae.

MS. ROMERO-BRIONES: Potassium chloride is generally used for two main purposes in food products. The first is to provide potassium enrichment to foods. The second is as a salt replacement to reduce the sodium content in foods.

We had several comments submitted and in general, they were all in support of re-

listing.

MS. DE LIMA: Any discussion? All right. Next up.

MR. PATTILLO: Going back to 205.605(b), synthetics allowed. And the substance is calcium hydroxide.

MS. DE LIMA: A-dae.

MS. ROMERO-BRIONES: It is used as a component of aluminum free baking powder to clarify sugar from molasses and as a conditioner for corn tortillas. And in general, we had several comments about it. And they all were in support of re-listing.

MS. DE LIMA: Any discussion? Next up. Devon.

MR. PATTILLO: The next substance in 605(b), synthetics allowed is ethylene allowed for post-harvest ripening of tropical fruit and de-greening of citrus.

MS. DE LIMA: Asa.

MR. BRADMAN: We had the discussion of ethylene related to crops and most of the

comments in the docket really are related to use for crops, especially pineapples.

There were a few comments related to the listed use in handling for post-harvest ripening of tropical fruit and de-greening of citrus. In general, there was pretty broad support for it.

There were some objections from Beyond Pesticides. There was a concern that we're using a synthetic hormone or regulator on this material.

Overall, it's used internationally but under many different standards. And there's a very, kind of, I think, helpful and interesting discussion in the comments related to its use for ripening bananas.

It seems like a very big use in the U.S. in that it helps facilitate the organic banana industry by having a method to uniformly ripen them once they're docked here and then ship them out.

So we've already talked about it with

respect to crops. I won't repeat some of that information. So any discussion?

MS. DE LIMA: I have one comment. I was happy to see Equal Exchange write in and talk about the farmers that they work with. And we actually had a couple of my buyers from my produce department at MOM's go out there this January to Ecuador and spend some time with the farmers.

And so it is one of those materials where people tend to think this is only for large scale ag, not that that's relevant to the listing of these materials. But in this case, they're doing a lot of good work working with small farmers and given the negative history of how our country has dealt with those countries and farmers down there, I think it's really important that we're able to -- it's a very small portion of the banana business, but it's really important that we are able to grow that. Dave.

MR. MORTENSEN: Lisa and Asa and subcommittee members, I was just curious. When

you go shopping, almost always where we are in central PA, organic bananas are, like, a pale yellow to green in color, and conventional bananas are bright yellow. I mean, invariably at least where we go shopping.

And I was curious, is that a -- does anyone know is that a post-harvest issue where the shelf life of organic bananas because of lack of use of other pesticides prior to harvest needs to be moved onto the shelves quicker than conventional bananas that might sit longer?

MS. DE LIMA: I'm not sure. I can find out for our next meeting.

MR. CHAPMAN: There was a chart in one of the comments, the one from the Organic Produce Wholesaler's Group that actually went through the various ripening stages of bananas and talked about displaying. I don't know either. Mike Dale is still here. He might be a good resource for you.

I imagine it might also just be related to volume and the fact that, you know,

conventional bananas probably have much more volume so you can get them to a higher stage of ripeness and use it quicker where the organics probably have a slower turn. But that's speculation. I don't know for sure.

MS. DE LIMA: Steve.

MR. ELA: I would say like in our small local store that's part of the Kroger system, there's no difference. They look exactly the same. And actually it's stunning to me there's only 10 cents difference per pound. I think that's where you never saw organic bananas 10 years ago. It's a pretty stunning turnaround.

MS. DE LIMA: I think a large part of that reason is that the retailer is selling those bananas at a loss because I put bananas in that same category as baby food as being a gateway organic food, you know, especially for mothers and parents. And, you know, without that there, we would have a much harder time getting those new buyers, new consumers in the door.

MR. ELA: Thank you. Thanks.

MS. DE LIMA: All right. Next up, Devon.

MR. PATTILLO: The next listing is for glycerides, mono and di, for use only in drum drying of food.

MS. DE LIMA: All right. So glycerides are used in drum drying. They act as an emulsifier and release agent. And when mixed with food, they help prevent sticking during processing and help to strip the food from the cylinder walls once dried.

According to the 2015 TR, there may be alternatives to drum drying, such as spray drying, freeze drying and fluid bed dryers.

Although drum drying is said to be preferred to potato flakes, the TR also suggested that organic soy lecithin and gum arabic could theoretically be used as alternatives. And the Board asked for feedback on the use of possible alternatives as proposed in the TR.

I didn't get a whole lot of comments. So we did get one comment from a manufacturer

stating that potato flakes have unique water absorption properties due to their surface area. And for this reason, drum dried potato flakes are preferred.

I did have one certifier and organization support the removal because of possible alternatives. But I believe those statements were made based on the TR, at least from the certifier. They clarified after public comment that they didn't know of anyone actually using alternatives. It was based on the TR.

Any discussion? All right. Devon, next up.

MR. PATTILLO: Moving on to the next substance, 605(b), synthetics allowed. The listing is for magnesium stearate for use only in agricultural products labeled as made with organic. Specified ingredients are food groups prohibited in agricultural products labeled as organic.

MS. DE LIMA: Asa.

MR. BRADMAN: Magnesium stearate, as

Devon just mentioned, it's only allowed for use in products labeled made with organic ingredients. It's primarily used as a binding agent and nutritional supplements and other similar uses.

It's also involved a little bit in some other processes related to adding lubrication or flow for materials in some manufacturing processes. But overall, the use is actually very limited, and it has a small constituency in terms of the International Food Additives Council. Some CCOF members use it.

No one was opposed to it. And it seems like a fairly straightforward small use material that has very specific uses and does not raise any real concerns.

MS. DE LIMA: Any discussion? Seeing none, we'll move on. Devon.

MR. PATTILLO: The next listing for 205.605(b), phosphoric acid, the cleaning of food contact surfaces and equipment only.

MS. DE LIMA: A-dae.

MS. ROMERO-BRIONES: So phosphoric acid is used in cleaning operations to remove encrusted surface matter, mineral scale found on metal equipment, such as boilers and steam producing equipment. And we've had several written comments and all were in support of re-listing.

MS. DE LIMA: Any discussion? All right. We'll move on to the next one, Devon.

MR. PATTILLO: We're still in 205.605(b) and the next substance is potassium carbonate.

MS. DE LIMA: Scott.

MR. RICE: Potassium carbonate is commonly used in the Dutch alkali process for processing cocoa and chocolate to reduce acidity. And it's also used as a pH control leavening agent boiler water additive, tenderizer in tripe, and in soap production.

It's used in soft drinks and confections. It uses a buffering agent in making wine and mead to reduce acidity. During the last

Sunset review, public comment did not indicate that it is widely used.

In this most recent round of comments, we had one manufacturer note its use as a sodium reduction agent in chips and an absence would raise that sodium by 18 percent.

Another uses it in a protein bar, another as a nutritional supplement. The manufacture is a strongly alkaline white salt, a major component of the mined salt potash. Thank you.

MS. DE LIMA: Any discussion?

Seeing none, we'll move on. Devon?

MR. PATTILLO: The next substance is sulfur dioxide for use only in wine labeled made with organic grapes provided that total sulfite concentration does not exceed 100 parts per million.

MS. DE LIMA: Steve?

MR. ELA: A product near and dear to my heart. Basically, exactly as Devon said, used for wine-making, to stabilize wine so that they

reduce the spoilage, especially the white wines, also certainly increase the shelf life of red wines. Basically all the comments in favor of it, although there are people that have sulfite allergies, so that's the one drawback of it, but it's labeled and as one commenter pointed out, there is nothing in the organic regulations that say it's against the law, or against the rules, to put allergens in the food, as long as they're noted. So, basically necessary to the production of line and critical.

MS. DE LIMA: Any discussion? Tom?

MR. CHAPMAN: Was there any comment about other, you know, other alcohol made from other fruit other than grapes?

MR. ELA: Yes, we had heard through the -- I guess it's not through the grapevine if it's not wine -- through the apple tree that there were other ciders and such that might be wanting to use it. No comments that I saw, which surprised me, because I actually thought there might be some interest in that, so. And I could

have skimmed over one, but I didn't see any that I saw.

MR. CHAPMAN: Yes, I didn't see anything either.

MS. DE LIMA: All right, moving on. Devon?

MR. PATTILLO: Okay, we're onto the last substance in 205.605(b); the listing is for xantham gum.

MS. DE LIMA: Okay, so xantham gum is used in numerous food products, including but not limited to baked goods, beverages, dairy products, dressings, nutritional supplements, frozen foods. The gum is used in a small percentage in the finished product, again usually below .5 percent by weight, and basically disperses water giving a thickening and gelling effect. It's also often used with other gums to achieve desired viscosities and product structures for firmness and water binding. It's particularly effective in frozen and chilled products, where it can impart thickness and has

freeze thaw production and stability during processing.

The other gums it's commonly used with are locust bean gum, guar and carrageenan. It's also allowed for use in organics internationally, Canada, EU, Japan and by IFOAM. It's also available commercially to consumers to use for bake at home, gluten free and other gluten free recipes.

Public comment, there was a number of public comment from organizations, certifiers and manufacturers that were expressing support for the material. One large certifier stated, of all the gums it's the most commonly found in OSP's. And another manufacturer mentioned they haven't found an organic xantham gum and that other organic gums don't have the same functionality in their organic baked goods. One organization did comment that it should be removed, unless it's allowed only for essential uses, and the same retailer commented that the use of gums in general they believed diminished the market for

organics.

Any discussion?

You guys are so quiet. All right, moving on.

MR. PATTILLO: We're now moving on to Section 205.606, which includes non-organically produced agricultural products allowed as ingredients in processed products labeled as organic. And the first listing is Paragraph E, fructooligosaccharides.

MS. DE LIMA: Tom?

MR. CHAPMAN: Fructooligosaccharides, otherwise known as FOS are added to foods as non-digestible carbohydrates and selective energy sources for species of probiotic bacteria gut. It's also commonly used as a prebiotic fiber, as a sweetening agent, as a binding agent, and as a humectant. And it's found often in yogurts and other dairy foods, infant foods, medical foods, baked goods and beverages. There's two widely used methods of producing fructooligosaccharides, one derived from inulin and one derived from

sucrose. I can go into detail the manufacturing if folks want, but it's listed out in our Sunset Review. Back in 2015, we reviewed both of these and determined them both to be agricultural. FOS is not specifically listed on CODEX, EU, Japanese organic or Canadian standards; however, non-organic agricultural products are not listed on the CODEX or Japanese organic standards.

Several interest groups objected to the presence of FOS on international list, stating that it's a highly processed ingredient and questioned its usage and essentiality. We also received some feedback from a certifier about its agricultural status, stating that their interpretation is that some of the methods of manufacturing would place it on the non-agricultural list. It didn't seem like there was any new information, though, related to the manufacturing process that would have changed the determination we made in 2015, but we will be going into depth on the comments and reevaluating that as we bring this material through sunset.

Comments from manufacturers and manufacturers via trade associations talked to its essential usage as a prebiotic, particularly in baby and infant foods and in kombucha beverages. And no comments received on organic sources of FOS and no additional, new information was received related to whether it meets other requirements for listing.

MS. DE LIMA: Emily?

MS. OAKLEY: So, handling is obviously not my forte, but I did think it was interesting to note the public comment that was in opposition or expressed concern. Could you help me understand some of the comments about the highly refined nature of this product so that I can better understand the perspective that they're bringing?

MR. MORTENSEN: Yes, maybe Tom, so you address both our questions, one is related to the refinement; if you could give us the sense for the proportion in that, roughly, that's insulin-derived versus sucrose-derived. And the third

part of that is sugar beets are largely GMO these days, and I was curious how that plays into the thinking?

MR. CHAPMAN: So it's inulin, not insulin, just to be precise. So there's -- yes, the two primary methods are inulin-derived and sucrose-derived. The inulin-derived method, inulin is dietary fiber, it's found in several products naturally, chicory, Jerusalem artichoke and agave being the kind of primary commercial sources for the product. And it's extracted from those plants generally in a water extraction, which is similar to how sugar is extracted from cane or beets; it's basically crushed and dissolved into water, and then that gets evaporated and refined. And then it goes through enzymatic hydrolysis that breaks the kind of long-chain inulins into shorter chains and the shorter chains are what's in FOS, longer chains are what's in inulin. Both are used as food ingredients. I would say overall the most comparative method that's maybe more commonly

known to something like that is how you make a malt syrup that's used in brewing or something; you're doing an enzymatic conversion of fibers or starches available in the product. That method is kind of the more straightforward one; the one that's a bit more complex is the sucrose-derived method. And what inulin is, is it's a glucose molecule with a chain of fructose molecules, and it's that length of chain of fructose molecules that determine whether or not something it's inulin versus FOS. Inulin is basically the overarching term and FOS is just the small-chain sections of that product.

So the sucrose-derived one you take sugar cane or beet sugar and you ferment it. That fermenting culture needs to be suspended in calcium alginate as an immobilizer. That fermentation then hydrolyzes the sucrose molecules into glucose and those fructose molecule chains, sucrose is both glucose and fructose to start with. And it creates that kind of FOS complex of sugars. Then you filter it

either using filtration methods, enzyme extraction or mixed culture fermentation to create that FOS solution. So it's a very -- it's a much more technical and complex process that I don't know how to further compare to than like a fermented product process.

Both of them can use pH to adjust as well, and pH adjustments is using a lot of products; this is one area where our definitions aren't quite clear, we generally do not use pH adjustments as being considered a chemical change. That's something else that the pH is used for buffering control.

Does that help explain anything?

MS. OAKLEY: That helps me, but I don't know if that helps --

MR. CHAPMAN: Oh, sorry. So what were you -- sorry --

MR. MORTENSEN: Yes, my question was just if you could give us an idea of the proportion of that FOS that arises from those two methods.

MR. CHAPMAN: Yes.

MR. MORTENSEN: And then how do we know that the sugar beets that are the source of sugar are not GMO, Round-Up ready sugar beets?

MR. CHAPMAN: Okay. So the first one, I don't really have a sense of which one's more prominent or not; they're both quite readily available. I believe there's three companies that produce the inulin one because inulin manufacturing from chicory at least requires a bit of scale to make it work. The sucrose one I'm aware of one manufacturer that's quite large, but there's probably others as well that use it during the same manufacturing method, but I don't really know overall. They're both considered readily available, though.

The second question is the requirements for excluded methods apply to all agricultural substances, organic or not, and that would be applicable in this case as well. So that requirement on applicability of excluded methods applies to FOS.

MR. MORTENSEN: Okay thanks.

MS. DE LIMA: Harriet?

MS. BEHAR: I don't know if it's the specific chicory, but chicory is also a plant that can be genetically modified and is available in the marketplace. I don't know if it's the same one or not, but let me just say chicory is also available as a genetically modified plant, but I don't know if the chicory used in making inulin is the same chicory that is used -- that can be genetically modified. It's been around as long as genetically modified soybeans and corn.

MR. CHAPMAN: Yes, but again, excluded methods still apply to all 606 items.

MS. DE LIMA: Emily?

MS. OAKLEY: This is another possibly ignorant question. So, are there forms that are derived from non-GMO sugar beets, or how would a certifier verify that? That seems pretty challenging, but I don't know.

MR. CHAPMAN: I think it's the general method used to verify most ingredients, which is

an affidavit that's very specific around how the product is manufactured, being signed by the manufacturer of that substance.

I don't believe agave and Jerusalem artichoke are genetically modified, so sources from those would potentially be, you know, by their nature not that way. I am not aware of any FOS products conventional organic from agave; the structures of those molecules that agave produces the inulin is just different and doesn't lend itself to the shorter chains or stability in the shorter chains. I believe there is Jerusalem artichoke production out there, but I think it's mostly based in China.

MS. DE LIMA: I'll just add that I believe there are, at the last supplement products for sale to consumers that are made from chicory that are non-GMO.

MR. CHAPMAN: Yes, I do know chicory non-GMO FOS and inulin is widely available.

MS. DE LIMA: All right, no more discussion?

Devon?

MR. PATTILLO: Thanks. We're still on Section 205.606 and the listing is Paragraph G gums, water extracted only, arabic, guar, locust bean, and carob bean.

MS. DE LIMA: All right, so all these gums are extracted from endosperm of plants via water processing and then they're dried and milled. They're used in various food applications due to their ability to modify the viscosity of products through the binding of water and the generation of gelling effects. They're also thickening agents. Despite having some similar characteristics, not all gums are interchangeable due to the structure of the gums; some behave differently at different temperatures, different pH ranges, physical agitation, et cetera. And these gums are allowed for use in organics internationally in Canada, EU, Japan and by IFOAM. A public comment included manufacturers and associations in support of these gums, with one manufacturer

noting that although they do source organic guar and locust, they support retaining on the national list as they don't know if the organic supply of these gums is adequate. During public comment, the public comment webinar, one manufacturer said that they were able to get organic gum arabic this year, but in the past it's been inconsistent, given from geographically where the gum is coming from. One organization thought the board should investigate whether there is gum arabic that could be certified as wild-crafted organic and also look into the availability of organic carob/locust bean gum. And there were a couple organizations that requested that the gums be listed individually so that in the future organic supply could be taken into account for those that are produced organically, and that's something we will be talking about in subcommittee.

Any questions, discussion?

All right, seeing none, we'll move on.

MR. PATTILLO: The next listing is

205.606(k), lecithin de-oiled.

MS. DE LIMA: A-dae?

MS. ROMERO-BRIONES: Lecithin is a substance isolated as a gum following hydration of solvent extracted soy, safflower or corn oils. Lecithin has a wide range of food application such as emulsification release properties, wetting, dispersion and texturization. The major applications for lecithin include margarine, chocolates, instantizing powders, release grades and baked goods. It is used as a natural surfactant between oil and water systems as seen in margarine products. Lecithin also helps modify chocolates for better enrobing and reduces crystallization of cocoa fat. As an instantizing agent, lecithin reduces the hydration properties of powder that would otherwise clump during dispersion in water and milk products. And in baking the lecithin provides multi-function application for emulsifying the fat in water and as an anti-staling agent by inhibiting starch retrogradation. The Canadian organic standard

lecithin bleached form is allowed when unbleached form is not suitable for organic sources only. And in EU organic regulation the use of lecithin as a fungicide listed in the section, Substances of Tropical or Animal Origin for Plant Protections, and as a food additive listed in section Food Additives including carriers.

In 2009, the NOSB meeting, several experts in lecithin industry provided informational presentations describing the types of lecithin available and the methods of manufacture of each. It was explained that it is the de-oiling process, not the bleaching process that differentiates the types and functionality of lecithin and dictates in which products they could be used. In 2009, the NOSB reviewed the arguments for and against the renewal of lecithin. Those in favor of renewing pointed out there was insufficient supply in an organic form, specifically from raw materials other than soy. We had several written comments and oral comments about lecithin. In general the comments were in

favor of relisting; some of those noted that de-oiled lecithin was being produced. CCOF suggested that if we removed it, it would allow companies to produce the ingredient, an organic form of the ingredient. Beyond Pesticides also noted that what was against the relisting because of the hazards associated with its production and the availability of organic lecithin. And I was able to talk with Zea, who previously had this material, and I think her perspective. So the issue is whether there are enough forms of organic de-oiled lecithin in form --- from sources other than soy, and there seems to be not enough forms derived from ingredients other than soy.

MS. DE LIMA: Tom?

MR. CHAPMAN: Yes, and I would agree with that last assessment that it's really no longer about de-oiled versus the oiled; it's that this is kind of the last listing that would allow someone to use a non-allergenic based raw material, so a sunflower or canola or something

other than soy. It is becoming more available, but the availability in my experience has been quite varied now, and I don't think the market is quite there yet, although I think it's getting very close. And I would think maybe on the next round this would not be material that would need to get re-added, but it's not quite there yet. I know companies in the last year who had switched to an organic, de-oiled version of sunflower and then have switched back because of the availability issues, so it's a still a little bit difficult to get even though it's starting to emerge out there. Clearly the demand signals and companies are starting to manufacture it. It's generally a byproduct of the oil industry, and so, you know, it's in all the -- you make soil oil or you make sunflower oil, and it's in all the stuff that remains after you've refined it, you extract the lecithin from some of that stuff. So there's a lot of incentive for companies to commercialize this because it increases their profitability because they have less byproduct

that gets sold into feed. They have another food-grade product that has quite a nice margin on it for them to sell. There's a strong incentive for people to do it. It's starting to happen, it's just a matter of the supply becoming regularly available.

MS. DE LIMA: Steve?

MR. ELA: Thank you, Tom. This is a product I just can't get my head wrapped around. You just clarified a lot of it in a nutshell, so I appreciate that insight. That actually helps my comfort level quite a bit.

MS. DE LIMA: All right, Devon?

MR. PATTILLO: The final listing under review is Section 205.606(q), tragacanth gum.

MS. DE LIMA: So, this gum is prepared from the sap of various species of legumes. It can form gels and be used as a thickener and emulsifier. It's effective at low pH and at many temperatures and its stability at a low pH is one of its distinguishing characteristics. The percentage in final products is usually low,

below 1 percent, and this gum is allowed for use in organics internationally in Canada, EU, Japan and by IFOAM. In 2014, subcommittee was unable to find evidence that tragacanth was available in organic form and received testimony from a certifier and producer who currently used the non-organic form. This time around public comment was limited; one organization did oppose because of potential health effects that haven't been taken into account, as well as the possible impacts of non-organic production. As far as the health effects, I would like to point out that in the 2018 Gums TR they summarized the results of the European Food Safety Authority Panel and food additives and nutrient sources that are added to food. Tragacanth gum was looked at and the panel found no need for a numerical ADI, or acceptable daily intake, and had no safety concerns for the general population.

Any discussion?

All right, Steve, yes.

MR. ELA: So I know we've talked --

the gums are another big class, they're not lump -- well, it's like sanitizers -- I mean, there's this whole group of things that we can't really determine essentiality because they seem to be seemingly essential. You're more an expert than I am by far -- it wouldn't be hard -- but I mean, are you pretty comfortable that each of these -- I mean, the claim is that each of these has specific uses, and it seems to me that's true. Is that -- I mean, am I interpreting that correctly and are you comfortable with that?

MS. DE LIMA: I mean, from my perspective of looking at the products on the shelf, yes. I feel that Tom might have more like a technical-technical aspect.

MR. CHAPMAN: Yes, I mean, I know we're always kind of skeptical of the testimony of the manufacturer of these substances, but I do think the information submitted by CP Kelco is fairly accurate in the wide applications of uses for gums and how some work in certain applications and some don't; whether or not that

constitutes essentiality is, you know, a different question. But they all do function different from each other and in different applications. And the reason why we did the gum TR altogether was to get at the do they function differently and then what circumstances would you use one gum versus another gum.

MR. ELA: So I know we have another gum petition that we'll be reviewing here -- I don't know if it'll be next meeting -- but I'm trying to wrap my head around how do we evaluate yet another gum which may have unique properties, you know, in reflection of all these other gums, and I guess I'm kind of looking for advice. The next one is my material and I'm not feeling real comfortable. I mean, I can see you read the petition and it's essential, and we don't need to discuss that now, but I'm still trying to struggle with how do we -- like the sanitizers, how do we parse out -- do we rely on the manufacturers to say this is truly unique? Especially, like on a new one we can't rely on

users because it's not approved because they're not using it yet.

MR. CHAPMAN: Yes, I mean, when you look at it, effectivity in a manufacturing situation is a little bit different than effectivity in a farm situation because it's quite simple to do the setup and to figure out under what circumstances various, different products function in different ways than organic versus conventional experiences on that should be fairly relevant to each other. So if a conventional product has certain functionality, that should apply in the organic application for the most part. I think the chart that we've been seeing multiple times, and I think there's one in the TR as well around different application uses is a good one to use, and then we can see how the petition substance lines up against those, and if it's redundant or if it has some unique properties.

MS. DE LIMA: I mean, I'd also just add that things have changed a lot since I

started in retail. So like 20 years ago I'd be really excited when there was like a broker brought in a new product because there wasn't a lot of growth in organics. And now there's so many products we have to turn stuff away, and I think that's a good thing. I mean, because these gums are used in tiny percentages, and if we're not overall concerned from an environmental aspect, if we're not seeing that any of these are a health aspect, then I feel like we need that -- if that little percentage needs to be in there, then that's growing the market for organic raw agricultural commodities, I think that's a great thing.

All right, I think that wraps it up for sunsets. And next up we got a petition SDBS, Devon?

MR. PATTILLO: Sodium dodecylbenzene sulfonate, or SDBS has been petitioned for use as an anti-microbial for use in treating fruits and vegetables in the premises of organic food retail establishments. The petition was submitted by

Ecolab Incorporated in October 2015; in support of NOSB's review of this petition, a technical report was obtained and published on NOP website in May 2017. Thanks.

MS. DE LIMA: Scott?

MR. RICE: Thank you. This material, sodium dodecylbenzene sulfonate, SDBS, as Devon just mentioned has been petitioned by Ecolab for use as one of two active ingredients, the second being lactic acid in an anti-microbial formulation. It is administered through a sink-mounted system. SDBS is manufactured from linear alkylbenzene sulfonates, LAS, produced from linear alkylbenzenes, LAB. SDBS is the sodium salt of LAS; its manufacturing process determines its composition and specific application performance level. The function is to reduce the number of microorganisms in fruit and vegetable processed water, and on the surface of those vegetables and fruits. It's proposed use is on raw and processed fruits and vegetables involving a minimum 90-second immersion in the wash water,

followed by a draining step. As noted, we first received this in October 2015, initially not requesting a TR. The proposal was initially reviewed at the 20 -- or, excuse me, the spring 2016 meeting -- referred back to the subcommittee as the board felt we needed a technical report to make a more informed decision and answer some questions that we had.

The TR provided additional information on the manufacture, alternatives to its use and potential impact on human health and the environment. Existing allowance in synthetic alternatives to SDBS include electrolyzed water, sodium and calcium hypochlorite and peroxyacetic acid. Non-synthetic alternatives include organic acids, including ascorbic, citric, lactic, lactates, tartaric acid, malic acid, organic vinegar, also refer to acetic acid. Those non-synthetics also include essential oils, grapefruit seed extract and egg white lysozyme.

It should be noted that commenters expressed the natural organic acids in oils are

not effective due to their flavor impact on the product as well as the quantity of those acids that are necessary to be effective.

The subcommittee's review found that while the material does not have significant concerns regarding human health and exposure or environmental impacts, the significant environmental impact concerns there still exist a number of alternatives available for use. The subcommittee also recognized the importance of having the ability to rotate among several materials in an antimicrobial regime to reduce incidence of resistance. And none lessened the absence of significant public comment advocating for the addition of SDBS to the national list and the availability of alternatives. We did not see it as essential to organic production.

In public comments, in both this and the previous time that we reviewed this material when it came before the board, we received few comments expressing a need for it. The Organic Trade Association noted, while it received

substantial feedback, it did not receive comments expressing the need for this material, highlighting the alternatives already available. Beyond Pesticides noted that while it may be one of the better alternatives, it is just not essential at this time.

The Organic Produce Wholesalers Coalition recognizes that sanitizers must clearly be essential for food safety in order for their use to be accepted by organic consumers, particularly at the retail level. That organization did not think that SDBS meets that benchmark. Commenters pointed to existing microbials as sufficient, and as noted just a moment ago, sufficient at this time.

Finally, several commenters pointed to the importance of the NOSB's work agenda item to develop questions to assess the essentiality of sanitizer antimicrobial materials, and some of those commenters expressing preference for doing so before adding additional materials.

Thank you.

MS. DE LIMA: Discussion?

Tom and then Steve?

MR. CHAPMAN: Yes. I mean, I was part of -- there were some complaints heard at this meeting this time about delays on the substances, and that was -- you know, I was part of some of those delays in an attempt to allow for operations who may want to use this substance to come forward and provide information on the substance's essentiality or need and there's really -- I think it was really demonstrated in the public comment here today that that hurdle has not been met yet on this substance. So I just don't see it as meeting the OFPA criteria at this time because of that. It's not to say in the future they won't be able to get the essentiality criteria and come back with a repetition, but at this time that was clearly not demonstrated by the public comment received.

MS. DE LIMA: Steve?

MR. ELA: Echo -- that really was, I think, my basis as well. So.

MS. DE LIMA: Yes, and as a retailer, at least for now, we have no intention or desire to use it. Emily?

MS. OAKLEY: I'm just thankful that we've gotten the sanitizer review on our work agenda and look forward to seeing how that plays out in the future sunset reviews and the material reviews. So I think it will be helpful for us in the future.

MR. CHAPMAN: Seeing no further discussion, we will proceed to vote on this petition.

So the first motion is a motion to classify; the motion is to classify SDBS as petitioned as non-agricultural and synthetic. So again, this is just a notion to classify, not the motion to list. The motion came from Scott and was seconded by A-dae. A yes vote is to classify as non-agricultural synthetic; a no vote is to not classify this substance. The voting will start with A-dae.

MS. ROMERO-BRIONES: Yes.

MS. OAKLEY: Yes.

MS. BAIRD: Yes.

MR. BUIE: Yes.

MS. SWAFFAR: Yes.

MR. RICE: Yes.

MS. BEHAR: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

MR. ELA: Yes.

MR. BRADMAN: Yes.

MS. DE LIMA: Yes. Tom?

MR. CHAPMAN: The chair votes yes. Thirteen yes, the motion passes. All right, the next motion is the listing motion, so this is a motion to add SDBS as petitioned to 205.605(b), so this is the listing motion. Yes vote would move this proposal forward as a recommendation to list; the no vote is to reject the petition. The motion was made by Joelle while she was still on the board and seconded by Steve. And the voting will start with Emily.

MS. OAKLEY: No.

MS. BAIRD: No.

MR. BUIE: No.

MS. SWAFFAR: No.

MR. RICE: No.

MS. BEHAR: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

MR. ELA: No.

MR. BRADMAN: No.

MS. DE LIMA: No.

MS. ROMERO-BRIONES: No.

MR. CHAPMAN: The chair votes no. Zero yes, thirteen no. The motion fails.

MS. DE LIMA: All right, next up and our last item on the agenda is the proposal from the Board for reclassification of magnesium chloride. So the Handling Subcommittee is proposing to change the classification of magnesium chloride from a non-agricultural synthetic substance to a non-agricultural non-synthetic substance and move the substance from 205.605(b) to 205.605(a), the National List.

Additionally, we are proposing to remove the annotation derived from seawater, since there are multiple sources from which non-synthetic magnesium chloride can be derived. During the 2015 Sunset Review, magnesium chloride was recommended for the continued listing, but issues related to classification were raised. The Handling Subcommittee requested public comment during the 2015 Sunset Review and comments were generally in support of reclassification. So a TR was requested and received in 2016, which did indicate that magnesium chloride could be produced both synthetically and non-synthetically and that the annotation derived from seawater can apply to both. During the 2017 Sunset Review, information from the TR was incorporated into the review, a series of questions were posed to the public requesting feedback on the impact of classification in regards to feasibility of moving its listing and the sufficiency of supply and functionality, and again comments from organizations, certifiers and manufacturers were

supportive of the reclassification.

In response to this proposal posting, all the public comment was in support of reclassification. OMRI and others did suggest that the proposal might be helpful to include which processes are non-synthetic and allowed and which are synthetic and prohibited based on the TR. And if we heard in public comment from OMRI and OTA that although that would be helpful, it could be included in the proposal or included during rulemaking.

That is everything. Any questions or discussion from the board?

Emily?

MS. OAKLEY: Sorry, I sneezed at the end of what you were saying and didn't totally catch that, but I also read those comments and was wondering if you -- what your reaction or your response was, because I thought I heard you just now repeat them, but I wasn't sure if I might have sneezed when you commented on them.

MS. DE LIMA: So they were saying that

citings -- there were some examples in the proposal, but we didn't list out every single form that would be -- process that would deem it synthetic and process that would deem it non-synthetic. The suggestion was to include a few of those specifically like in a chart so that certifiers could refer to that, but then -- and we heard during public comment that that would be fine also to come through from the program during rulemaking to help with that implementation.

Tom?

MR. CHAPMAN: Yes, I think coming through the program during rulemaking is actually the better place for it to come, so it's not reason for me to not move forward on this at this time.

MS. DE LIMA: Steve?

MR. ELA: I guess I have the question on that; the program is that -- I mean, are you comfortable with that, of letting those, listing the process as come through rulemaking versus from the NOSB? I mean, it makes more sense -- I

agree with Tom, but I also don't want to throw this under labs and have to go, we can't do anything on it because we don't know.

DR. LEWIS: Right. We'll be getting comments to the rulemaking process and how it works.

MR. CHAPMAN: And just to note the decision tree that decides whether something's synthetic or not synthetic is a NOP decision tree that they've put out that are proposed guidance, the guidance -- yes, it's their guidance.

MS. DE LIMA: It looks like we're ready to vote. Tom?

MR. CHAPMAN: All right. So this is a reclassification motion; the motion is to remove the annotation that reads, derived from seawater and to reclassify magnesium chloride as non-synthetic and move its listing from 605(b) to 605(a). The motion was made by Lisa, seconded by Steve, so a yes vote would be to adopt this and recommend the reclassification and the removal of the annotation. The voting will start with

Jesse.

MR. BUIE: Yes.

MS. SWAFFAR: Yes.

MR. RICE: Yes.

MS. BEHAR: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

MR. ELA: Yes.

MR. BRADMAN: Yes.

MS. DE LIMA: Yes.

MS. ROMERO-BRIONES: Yes.

MS. OAKLEY: Yes.

MS. BAIRD: Yes.

MR. CHAPMAN: Chair votes yes. Thirteen yes, the motion passes.

Sorry Sue, I think I skipped you. You should have been the first to vote. My apologies.

MS. DE LIMA: That concludes the Handling Subcommittee portion. Tom?

MR. CHAPMAN: All right. Thank you, Lisa. Up next we have the Materials Subcommittee

and Harriet Behar is chair. Harriet?

MS. BEHAR: Okay, we have one item as a discussion document before the group. And I guess I need to pull it up. This is a group effort, Dan Seitz is the lead. And Dave Mortensen and myself have been working with Dan on the -- I'll get the exact title here because we're trying to be very clear about what we're talking about -- Protecting the Genetic Integrity of Seed Grown on Organic Land -- so, Dan?

MR. SEITZ: So as Harriet mentioned, this was a group project, but I do have to say that Harriet did the lion's share of the work on this discussion document. So thank you, Harriet, for doing that. We're going to present this in three pieces. Harriet's going to present the discussion document, Dave then is going to talk a little bit generally about some of the issues associated with organic seed and protecting seed from genetic contamination. I'll then summarize some of the -- summarize the comments that we received, and then we'll open up for some general

discussions. So, Harriet?

MS. BEHAR: So this is a subject that we have, as many commenters pointed out, been visiting and reviewing and discussing for many years and through numerous discussion documents. But some of those were not with this board, and so we felt that we should have kind of an updated discussion document and try to get some more current information. Although, I will say that many of the commenters just referred back to their previous comments. So we -- in the discussion document we've talked about the relevant areas of the rule, why we're discussing this contamination of the genetic makeup of the seed used on organic land, and it's not about cross-pollination just in a regular sense, but the contamination of seed grown on organic land by genetically modified pollen.

So we did ask a variety of questions that seemed like we were leaning towards some sort of threshold levels, or at least asking about those, because that does seem to be where

the marketplace is heading on the crop side. So the finished crop is typically tested, even livestock feed, but definitely human food that comes from crops that are at risk for genetic contamination. This document is very focused on seed; we didn't really want to head down the road just yet on finished product. It's just about seed because this is where it all starts. And there are issues that when a farmer is planting seed, especially for a specific market, we feel and we wondered how the public felt, if there should be transparency for them on what they're getting. Because if you plant a seed with 5 percent genetic contamination, it will never get less; it could get more, but it will never get less. And if they're trying to get into a market that is going to test it and require it to be a half of 1 percent, and they're starting at 5 percent, they will never make that and they will spend the whole growing season using their fertility products, doing their cultivation and mechanical and cultural practices and spend the

whole season, and then not be able to sell it into that preferred market. So we felt it was important to see how we can deal with that issue.

Now, on the organic side, the organic seed producers, many of them are doing testing and are -- because they understand that this is an issue for their buyers. However, the vast majority of the seed grown on organic land is not organic seed. We have been trying to get more of that -- more organic seed, so -- and the non-organic seed producers are not doing the testing and providing that transparency, where some of the organic seed producers are. Not all, but some are. So we asked five questions about thresholds, about transparency, about testing and sampling protocols, because if we did decide that we wanted testing, we needed to make sure that it would be consistent of what types of tests, what types of sampling, who does the sampling, because this is an issue where there could be false information obtained if it isn't done consistently and by someone who has the knowledge

and the infrastructure in the case of testing labs to do it correctly.

Okay, and so Dan is now going to -- no, I'm sorry, Dave is now going to talk about some of the issues with that contamination that can happen.

MR. MORTENSEN: Thanks, Harriet. So we're going to talk about some of the issues and a process that we're envisioning stepping through. And pardon me, but I am going to read some of this just so that I remain on point. The issue of maintaining genetic integrity of organic and non-organic seed and planting stock grown on organic land and sold in the organic marketplace is complex but is manageable. And the NOSB has put forth discussion documents on this subject in 2013, 2014, 2015, 2016 and 2017. Over the course of the last several days, we've reflected on the value of models where dimensions of a complex problem similar to the one we're dealing with be carefully reviewed and studied. So it is with the Organic Seed Growers Trade Association

protecting organic seed integrity, the Organic Farmer's Handbook to GE Avoidance and Testing Published Guide, and other resources have also proven to be very helpful for the three of us as we scoped our approach. The published procedures and guidelines for what, when and how the Non-GMO Project test seed has been a helpful resource as we've thought through this issue.

So, we're thinking that an approach that we're pretty fired up about pursuing so that we not have this be another document to add to the list, so that way we will now have 2018 and '19 and '20 is as follows: we're interested in scoping, number one, scoping the integrity of at-risk crops cultivated by organic farmers and consumed by organic consumers. This work will focus both on certified organic seed, as Harriet said, but also on non-treated, conventionally bred, non-GMO seed. To this end, it is our intent to ask seed companies and entities that work to ensure the integrity of farmer client's seed, for example, entities like when I just used

two examples here and there are many, many that were represented in our room over the past several days, Organic Valley, Soil Tilth and others, to share their data on genetic integrity of out of the bag and into the planter box seed. In other words, the seed that farmers are purchasing to put into their fields for the growing season. It's our opinion -- and I'm off script -- it's our opinion that there's lots of insight and lots of data that we could pull together rather quickly.

And during the course of this conversation the three of us have met with several of these groups that are working with farmers that have actually willingfully shared their data over breakfast over the last several days. So I -- so this is really encouraging and I think it will be really helpful for us to sort of get our heads around the scope of the integrity or lack thereof.

The second leg on the three-legged stool is that we're interested in conducting work

to establish, quote, unquote, out of the bag and into the planter box seed purity thresholds. We are not intending here to set the thresholds; rather, we're interested in scoping out what they would like given what we learned in one, the extent of the integrity problem. And here we see there are several steps. First we would focus on crops at risk, Point 1.

Second point, we'd be interested in understanding much more deeply, than we do right now, the procedures and costs of implementing these procedures associated with seed purity thresholds. Here again, we'll assess what is currently being done to meet established standards set by seed breeding companies and farmers working to meet non-GMO thresholds.

Our work will focus on the genetic testing methods used, as well as the sample methods that would enable us to infer to fields and farms more broadly, because we all have heard that the sampling of any of this stuff for detecting seed impurity or pesticide residues is

a statistical problem that we would like to be able to infer broadly from.

We've learned a great deal about the testing methods that are being used, Point 3 of the second leg of the stool. From the work we've conducted thus far we know the cost associated with testing will depend on the detection limit of the method and what it is we're testing for. On the surface of it this may seem obvious. When you dig a little deeper there's more than you might expect, and certainly there was more than I expected.

For example, a typical corn hybrid planted in the United States today, and this is conventional corn, has been modified to express at least two and as many as four or five genetically modified traits: glyphosate resistance, 2,4-D resistance, Banvil resistance, Bt resistance for this protein or that; each of those are individual assertions.

And while one hybrid may have these GM genetic events in their genome, they're not the

same four or five genetic events in each and every corn hybrid; there could be different ones. So the so-called, which we've heard about from several public testimonies during the course of these last several days, the so-called nine comb test we've heard mentioned a number of times is a test that's actually probing for all 9 possible traits that exist in maize, but any one hybrid might only have two or four or five of those. And so the more of these traits you're looking for, the more expensive the test becomes.

Okay, third leg of the stool; assess methods currently being used by farmers to aid in documenting the genetic integrity of their planted and harvested seed. Here we're interested to learn the sort of practices that Jake Lewin spoke about on at least three occasions during the course of the last three days, advocating for, during the course of the sessions, taking a sample of the seed that is being planted and saving that seed in the event that an integrity issue is found on the back-end

of the field season when the crop is harvested, so that you would know how much of the problem arose when you planted the seed and how much of the problem arose from when pollination during the course of the growing season or some grain handling steps on the back-end of the growing season heading off to the grain mill or depending on the crop. At the same time, other farmer support business entities require or work with farmers on seed saving on the back-end of field season where farmers collect and retain a designated volume of seed after harvest. Interestingly, we've spoken with several farmer support entities -- and I don't know the right terms for this -- Organic Valley I think is a farmer support entity -- there are a number of these that have ongoing testing on the order of 200 to 300 farms per summer -- I was kind of blown away by this -- where they have farmers grabbing, grab samples from their fields, whatever's being harvested, saving it, and then the farmer support entity has folks going around

collecting the samples, bringing them back to a central place, testing the seed, and then sharing that data back with the farmers both individually and anonymously through group meetings to help folks gauge how we're doing on genetic purity on the back-end of the field season.

So it's our opinion that through these three thrusts, which we believe a lot of this data and insight is fairly, readily out there as opposed to us thinking this is like a five-year project where you have to go out and do a bunch of things, but actually it's harvesting what we know and learning from each other by our willingness to share data that we believe we will have a much clearer idea of how we're doing on seed integrity and where the weak spots are to be targeting. And that's what I had prepared to say.

DR. SEITZ: So what Dave just presented was just some of our brainstorming around this, and obviously we're very open to other ideas and so forth. And I just want to now

take a step back and just give a little bit of a context in terms of the various comments. There were a ton of comments -- I mean, it was I think one of the more popular things to comment on in the context of this meeting, and I tried to abstract a number of the key points that were made often across a number of commenters.

So the first one was, "Are you kidding? Not another discussion document." I'm paraphrasing, okay. One thing that was widely suggested was that we really need a task force to look at this, and that data is essential. As Dave was saying, one of the things that in our conversations we learned and we haven't looked into this further, but there may be more data out there than we thought at first, so there may be good sources and we don't have to just start collecting data from scratch so to speak. But everyone said if you're going to set a threshold or a seed testing requirement, you can't do that in the absence of good information. So that was absolutely clear and made across many comments.

And again, a task force was seen as a good way to go about that.

A number of people said that from a consumer standpoint there would be an expectation that organic products would generally be grown as organic seed. I think probably most consumers don't know that conventional seed is used and all the complexity around the use of seeds involves. So not everyone was necessarily in favor of seed testing, but those who were said that you should set a threshold, that the threshold would have to be done on a crop by crop basis, and you would need a very good amount of reliable data to even begin to set a threshold. The point was made that even within the context of an otherwise processed-based system, there can be a place for testing, and that there are already the regulations and they're referenced in the discussion document that allow for periodic testing. So it may be in that context you would have it.

But I should say, there were people

who said, "Well, wait a minute; do we really want to go down this testing route? It could prove to be a very awkward situation for farmers, and farmers are trying to do the right thing, and we have a processed-based system." So another approach to this could be that rather than going the testing route, you would go the process-based route, but with the idea of continuous improvement, identifying best practices for maintaining the integrity of seed and so forth. So that is a potential, alternate route. Most people said that if you do do testing you should have an approved list of tests or an agreement on how testing should go about. Something mentioned there may be some good international testing already on the question of handling testing; though there was a comment that said if you try to specify too carefully, you won't allow for changes in the market in terms of what might be developed in regards to testing.

A lot of people said that a natural result of testing would be some sort of seed

labeling, but this may be not very practical; it could be really tricky to do labeling of seeds. And ironically, it may lessen the access to non-organic seed, because some non-organic seed producers may not even want to enter into a seed testing protocol. And a piece of this is that whatever is done, if we do something, it has to be done very carefully because you can imagine a range of unintended consequences. The last thing you want to do is lessen the varieties of crops that are available to farmers, the variety of seeds, so you don't want to disincentivize the use of organic seed.

It was suggested that if we do something, it should be done initially as a pilot project just to make sure that this is something that's actually practical to do. Again, there was a sense that there probably is good information out there about best practices in terms of seed management. There's a Federal Seed Act that may come into play here that has certain standards around labeling and such. Dave

mentioned the idea of farmers routinely maintaining a sample of their seed as just one way of looking into this that may be low effort, low expense. A number of people said that, just reminded us that this discussion document also relates back to the Excluded Methods document and just suggested that we need to complete work on that document as well. Farmers should not be responsible for testing seeds; this should be a certifier responsibility. And people are concerned about the cost and making sure that especially farmers are not saddled with significant costs. OTA had extensive comments on ideas about how this might be approached and a number of people endorsed their comments.

And finally, the broader question of unintended genetic trespass was there, that farmers ironically who are trying to just grow their crops are often, as Dave mentioned, and I think Harriet as well, that if there is contamination in a crop that cannot be sold as organic, someone may take a major loss at the end

of the season. And shouldn't there be something like a super fund site or other way that farmers could be reimbursed rather than bearing the cost of that; obviously, that's not something that we have involvement with, but the idea being that it would be a helpful thing just generally from a policy standpoint, a political standpoint to look into how you can better portion responsibility to cover losses.

And that's a number of the comments I think; though, there was a lot more subtlety, a lot of, again, very thoughtful, excellent suggestions and comments that were made.

MS. BEHAR: So just in summary I would say that the organic community really sees this as an important issue, and it's not an easy one to solve, but we will work on it in the Material Subcommittee. But I leave it open now to anyone who has comments.

Okay, Emily?

MS. OAKLEY: Okay, thank you guys for continuing this work and for putting so much

thought and effort into it. So I have two thoughts; one, I really like the notion of a practice-based approach as opposed to a testing-based approach because I think farmers who are following all the best practices that are prescribed in our system absolutely cannot be penalized for conditions that are out of their control. And I think that actually cuts across many other areas of organic production as well. But secondly, the issues of thresholds feels like it may be something of a moving target as contamination changes over time and as technologies evolve over time, I was wondering what you guys thought about that or if you've discussed that?

MR. MORTENSEN: Yes, those are two really well-reasoned thoughts. So we need to do things clearly as a group, so I don't want to lapse, but I just started to lapse into I think, right? So there is a concern that I have, so I will get to just about how I see it, that the trespass issue -- and for me I'm thinking about

pesticide drift and unwanted pollen movement -- it's going to be hard, in my opinion, for folks to take us seriously, us in the organic community, about the problem if we can't demonstrate that it exists in the first place. That's how I think about it, so that's that.

I am not personally thinking it would be desirable that everybody's running around having to test their seeds every time they do something. I do think when you buy seed, I believe the system would clean itself up a lot if when we bought seed we knew it was close to pure, so that when we're starting we're like, okay, it's on me now, it's on me and my neighbors. And that's a challenge anyway, but at least I know I'm starting clean. I think our farmers should know that, I want to know I'm starting clean and I'll do everything I can with my neighbors to keep my stuff the way I want it to be, which is free of these traits. So that's on that point, Emily.

Over the last ten years I've been --

you guys have heard me say this, and I don't do it to brag; I do it because I've been trying to prevent a deregulation of these herbicide-resistant crops because I think they just are really bad for agriculture and they're bad for organic farmers. And I would say that organic farmers are not, in my opinion, being heard or taken seriously when the big issue of the dicamba problem, to take an example, comes up. I heard last week from a lot of people at a meeting, we'll solve the dicamba problem if all the rest of the conventional farmers plant dicamba-resistant soybeans. And I was sitting there thinking, that's the last thing that organic farmers would want.

Because as the proportion of acres treated and the amount of anything used, whether it's genetically modified crops and their pollen, or it's pesticide drift, it's this whole thing that Silke talked about; it's a probabilistic world we live in and as we increase the amount of stuff we do in our neighborhood, it increases the

probability that I get your problem. So I believe, therefore, that we will work together to scope the problem of farmers having the ability to start clean and then we must continue as a community to work on cleaning up the neighborhood, so to speak. And I think that's kind of what we're going to try to do.

And a task force I'm sure will be helpful, but we also, I think we're also feeling a certain sense of urgency, if there's data there, if there's folks that are willing to share the data and insight and knowledge, and our -- this community is so rich with knowledge and insight and I'm hoping that that will happen.

My email inbox wasn't lighting up with data files last night. We should send an interest to collaborate and please communicate with your colleagues, interest to collaborate on seed purity going into the planter box, please send your interest to collaborate with our subcommittee to Michelle. We would love to hear from you.

MS. BEHAR: And just quickly to -- there's a lot that is market-driven, that the farmer no matter what they do, they could still suffer the loss of market. So there is an urgency in, if they are contracting -- I mean, some contracts say if you don't deliver you have to go buy something and fill this contract. So someone could even get a double whammy where they've grown the crop out, can't deliver at the threshold level that was in their contract, and then has to go out and try to buy an organic crop at that threshold level. So while we would prefer to stay process-based, we do have to somehow think about the pressures of the real world in the market.

And Sue had a question.

MS. BAIRD: Several observations, and I'm pretty knowledgeable about this subject because I do consulting for the Non-GMO Project, for clients. MOA has actually implemented a non-GMO verification program based on the same criterias as the Non-GMO Project for our farmers

as they transition to organic. So I feel like I have some -- a little bit of knowledge, anyway.

I'm wondering why we're targeting the farmers to do the testing as opposed to the seed companies. I know there are strict feed and seed laws of what needs to be on a seed tag, and this would be an additional tag, so it couldn't go on the official tag itself, but it would seem to me like it would make sense that the seed company who's selling that seed would be the one doing the testing instead of farmers.

DR. SEITZ: And Sue, just to say that that was a comment, that why - the farmers should not be bearing the brunt of that, so that was out there.

MR. MORTENSEN: Yes, if we gave that impression, I guess I would have been the one to give that impression. That was not at all what we were intending.

MS. BAIRD: So you're talking about the seed process itself?

MR. MORTENSEN: Yes. No, we would

certainly not be expecting the farmer to pay for a front-end test on their seed; they would have the seed companies share that data with them.

MS. BAIRD: Right, okay.

MR. MORTENSEN: And this is what you're starting with. Yes, and exactly how that's shared, I don't know. We don't know yet. It's a tag, it's something, but maybe it's a database, you can look it up. But that would be provided by the -- I think, Sue, maybe I gave that impression when I said pull a seed sample and planting --

MS. BAIRD: No, I thought that you said the farmer would be pulling the seed samples.

MR. MORTENSEN: That would be a fallback option if you had a problem on the back end and you would just have that to know later if you needed to test it.

MS. BAIRD: Thanks, Dave. And I think that is a good practice because if something did come up and you bought it with a certain tolerance level and it exceeded that, then you've

got the samples, just like we do in processing or anything else, you keep a sample of the end product, so I think that's a great practice.

I just texted my administrator and I said what is the cost for running testing corn for the nine GMO traits? I said I'm in NOSB and the question just came up, and I just got an answer back that the cost is about $20 to $25. It's not real prohibitive, but -- and in defense, because I thought you were going to say the farmer did bear that cost -- if you're selling to a non-GMO market, then the farmer does have to take a test. And if it's only $20, $25, that's not a huge amount, it's not onerous to the farmer. It's just one more expense the farmer has to pay, but non-GMO farmers who sell their crops at non-GMO markets don't get even close to the same premium that an organic farmer does. And they absorb that cost so they can sell their seeds, or their grains. So I really appreciate you guys tackling this; it is a huge issue.

One of my farmers when I was a

certifier -- and you know, I'm a storyteller. I'm sorry; I always have to tell stories -- but this farm had never been anything but organic. The father raised it as organic, it had been in generations of farmers, and the farmer always bought organic seeds. Did his dead level. The neighbor who was a chemical farmer hired - MFA, it's just a - anyway, to go in and spray his fields and the contractor who was running the rig turned south instead of north or whatever, turned the opposite direction of the way he was supposed to turn and sprayed down John's field that had never been anything but organic, used/bought organic grain and I was amazed by the fact that every four foot there was still soybeans standing. So that is an indication of how contaminated our organic seeds are.

So thank you, guys. Just an observation. I'd love to have you guys on this. It is something I really do a lot of work with.

MS. BEHAR: One other thing; the idea of transparency on the seed tag on whatever level

without a threshold actually came from -- I did a workshop at the Organic Seed Grower's Conference in Oregon this year and a group of, I think about 35 or 40 seed producers really did not like the idea of a strict threshold, but felt that transparency was something that they were happy to do and would go a long way towards trying to build some of that database of what is the actual contamination problem that we have. There was also, I think, discussion too of perhaps looking at one crop as a pilot crop and really focusing on that to help us determine the issues before we looked at the wider range of -- so we'll be looking at that as well.

I'm trying -- so that'll be kind of on our work agenda, so it's a big issue to put our heads around, but from the farmer level all the way to the consumer and everybody in between, we absolutely need to look at this issue and figure out a way to have some assurance in that whole supply chain that we're doing everything we can to be transparent and seek solutions.

MR. MORTENSEN: I guess there's one other thing that's been running through -- excuse me, Sue --

MS. BAIRD: Well, I just -- yes, I'm sorry; I was just responding -- I think this is akin to us being transparent about fraud.

MR. MORTENSEN: Yes.

MS. BAIRD: I mean, we're just trying to be, up-front.

MR. MORTENSEN: Yes, another thing that's occurred to me, so several folks in the room - and some of whom have had to leave by now, but -- served on the AC21, this was a national committee that looked at the ability of organic farmers and conventional farmers to co-exist on the landscape, the so-called Coexistence Task Force that I think went on for two or three years. I think the way I see this, my view is it's like a big experiment that's been unfolding over the last number of years, and I think it would be awesome if we could learn from where we're making mistakes and correct them now and

take coexistence way more seriously before other crops come online that are transformed like our vegetables and fruits, and where we've got pollen vectors like bees that fly miles in distance in a day. I just think it'd be great if we could learn now from what we know, what do we know, what don't we know, and then we as a community of practitioners will know where to focus our effort on policy as we go forward.

MS. BEHAR: Any other -- A-dae?

MS. ROMERO-BRIONES: I think -- and this issue has been on the forefront of indigenous communities for a long time in the protection of indigenous seeds. And I'm always very cautious about data gathering, especially at the level that we sit, and because we would be gathering data publicly that would be shared publicly. And from the indigenous experience trying to protect seeds, conventional seed companies are not always the most even-handed when they're looking at market opportunities for growth.

And so we should be very cautious about protecting that information that farmers may give us about seeds, and I don't know if there is a process in which we could protect that information, but any information we gather may be information about the organic community, but it's also information that can be used largely in the market by conventional seed companies to focus their efforts on expanding their markets into this community.

MR. MORTENSEN: Good point. Thank you, A-dae; that's very good point.

MS. BEHAR: Anyone else? Or discussion? And of course, if anyone wants to join with us and help, we welcome that.

That was the only item on the agenda for the Materials Subcommittee.

MR. CHAPMAN: Thank you, Harriet. So it's 3:22; we are going to very briefly recess, and then we'll come back and look at the work agenda. If the executive members could come back here and join me before recess. So we will come

back, let's call it 3:35; that's like 13 minutes. Let's do it promptly then and hopefully we can end on time.

So we're in recess.

(Whereupon, the above-entitled matter went off the record at 3:22 and resumed at 3:40 p.m.)

MR. CHAPMAN: All right, everybody, if the members could take their seats. We're about to get started. This will be really quick and then we'll be done, and then conversations can continue indefinitely.

I am not being heard. All right, do I need to get my gavel?

If members of the public can please quiet down. We're almost done. And if members of the Board can please take their seats. This includes Dave Mortensen, can you take your seat please?

All right, we are back in session. We have very little to go over still; we're just going to review the active work agenda and we're

going to go a little bit differently than in the past, so I am going to review where we're at on various matters by type. So sunset petition, NOP or NOSB requests that's being projected on the screen right now; this is the same document that's been edited down a little bit, but it's the same document that we published on a periodic basis on the website. And that will be updated in the future.

It's meant to give the public and the board just some transparency into what's coming up. You'll see stuff classified as fall 2018, spring 2019 or TBD, TBD means we don't know the timing right now. And we'll discuss a couple of items in a little bit more detail to give some sense of where things are at.

I ask all of the committee chairs if I skip over anything or if we need to provide a little bit more detail as we're on your section, please speak up and we will discuss that. So right now I'm going to filter to sunset items. So all the items that were reviewed at this

meeting will be going back to the subcommittees so they can finalize their sunset reviews and all of those materials will come back to the fall 2018 meeting for a vote. So all 41 of them right there.

Any questions on the sunset materials for 2018?

We have also added the 2019 sunset materials to our work agenda and there are 54 of those. The 29 sunset materials are - right now we are determining TR requests for them in preparation for the spring 2019 first sunset review, preliminary sunset review, what we just did today for 2018. So nothing on these will come forward in the fall, but the subcommittees are working on reviewing what areas that we need more technical information on.

Is there any questions or any statements from Board members? Okay, so that is all of the sunset materials.

Up next we'll review petitions, and there are several petitions that we're expecting

to come forward in the fall for votes; they include -- and correct me if I say these wrong -- allyl isothiocyanate -- yes, close enough -- AITC, sodium citrate, natamycin -- those are all crop materials and we're expecting the subcommittee to be able to bring them forward as proposals in the fall. On the Handling Subcommittee, sodium chlorite for the generation of chlorine dioxide gas, Japones peppers, Ethiopian peppers, and tamarind seed gum. We expect to bring all of those forward in the fall for a vote.

We also have several that we are waiting for technical reviews, so our next step on those would be to do a technical review sufficiency determination, and those include ammonium citrate for Crops, ammonium glycinate for Crops, calcium acetate for Crops, silver dihydrogen citrate for Handling, pullulan for Handling, and oxalic acid for Livestock.

So these still may come forward in the fall; it really matters on when we get the

technical review in hand and determine its sufficiency. The earlier we get that, you may see some of these turn to fall 2018; if they come later after the fall 2018 cut-off, then they will be at a later date. We also have collagen gel for casings for Handling that we have just received the petition, but we have not yet determined sufficiency in the subcommittee, so that's also an item that's TBD on its next steps.

Any questions on the status of petitions?

This doesn't include any petitions, just so people are clear, on substances that haven't run through the NOP portion of the petition process. So there may be some additional petitions that are running through the process that the NOP is still doing their work on, and as those come through they will be added to our work agenda to determine petition sufficiency.

All right, up next I'm going to look really briefly at NOP requested work agenda items, and these include the imports item that we

spent a lot of time on this meeting. Right now we will be bringing something back in the fall, not 75 proposals. We need to figure out which areas we're going to focus on and then what form we're going to bring those back in. So what we can say now is that we will be bringing stuff back in the fall, but based on subcommittee discussions we'll determine what it is and in what format, be it proposals, discussion documents, or both. It will likely be both.

We also still have the packaging substance for use in food handling including BPA, and in that we're working to finalize a discussion document, so we know that the next action will be a discussion document, but we haven't determined yet when we'll be bringing that forward.

Up next is NOSB-initiated items; so biodegradable, bio-based mulch is still there for Crops, it's a TBD as we're waiting for additional research information. We also have the strengthening and clarifying requirements for

organic seed. We expect to bring a proposal, so the next step would be for the subcommittee to draft a proposal, but we are expecting to bring a proposal in the fall on that item.

Nutrient vitamins and minerals, annotation change, again that's with the Handling Committee and we have not determined our next steps on this item, so still at a TBD and we do not expect to bring anything forward in the fall.

Marine materials -- this should be discussion -- sorry, I was going back and forth with the lead on this, whether it's going to be a proposal or a discussion document, but it will be a discussion document coming back in the fall on this material. Just for clarity, we did combine the Handling and Crops versions of these and we put it together on the materials. Okay, but it may focus in the future on just crops.

Protecting the genetic integrity of seed grown on organic land, that was the discussion that we just had. And the subcommittee expects to bring that work back as a

proposal in the fall as well.

Contamination of farm inputs remains on the agenda, and the next step would be a discussion document, but we don't believe we'll have a work product to bring back in the fall.

Excluded methods terminology remains on the work agenda and we do expect to bring forward a proposal in the fall.

And then sanitizers essentiality criteria review was recently added to the subcommittee and we're having discussions on what products will be brought forward and on what timeline.

Any questions, statements?

And we have other -- those were kind of the two standing items, every fall we bring forward the research priorities and we expect to bring that forward at the fall for a vote as well. And then we also have a standing review of our Policies and Procedures Manual and we're waiting to accumulate enough changes to justify bringing that forward.

Dan, correct me if I'm wrong, but I don't expect we're bringing anything forward in the fall right now, on the PPM?

Yes, and that is it. So that is our current active work agenda in its totality. Again, look for updates on a periodic basis on the NOP website. There are 121 active items on our work agenda, so we are quite busy, although the vast majority of those are substance reviews.

So any other questions on the work agenda?

Yes?

MS. OAKLEY: The items that are not high priority or active right now, including inerts, I just wanted to ask the Program if there is any potential for movement on this because we have two people on our Board right now who are very expert in this material or these materials, and who have an active interest in taking the time to work on it, and I was wondering if there's any way that we could move that to a more active position on the work agenda?

DR. LEWIS: Sure. So thanks, Emily. I know that this is a topic that we've heard from the Board and from the public commenters today and previous meetings. There's only so much resources that we have in our program in terms of managing the activities that we have to focus on now. Let me kind of have conversations back with folks and think about this, but I want to at least recognize in terms of something you brought up and others here, over time.

MR. MORTENSEN: I wonder on that subject, I'll just raise the question; I think one of the steps was the bridging step of identifying the EPA resource person or people that we could just talk to and just say, let's just get a conversation started. But, would that be possible?

DR. LEWIS: Right. If I remember, I think the Board previously had a presentation from the skill leadership. I think maybe, Tom, you were on the Board when that happened, but there was a presentation by EPA on that. Again,

there is a person in EPA who we interact with all the time; what you've been hearing overall during the past several days from Jenny and the secretary and others in terms of there's only so many resources, you heard about the priorities that the Department wants to move forward on, but I appreciate in terms of you kind of sharing that.

MR. CHAPMAN: We've passed a proposal on how to move forward on inerts and it's really in the Program's hands to take forward. It's not like we need to provide more clarity and our position is pretty clear, I think, in relation to the skill list, but since that time there's been -- it's again, one of those recommendations that's kind of in their hands, and we had this inert working group that NOSB members were a part of just to ensure that the progress was going forward. And that's the part that we're still at right now.

Harriet?

MS. BEHAR: Well, for inerts we are

living with an obsolete listing and it is somewhat damaging the innovation -- damaging the innovation that input suppliers can do for organic because there's this static list of inerts and there could be new ones available, but they technically couldn't use them.

And then I'd also like to bring up just because -- in some things I can be a bulldog -- and that is the field and greenhouse container work. We did hear from numerous public commenters, this is not strictly a hydroponic issue and the use of containers has grown a lot in organic agriculture without any oversight or standard. And that was discussed at the NOC meeting and numerous -- so just to reiterate that -- I know that's not a priority for this administration, but I would like to let the administration know that at least some of us still want this and there are numerous public commenters that would like us to keep working on that issue, too.

DR. TUCKER: Okay. Thank you,

Harriet. On this one I think, again I'll be -- I said I'd be honest, so I'll be honest. I think on this one, and I've said this to a number of folks sort of offline so I'm okay with saying it into the record; the container item, when we sort of look at the history of the container item, it really did evolve from the hydroponic source. So I understand that it's not just directly related to hydroponics, but the item on the work plan itself really emerged from that discussion.

At this point in the game we do not see bringing that back onto the work agenda in the near term. We - you said that there were questions about oversight. These folks are certified and USDA supports their certification, and so certifying agents are overseeing them. Like all production practices, we look for whether there are inconsistencies across different operations and where there are inconsistencies, if there is a need for clarification either on the regulations or through training, we will pursue that. But at

this point in time right now we do not see a need to put that on the work agenda. I think right now we need to let this issue rest for a bit.

MS. BEHAR: I'm not arguing that there are certain parts, like the fertility inputs they're using, but we don't have any standards for artificial light, we don't have any standards for recycling of pots and things like that -- recycling of pots and artificial light and there are a few other issues, too, that have come up that are specific to this method of production.

So right now our standard is mute and we do have some inconsistency especially among certifiers, some that will not certify operations at all and others that will. And so there is encouragement of certifier shopping and that sort of thing. So I respect where the administration stays, but I guess I will keep bringing it up as well.

MR. CHAPMAN: Ashley?

DR. SEITZ: Actually, just a question out of curiosity; when there is an area where

there aren't many standards and the Program is seeing inconsistent enforcement, what's the -- how do you approach that?

DR. TUCKER: So working outside containers for a moment in the more abstract, right. The way that works is AIA, Accreditation International Activities Division, there are a number of auditors and they're doing most of the audits now that they go out and do witness audits, they do audits in the certifier shop, and then they come back and they share experiences with each other, and then over time we keep a list of areas where we'll often start with training. So we keep a running list of the topics that need to be covered at the next certifier training, which happens every February.

We also keep a list of topics for potential webinars with certifiers and topics where sometimes we just need to send out a clarifying email. So that's really an ongoing process. Audit reports are always reviewed by somebody that didn't write the audit report, so

they're observing what are the non-compliances and then we do a review of all non-compliances every year to see what are the common problems that are being -- and that frames the training that we do.

DR. SEITZ: So would in some cases NOP supply, you might say the missing details, so there's a wide variety of practices and NOP says, we see that we need a little bit more specificity here in order to have consistency. Might that happen through an NOP action issuing the guidance or something?

DR. TUCKER: Yes, so sometimes -- so we've mentioned before that guidance instructions usually come through the Board first. There are times where we have done instructions where it's been out of that audit check process and not necessarily out of a recommendation from the Board, so I think both forms are important for feedback to the Program on where stuff is needed. We have to be very careful that we don't do guidance or instructions that introduces new

requirements beyond the regulations, so that's always a part where we have to keep an eye out.

MR. CHAPMAN: Ashley?

MS. SWAFFAR: I just want to mention that I feel like we're going to get really bored in Livestock. We have one thing, one petition, so if anyone wants to petition anything, please feel free. And I would like to remind the program that we do not have apiculture or aquaculture standards, and we are ready and willing to work on those if you so wish for us to.

MR. CHAPMAN: Great. Harriet?

MS. BEHAR: And I second that, and especially in apiculture there's definitely a great difference in standards and there are certifiers certifying organic honey and organic wax, beeswax, and organic pollen collected from bees and the standards are very different. There was a -- and I talked to Paul about this, and I said, I am sitting here ready to help. I believe it was pretty close to being done, and so it

would be nice to get a few more things over the finish line.

MS. SWAFFAR: I just can't wait to determine how we're going to do an identification system on all those little bees out there.

DR. TUCKER: Apiculture was -- every six months or so the OMB releases its regulatory agenda. The spring regulatory agenda will be coming out and it will list the administration's priorities for the next six months.

MR. CHAPMAN: Okay, I think that's it. And for all of you bored Livestock, we've got like 75 questions in areas for imports, so if you guys want to come over to CACS, we're again, taking applicants.

MS. SWAFFAR: You already made me do that.

MR. CHAPMAN: I know. The Chair does strong-arm from time to time.

Okay, I think that concludes our discussion of the work agenda and that is bringing us near the end of our agenda. We have

no incoming members present, unfortunately, but we will have them at the next meeting, so there is no business there. We had no deferred proposals or final votes to take, and so that takes us to any other business or closing remarks.

So at this time I just want to make one quick announcement that the -- I'm going to get it wrong -- the proposed changes to the National List for livestock and handling that were petitioned items at the fall 2017 meeting were just published today. The announcement went out, and so please look for that in your email or on the website.

DR. LEWIS: There was a note that went out in The Organic Insider, basically provides a brief description of the two materials, that's part of that proposed rule. So I encourage you to look at that and provide comments on the proposed rule.

MR. CHAPMAN: I do appreciate the response time on these materials; clearly vastly

improved from some of the items that were published in the January items. So clearly the Program is expediting the review of these after we do our work, and that is greatly appreciated. So, thank you.

And with that, I don't think --

MR. MORTENSEN: Tom, I have one more thought.

MR. CHAPMAN: Yes.

MR. MORTENSEN: I just wanted to thank you guys, whoever was responsible for the panels. I thought that was just really valuable and really well done and really enriched not only the whole process here, but as a Board member I learned a great deal. And thank you to everybody that put that together.

MR. CHAPMAN: Thank you, Dave. Yes, it was definitely a team effort with everybody a and a big thanks to Jenny who was very instrumental in getting that on our agenda and making it happen.

With that, I don't think people want

to hear anymore of me talking at all, so I am going to hand it over to Ruihong for any closing remarks.

Oh sorry. Sue, did you want to say something?

MS. BAIRD: Yes, I gave you all inaccurate information and I wanted to clarify; I got a follow-up email and that was $20 per comb, per trait, so it would be $180.

MR. CHAPMAN: Gotcha. Thank you.

MS. GUO: Thank you, Tom. First of all, I'd like to thank you, Tom, for your great leadership and facilitation to make this meeting such a successful one. I haven't attended one for a while and I feel that it's my great honor and fortune to be here for the last three days to work with you and witness how our process works. Thank you, Board members, for your dedication and commitment and you do have a lot of great physical stamina, too. I really admire you. You just demonstrate the passion and dedication.

Thank you to our audience

participants. Your numbers dwindled, but some of you stayed with us. And it's good to have -- the crowd makes this more fun.

And then lastly, thank you NOP staff, Jenny and Paul, and especially Michelle. Thank you so much.

(Applause.)

And everybody travel safely. So, the meeting is adjourned. Oh, Tom, you say that.

MR. CHAPMAN: The meeting is adjourned. Thank you, everybody.

(Applause.)

(Whereupon, the above-entitled matter went off the record at 4:04 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: Spring 2018 Meeting

Before: National Organic Standards Board

Date: 04-27-2018

Place: Tucson, Arizona

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