UNITED STATES DEPARTMENT OF AGRICULTURE

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NATIONAL ORGANIC STANDARDS BOARD

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PUBLIC COMMENT WEBINAR

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TUESDAY,
OCTOBER 20, 2020

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The Board met telephonically at 12:00 p.m., Steve Ela, Chair, presiding.

PRESENT
STEVE ELA, Chair
SCOTT RICE, Vice Chair
JESSE BUIE, Secretary
SUE BAIRD
ASA BRADMAN
JERRY D'Amore
RICK GREENWOOD
KIM HUSEMAN
MINDEE JEFFERY
DAVE MORTENSEN
EMILY OAKLEY
NATE POWELL-PALM
A-DAE ROMERO-BRIONES
DAN SEITZ
WOOD TURNER

STAFF PRESENT

MICHELLE ARSENAULT, Advisory Committee Specialist, Standards Division

JARED CLARK, National List Manager, Standards Division

DAVID GLASGOW, Associate Deputy Administrator, National Organic Program

DEVON PATTILLO, Agricultural Marketing Specialist, Standards Division

DR. JENNIFER TUCKER, Deputy Administrator, National Organic Program; Designated Federal Official

SHANNON NALLY YANESSA, Director, Standards Division

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

(12:00 p.m.)

MS. ARSENAULT: Welcome to the National Organic Standards Board public comment webinar for the first day.

Hopefully you're online with us. You should be able to see a welcome slide with some instructions about calling in on the phone if you need to call in on the phone because audio issues.

If you have any problems with Zoom, you can go to their help center, which is really actually very helpful.

They are very friendly.

If you go to zoom.us, in the upper right-hand side, you'll see a contact us button, and you can live chat with them or call them to get any help if you have issues with Zoom.

So, as I mentioned, we are recording the webinar.

We're going to post a transcript after the entire NOSB meeting is completed at the end

of next week, and then it takes a couple weeks to get the official transcript ready for ADA compliance so we can post them on our website.

So, we'll have those up for you guys.

Speakers had to sign up in advance, so we have a list, and it will be projected on the screen so you can get a sense of who's coming up next.

Jared, if you want to flip to the next slide, I think you can probably do that. Just give a little preview there. Or the next one.

And so, speakers had to sign up in advance, and Steve, the board chair, is going to call on people in the order in which they signed up.

So, we have quite a lengthy wait list already, and I don't think we're going to have any room for quote unquote walk-ins, so, just so you know.

And we are asking people to please keep your microphone muted until it's your turn to speak, and we can unmute you and mute you from

our end.

You can also do it from your end as well, when it's time for you to talk.

We'll be monitoring the noise, so if the dogs are barking or the kids are screaming, or in my neighborhood, the weed whacker seems to be going 24/7, we'll mute people for background noise.

When you come to the microphone when Steve calls on you, we ask that you state your name and affiliation clearly for the record.

Our transcriptionist is on the call with us, so she wants to be able to associate the correct name with your comment.

At the beginning of your comment, I'm going to start a timer, and I'm going to demonstrate the timer we practiced earlier, and people were able to hear it pretty well.

Get to the seconds here.

All right, I'm going to flip my screen to show you guys the timer which will be in a thumbnail view on the screen for the whole time

for the comments.

So, you should be able to see the timer, as well as hear the timer. Just change my camera here.

All right. Hopefully everyone can see that, and Devon and Jared might pin that view so it's always visible to you guys.

And I'm going to start the timer here, and hopefully you'll hear the loud obnoxious noise. Seconds. All right.

Hopefully you guys heard that. Can I get some thumbs-up from board members, maybe?

Excellent, all right.

So, that will beep at the end of your three minute comment period, and it'll be visible on the screen, so you should be able to (audio interference) counting down as well, and hopefully that won't be too distracting for you guys.

All right, now I'm going to turn the mic over to Jenny Tucker, the deputy administrator.

We can actually call the meeting officially to order. Thank you.

DR. TUCKER: Thank you, Michelle. Hi everyone. I'm Jenny Tucker, deputy administrator of the National Organic Program.

Welcome to all our National Organic Standards Boards members. We are meeting again online during unique and challenging circumstances.

Your continued dedication and flexibility have allowed this ongoing practice of engagement and transparency to continue.

I'd like to particularly acknowledge our five board members who are beginning the last meeting of their terms.

Jesse Buie, Emily Oakley, Dan Seitz, A-dae Romero-Briones, and Scott Rice.

I am really sorry to not be able to give you a big hug of thanks.

We're grateful for your hard work and service over the last five years.

Let's all give them a big round of

applause like this, so, to applaud in Zoom, we're going to wave our hands in thanks for their service.

Thank you very, very, very much.

To all our public commenters, thank you for sustaining this participatory process in this format again this fall.

We thank you for signing up to have your voices heard.

I also thank our audience. You serve as important witnesses to this public meeting process, and we're grateful you're here.

This webinar opens a series of virtual webinars that will occur over multiple days. Two days this week, three days next week, and one day in November for a panel on sanitizers.

Meeting access information for all meeting segments is posted on the NOSB meeting page on the USDA website.

Transcripts for all segments will be posted once completed.

This meeting, like other meetings of

the National Organic Standards Board, will be run based on the Federal Advisory Committee Act, or FACA, and the board's policy and procedures manual.

I will act as the designated federal officer for all meeting segments.

I'd like to thank the National Organic Program team for their amazing work in getting us here today.

I'm going to ask them to go on camera if they're not already so I can acknowledge them.

We've got Michelle Arsenault, who kind of runs the place. Let's give Michelle a round of applause.

It's a tremendous lift to get us all together.

I also want to acknowledge and thank Devon Pattillo. Where are you, Devon? You want to wave? All right.

We've got Shannon Nally Yanessa. Go ahead and wave, Shannon.

Dave Glasgow. Thank you, Dave, for

everything.

And I want to both introduce and thank your new national list manager, Jared Clark. Jared's been with us a few months, and he's already had a significant impact on the program.

So, thank you very much, Jared.

I also want to thank Steve Ela, chair of the board, who led our virtual meeting so well in the spring, and who I am confident will do the same this fall.

So Steve, you've continued to be an amazing and exceptional collaborative partner. Thank you very, very much.

I'm now going to hand the mic to Shannon Nally Yanessa, who is our standards division director, and she will do a roll call of NOSB members and staff. Thank you so much.

MS. NALLY YANESSA: Thank you, Jenny. All right, so it's starting with the NOSB members. Steve Ela?

CHAIRPERSON ELA: Mute button.

MS. ARSENAULT: Got you, Steve.

Thanks.

MS. NALLY YANESSA: Scott Rice?

VICE CHAIR RICE: Present.

MS. NALLY YANESSA: Thank you. Jesse Buie?

SECRETARY BUIE: Present.

MS. NALLY YANESSA: Thank you. Sue Baird?

MEMBER BAIRD: Present.

MS. NALLY YANESSA: Asa Bradman?

MEMBER BRADMAN: Here.

MS. NALLY YANESSA: Jerry D'Amore?

MEMBER D'AMORE: Good morning.

MS. NALLY YANESSA: Good morning. Rick Greenwood?

MEMBER GREENWOOD: Present.

MS. NALLY YANESSA: Kim Huseman?

MEMBER HUSEMAN: Present.

MS. NALLY YANESSA: Mindee Jeffery?

MEMBER JEFFERY: Here I am.

MS. NALLY YANESSA: Dave Mortensen?

MEMBER MORTENSEN: Present.

MS. NALLY YANESSA: Emily Oakley?

MEMBER OAKLEY: Present.

MS. NALLY YANESSA: Nate Powell-Palm?

(No audible response.)

MS. ARSENAULT: Nate, you may be muted. Can you see --

MS. NALLY YANESSA: I see him.

MS. ARSENAULT: Okay.

MS. NALLY YANESSA: Let's see. A-dae Romero-Briones?

MEMBER ROMERO-BRIONES: Present.

MS. NALLY YANESSA: Dan Seitz?

MEMBER SEITZ: Present.

MS. NALLY YANESSA: And Wood Turner?

MEMBER TURNER: Here. Good morning.

MS. NALLY YANESSA: Good morning. Thank you all.

And now I will hand the mic off to Steve Ela, who is the chair of the National Organic Standards Board.

CHAIRPERSON ELA: Thank you, Shannon. Thank you, Jenny.

To lead off, I just want to recognize again all the members for the hard work that they're doing, and we want to say that I'm glad that we're able to do this virtual meeting, but I know that the organic community is a community that's not just coming together for a meeting, but it's also a social community, as well.

And so, I truly hope that we can meet in person again in the near and later future, but I'm also glad that we can still get together for these virtual meetings and go ahead and conduct our business today.

I do miss seeing everybody in person, board members as well as our stakeholders.

I do want to recognize that it's been announced the five new board members that are, you know, going to be coming on in January.

I won't read their names at this point, but the board continues to rotate, and the five members that are going up, you have been mentors and friends, and you will be dearly missed.

I'll say more about that in our actual meeting.

I do want to remind everybody that we do have a public comment policy in our policy and procedure manual.

I just want to quickly go over them again.

Michelle did a little bit, but all speakers who will be recognized did sign up during the registration period, and Michelle also noticed we do have some people on the wait list that we will hope to get to, as well.

The speakers will be called upon in order of the schedule that's been published.

Each speaker will have three minutes, and then we'll have questions from the NOSB members.

We will not take any questions from stakeholders, but just from the board itself.

It's always great to ask questions. I hope we can make the most of our commenters.

And I would ask the board to ask

questions, rather than just making comments.

We'd like to say, get the most out of our stakeholders that we can.

If you're giving a comment, I would like you to give your name and affiliation for the record, so that our transcriptionist can record that.

And I would also ask that if you're a consultant or working for some other company, that you also mention besides your consulting business, who you are actually speaking for or on behalf of.

We do not allow proxy speakers.

And most importantly --

MS. ARSENAULT: Steve, we just lost your audio.

CHAIRPERSON ELA: Try that again?

(Audio interference)

CHAIRPERSON ELA: This computer is touchy.

But, most importantly, any individuals providing public comment shall refrain from

making any personal attacks or remarks that might impugn the character and intention of any individual.

And if that does start to happen, I will interrupt and ask you to rephrase your comments, and if it continues, then we will move on to the next speaker.

We're very interested in the content, but not in the personalities of various speakers.

The way we'll work this is I will announce the speaker that is on, and then I will announce the next two speakers following that person so that each person can get ready and so our staff can find them on the list.

Again, each speaker will have three minutes, and Michelle will start the timer, just as she demonstrated.

Yeah, when your time is up, please complete your sentence and end your comment.

We have lots of people to get to, and I want to make sure we have time for the board to be able to ask questions.

So, first of all, I'm just going to read off.

We're going to start off with Keith Jones, and then we're going to go to Dee Browder, and then Mark Kastel.

I'm going to apologize ahead of time. It's the end of our harvest season.

I'm a little bit more tired than I am normally, and I am sure I will butcher some names terribly.

My apologies, and feel free to correct me, and maybe I can remember for the next time, but there's no ill will on my part if I mispronounce a name.

Are there any questions from the board before we start?

And just a reminder from the board, if you do want to ask a question, just hit the raised hand function and I will try and call on you in the order of raised hand.

If some reason using the raised hand function doesn't work, feel free to interrupt

before we move on to the next speaker.

All right. With that, we will open the public comment period, and we will start with Keith Jones.

Keith, can you state your name and affiliation?

MR. JONES: Hi. Can you hear me?

CHAIRPERSON ELA: We can. Please proceed.

(Simultaneous speaking.)

MR. JONES: Okay, great. Hi, my name is Keith Jones.

I'm the executive director of the Biological Products Industry Alliance, or BPIA.

The BPIA is a nonprofit organization based in the Washington, D.C. area.

Our mission is advancing sustainability through biological solutions.

Our organization is dedicated to fostering the responsible development of effective biological products, including bio-pesticides, bio-stimulants, and bio-

fertilizers.

Biological products are generally considered reduced risk products based on biological or naturally-derived chemistry by combining performance and safety.

Biological products offer value and benefits normally not realized by conventional chemistry.

(Audio interference) association with over 135 member companies, ranging from small, innovative sole proprietors, to large international companies.

Our member companies have developed dependable pioneering products for commercial agriculture, forestry, home gardens, horticulture, ornamentals, and more.

Many of our member companies produce products specifically for organic growers, and BPIA itself is a member of the OTA.

On behalf of BPIA and all our members, I want to thank the NOSP and the NOP for the work that you all do, and for the opportunity to

provide these comments.

We previously submitted our detailed written comments, so I will just briefly give a high-level summary of those comments.

Under the periodic five year sunset review process, NOSB's Crops Subcommittee is proposing to remove the citation of EPA List 4 pesticides inert ingredients from the National List of Allowed and Prohibited Substances under 7 CFR 205.601(n), synthetic substances allowed for use in organic crop production, and to initiate steps to replace it with the EPA Safer Chemical Ingredients List.

BPIA respectfully disagrees with this recommendation, and requests that the NOSB, one, recommend the continuation of the EPA List 4 inert ingredient as listed in 7 CFR Section 205.601(m)(1), to not allow the replacement of EPA List 4 with the Safer Chemical Ingredient List, and three, encourage NOP and EPA to work together to maintain a comprehensive list of approved formulating ingredients for use in NOP-

compliant pesticides.

NOP approval of the proposed sunsetting of EPA List 4, inert ingredients, and adoption of the EPA Safer Choice Ingredient List, will cause the loss of organic-compatible status for a large percentage of the biological pesticide products that organic growers rely upon for the production of a successful crop.

A sudden and significant loss of organic production tools on March 15, 2022 can be reasonably anticipated to result in significant pest problems with no effective organic solutions, and significant economic harm to organic growers.

I would encourage you all you review our written comments for greater detail.

Thank you again for this opportunity to provide these comments, and I'm happy to answer any questions. Thank you.

CHAIRPERSON ELA: Thank you, Keith. Are there any questions from board members?

(No audible response.)

CHAIRPERSON ELA: I'm not seeing any from board members. I do have a question, Keith.

So, given that to add anything to the National List, the National Organic Standards Board has to approve those, and given that the List 4 is at this point not being updated, and has not been updated for many years, how would you propose that we move forward in a --

(Simultaneous speaking.)

MR. JONES: Well again, we would love to see you all work with EPA, and, you know, find a way to, you know, either update that list, or, you know, through some other strategy.

The point of our comments really is that you can't just shut down the list without a clear path, otherwise -- you know, it can take years to develop a formulation, and to just remove those inerts from being available.

It's not like our members can flip a switch and continue to produce those products.

CHAIRPERSON ELA: Agreed, but you're aware that, I mean, just because we vote to

delist something, that does not mean that they are going to be delisted.

It does have to go through rulemaking and the program where there are additional chances for public comments.

So, I guess I'm still just curious. If we relist them, there's no incentive to move forward, if we delist them, then we're sending a signal that we would like to see some process move towards.

It sounds like you're in agreement that we should move forward and get away from List 4, but for some other list?

MR. JONES: Yeah, I would say potentially, but we'd like to know what that next step, or that next process, or that next list will be.

We have great concerns to take the first step without knowing the second step.

CHAIRPERSON ELA: Fair enough. Asa has a question.

MEMBER BRADMAN: Yeah, a question.

I guess several stakeholders in the organic community, both at the meeting last spring, and there's also written comments this fall, have laid out I think a fairly good roadmap on how to, you know, resolve some of these issues.

You said you don't see a way forward. I guess I'm curious about what you think about some of the proposals that are out there?

MR. JONES: Well, again, and I would just refer you to our written comments. You know, we might represent a wide variety of companies or members.

Like I said, many of our members produce products for organic growers, and we are just concerned about -- and then they have different concerns.

So presently, we don't see a clear path going forward.

MEMBER BRADMAN: And why is that?

MR. JONES: Well, what I'm hearing from our members is that they just feel they

would not have sufficient time, for one, to potentially do the kind of reformulations that might be required.

So, I think one suggestion that we definitely heard from our members is that, you know, if there was going to be some type of sunsetting, we would need a longer time line.

MEMBER BRADMAN: Right. But it seems like, you know, a significant portion -- maybe even a large proportion -- of the substances that are currently on the List 4 would probably carry over into a new list.

So, I just --

MR. JONES: Well, I think that there's definitely quite --

(Simultaneous speaking.)

MEMBER BRADMAN: In that case, there would be a --

(Simultaneous speaking)

MR. JONES: I'm sorry, go ahead.

MEMBER BRADMAN: In that case, would there be a need for reformulations?

MR. JONES: Well, see, that's where I'm hearing, at least from my members, there's a large question as to which materials would carry over, and which materials would not carry over.

And I mean, basically what I'm hearing is no, and (audio interference) would not necessarily carry over, and that the proposed list, the Safer Choice List -- again, my understanding is that that was originally created for cleaning products and it's not really compatible with, you know, our products that are used, you know, in food production, and that there would be a big disconnect in a lot of the products that we do use.

So again, we're open to a change, and in fact, as it was indicated to you, the List 4 is not currently being maintained.

So we are open to something that hopefully would be maintained, and potentially could even be expanded in the future, but we're just not seeing right now a clear path forward.

CHAIRPERSON ELA: Great. Well, thank

you, Keith, and we're going to move on.

But we normally don't ask questions of the program during public comment, but I am going to just because I think this is probably going to come up. You're not going to be the only speaker.

I'd like to put Jenny on the spot maybe and see what the program thinks in terms of not specifically your comments, but the process of where we do need to continue with inerts and not disrupt the process.

Jenny, would you be willing to say just a couple words?

DR. TUCKER: Sure. Happy to, and certainly diving into the deep end of the pool in the public comments first up.

Inerts is going to continue to be a topic of significant complexity and interest.

And so, I think this discussion has raised some of the complexities of this question, of this problem, what the Safer Choice List really is and is not at this point in time.

We also have to look at what is the regulatory status of the Safer Choice List.

The Safer Choice List is actually not codified in regulations, and so, there is the challenge of how do we refer to a list that actually doesn't have the same public comments provisions that our regs have.

And so, those are legal questions that have to be considered.

So, when we're thinking about the complexity of the topic, it's a good time to kind of remember the civics of NOSB and NOP, that the board's job is to evaluate these materials and make a recommendation to the program.

The program would then engage in rulemaking in order to lay out the proposed path forward.

In this case, because of the complexity, we believe that a good initial step would be to use a tool we don't use often in the program, but can be very valuable in complex, uncertain topics -- is an Advanced Notice of

Proposed Rulemaking, ANPR, where we would lay out what are the problems, what are the challenges of managing these lists, what are the potential legal questions that need to be resolved, and what are some options?

Then we would get feedback through that formal Administrative Procedures Act process to get community feedback.

Any action to remove something from the National List in this case would need to be accompanied by a replacement strategy.

So, they would need to go hand-in-hand because of the economic impact of removing these items from the National List there.

So, the rulemaking would need to consider both, both removal and replacement.

The added complexity there is that the program can't add a synthetic to the National List without a board recommendation.

So, figuring out what would that replacement be that the board has agreed to, and what would a sustainable process be for

maintaining such a replacement for List 3 and 4 be into the future?

So, there's a reason this hasn't happened yet.

So I know there are some frustration that these lists have been out of date for quite some time.

There's a reason for it. These are incredibly complex questions.

So, we will take it thoughtfully, we will take it slow.

We cannot remove something off the list without doing rulemaking that is accompanied by a very robust public comment process under the Administrative Procedures Act.

So, we're going to take it step by step.

I appreciate the thoughtful comment and the thoughtful questions that come from the board on this topic.

Steve, does that help?

CHAIRPERSON ELA: That does help.

Thank you, Jenny.

I just wanted to ask that of you just so that as we go through the rest of the comments, at least our stakeholders know that somewhat that this is not a willy-nilly process, but it does have some thoughts of protecting the industry while trying to move from an outdated list.

But, with that, I think we'll move on. Next up is Dee Browder, and then after that, we will have Mark Kastel, and after Mark, we'll have Alan Lewis.

Dee, would you like to go ahead, please?

MS. ARSENAULT: Steve, I'm not finding Dee on the participant list by name or by phone, so she may not be with us.

CHAIRPERSON ELA: Okay. Well, we'll move on and we'll circle back at the end to see if she is there.

So, next up, we'll have Mark Kastel, Alan Lewis, and then Doug Currier.

So Mark, please continue and state your name and affiliation.

(No audible response.)

CHAIRPERSON ELA: Mark, we're not hearing you, either.

MR. KASTEL: I am --

(Simultaneous speaking.)

CHAIRPERSON ELA: Go ahead.

MR. KASTEL: Can you hear me now?

CHAIRPERSON ELA: We can hear you now, so please state your name and affiliation and continue.

MR. KASTEL: I'm very sorry. Okay, start the clock. Thank you, Mr. Chairman.

My name is Mark Kastel. I act as director of OrganicEye, an investigative arm of Beyond Pesticides.

In terms of the pending rulemaking on organic enforcement issues, I would encourage other organizations in the NOSB to join with OrganicEye in opening up a community and industry-wide debate on the merits of this

omnibus rule, which has not happened to date.

I will remind NOSB members who might be new, and many for who have not been involved in the board process prior to their appointment, that the intent of congress was to form an independent and expert stakeholder panel to act as a buffer between lobbyists in the rulemaking process.

The board was established as part of the legislative debate in the 1980s in part to placate the concerns of some pioneering organic farmers who were concerned that we would lose control over what we had lovingly created.

The Organic Foods Production Act of 1990, in that, congress specified that the secretary was required to consult with the NOSB, not just for the approval of synthetic and non-organic compounds, but on the implementation of the act itself.

Only select elements of the new rulemaking were discussed by the NOSB, and only in general terms.

I'd like to have you think about unintended consequences.

For 11 years, we've worked and warned the USDA about widespread fraud in the importation of organic food and feed ingredients.

It was not until a collaborative effort between myself and others in the organic community, and a black eye, courtesy of the Washington Post, that they decided to take action.

Under the existing rules, without the need for new statutory help, the USDA orchestrated the revocation, or in most cases, voluntary surrender of the certificates of 75 percent of Black Sea Region operations certified by the NOP.

The race to adopt these rules might very well have unintended consequences.

The esteemed agriculture economist, John Ikerd will tell you that large corporate agribusinesses and certifiers love regulations because all too often, they squeeze out their

smaller competition.

These firms have extensive staff for compliance, but very well could put others out of business.

Before the former NOSB director unilaterally took away the power of the NOSB to set their own agenda, the NOSB controlled their own work plans (audio interference).

So, I would suggest that this board listen to a cross-section of this committee, and convene discussions, and make this a priority for 2021 so we can have an adequate discussion.

Let's just not do something, let's stand here for a while. Thank you.

CHAIRPERSON ELA: Thank you, Mark. Are there questions form the board?

(No audible response.)

CHAIRPERSON ELA: I'm not seeing any. We will move on --

MR. KASTEL: Thank you very much.

CHAIRPERSON ELA: To Alan Lewis. Thank you, Mark.

Alan Lewis, you are up, but then we'll go to Doug Currier, and Jay Feldman after that.

Alan, could you state your name and affiliation?

(No audible response.)

CHAIRPERSON ELA: Alan, I'm not hearing you.

(No audible response.)

CHAIRPERSON ELA: Still not hearing you. Michelle, do you --

MS. ARSENAULT: Yeah, we're not finding Alan either, or by his phone number.

CHAIRPERSON ELA: Okay.

(Simultaneous speaking)

MS. ARSENAULT: -- you want to chat into the Zoom chat, let us know you're there having audio problems?

And we'll skip over you for now and move on.

CHAIRPERSON ELA: Okay. We will move on to Doug Currier. After Doug, there'll be Jay Feldman and Terry Shistar.

Doug, please continue by stating your name and affiliation.

MR. CURRIER: Hi, good morning, afternoon. My name is Doug Currier.

I am presenting comments on behalf of the Organic Materials Review Institute today regarding the proposals on wild native fish for fertilizer production, marine macroalgae, and crop fertilizer production, and the Materials Subcommittee's research, priorities, executive summary.

Wild native fish and marine macroalgae.

OMRI applauds the efforts of the subcommittees and the NOSB as a whole on the massive work undertaken in the last few years that have culminated in proposals on wild native fish and marine macroalgae used in organic crop production.

OMRI supports the interest shown by the NOSB in upholding OFPA and the organic standards, which includes assessing the negative

environmental impacts of certain input materials.

As an organization who will eventually apply organic standards, we follow proposals closely and evaluate how these standards could be verified in practice.

OMRI supports the use of NOP guidance document or an NOP-appointed task force for work towards and development of best practices for review and approval of marine materials if the proposal is agreed upon by NOSB and published by NOP.

I also refer the board to written comments submitted earlier this month, which also included suggested edits to the proposed definitions of fish waste and bycatch.

OMRI believes that these suggested edits provide clarity, and they're the focus of fish sources of concern.

Also, OMRI wants to comment on estimated impact on the approval of the proposals on wild native fish.

OMRI expects that 49 of the 123 liquid

fertilizer products, many of which are solubles products, would be impacted, and only a handful of fish fertilizers are manufactured from fish waste and bycatch.

And given these potential implications, OMRI suggests a fair phase-out period if the NOP proceeds with rulemaking.

Moving on to Materials Subcommittee's research priorities.

So, given the amount of work devoted to assessing the environmental impacts of using (audio interference) materials and fish in organic crop production, OMRI requests that the Materials Subcommittee develop a roadmap type document that will outline the process for future boards on how to effectively assess the environmental impact of other non-synthetic materials currently used in organic production, and whose use may lead to harm to the environment.

Such materials may include peat moss, mined minerals, guano, and oyster shell meal.

That's all I had. Thank you for listening.

CHAIRPERSON ELA: Are there any questions from the board? Emily, go ahead.

MEMBER OAKLEY: Thank you for your comments, Doug, and thank you for your written comment, as well.

And I wanted to ask you a question.

We received a few comments from folks regarding the liquid fish proposal in terms of pet food, wanting to kind of update the definition language to allow for fish that have been used in pet food to also be allowed in this annotation.

I'm wondering if OMRI looks at that kind of detail, or if you're familiar with products that are deriving their fish material from pet food waste or residue?

MR. CURRIER: So, it is tricky because we don't normally get into much detail on the source of the fish, and I think just offhand, I can recall some sources reported from pet food

manufacturing.

And, you know, so implications for the proposal, fish waste, right now, it's from market fish processed for human consumption.

And so, we had kind of recommended that examples of what fish waste would be, such as skins, frames, and viscera, you know, be added to that, and I kind of imagine that might lend itself to the pet food source of fish waste.

But I guess it's tricky because we don't normally get into that amount of detail when it comes to the sources of fish and the ins and outs of where it's used, and where it's directed, and where it comes from.

MEMBER OAKLEY: Thank you. That's really helpful, and I also appreciate your comments about the updated language suggestion that you provided and how that might tie into the pet food question.

So, thank you. I appreciate that.

MR. CURRIER: Great.

CHAIRPERSON ELA: Dave Mortensen, it

looks like you have a question.

MEMBER MORTENSEN: Yes. Doug, thanks for the comments.

And I was wondering if you could just say a little bit more about what you have in mind regarding a roadmap?

MR. CURRIER: Yeah.

So, it's tricky because there are other non-synthetic allowed materials that would not be subject to the National List process outside of a petition, and these materials may warrant an evaluation of environmental impact.

And so, the thought was that because the NOSB has addressed the environmental impact with marine macroalgae and fish over the last few years, using that experience to apply for other evaluations for materials that are not necessarily part of the National List or part of a petition, and really the idea was just in a kind of gathering the experience over the last few years and putting it into a document that would help the NOSB in future evaluations.

MEMBER MORTENSEN: Thank you.

MR. CURRIER: Sure.

CHAIRPERSON ELA: Thank you, Doug. Seeing no further questions, we're going to move on.

Next up is Jay Feldman, followed by Terry Shistar, and then Aimee Simpson.

Jay, please state your name and affiliation.

MR. FELDMAN: Good afternoon. I'm Jay Feldman, executive director of Beyond Pesticides, former NOSB member.

Thank you all for your service, and thank you for considering our submitted comments.

The Crop Subcommittee biodegradable mulch discussion document raises questions of NOSB process that are critical to the integrity of the USDA organic label.

The fact that a change in annotation is being considered belies foundational principles of the law.

As a strong advocate for the growth of

the organic market, building public trust in the label is critical to affect a transition away from practices in inputs that cause a cascade of environmental public health effects.

Organic can help mitigate and begin to reverse the existential threats of the climate crisis, biodiversity decline that we are facing in the country and the globe.

Is the role of organic to take these challenges on, or is organic just a niche market and a profit stentor (phonetic) for producers and processes?

Those of us who strenuously promote the market as a solution to looming crises must be able to point to a full embrace of the principles and values embedded in the law.

The biodegradable mulch discussion document raises underlying principles critical to NOSB decision-making.

One, organic law establishes a systems approach to protecting and enhancing the environment.

It does not ask you to determine relative risk.

Two, the law sets restrictions and affects continuous improvement in organic management.

It does not disincentivize investment in natural materials and practices.

Three, organic law establishes criteria and categories of use for evaluating an allowed substance's adverse effects, compatibility with organic systems and essentiality.

It does not envision input substances not required in soil systems.

Four, organic law identifies soil as the medium for nutrient cycling, supplying the macro and micro nutrients through support of microbiota.

The laws required systems plan (audio interference) does not envision a dependency on synthetic substances.

Five, organic law requires complete

information and precaution.

It does not allow for uncertainty and incomplete information on effects in arbitrary margins of safety.

So, please don't consider the biodegradable mulch annotation until the technology meets the standards in the law.

There are, however, important matters of concern that need immediate attention, including what you've already heard about the inert ingredients that are no longer supported by EPA, which NOSB has already passed a workable recommendation.

The NOP's recent enforcement proposal, while containing many important elements, has been proposed without complete NOSB consultation.

The critical principle here is that NOSB controls the public dialogue process, ensuring that the NOSB carries out its statutory -- or the NOP, I should say, carries out its statutory authority in NOP.

It's both NOSB, but essentially NOSB,

to advise the secretary of agriculture on organic law implementation.

Protect the NOSB's authority, let the secretary know there's been a violation here.

Thank you for your consideration of our comment.

CHAIRPERSON ELA: Well-timed, Jay. Are there questions for Jay? Asa, go ahead.

MEMBER BRADMAN: Yeah, I just want to ask more about your comment about relative risk for biodegradable mulch.

You know, I assume that's relative to the current plastics that are used heavily in organic, and permitted, and for me, that is something to think about.

You know, I look at, you know, even very many small and -- or strawberry producers, for example, to me, it looks like they've actually just created basically containers out of the fields using plastic.

And the trade-off here is, you know, do we have a way of, you know, minimizing one

impact or another, and what's better?

And, you know, I think that's important.

If you look at the volume of plastic waste, it's just unbelievable. To me, at least.

And the organic sector is a significant contributor to it.

And this biodegradable mulch, for me, it raises huge issues because it is petroleum-derived, and, you know, I'd like to see some other alternative.

But, you know, people seem to clamor for plastic, even on probably most pioneering and innovative organic growers.

And so, you know, I think we do have to think a little bit about relative risk here.

And I would be interested on your thoughts on that.

I certainly will review all the written comments, but I think we're in a conundrum here.

MR. FELDMAN: Yeah. Well, I

appreciate what you're saying, Asa, and I agree with a lot of what you're saying.

The problem is when we constructed the Organic Foods Production Act, we specifically (audio interference) from this relative risk (audio interference) calculation.

And that came out of our experience, and your experience, actually, with implementation of the Federal Insecticide, Fungicide, and Rodenticide Act, which has moved us through chemical families, thinking we were making progress along the way.

You know, we'd move from organic chlorines to organic phosphates to synthetic pyrethroids, and look at now, we got the neonicotinoids, which are causing indiscriminate contamination.

Every one of these steps were made based on relative risk calculations, and we've really jumped from the frying pan into the fire with indiscriminate contamination of the environment with the latest generation of

pesticides.

We never wanted to recreate that scenario and that approach to organic as a cutting-edge technology.

We wanted to incentivize, and we still do, and we are incentivizing alternative practices.

If we send out this message that plastic is the only solution without having these really, really disturbing questions not answered vis-a-vis manufacturing petroleum-based inputs, degradation in the soil, different conditions that contribute to degradation, impact on soil biota, we are jumping from the frying pan into the fire.

Our job as an environmental community, I believe, is to incentivize, to research progressive corporations that want to find a solution, not engage in a relative risk calculation.

MEMBER BRADMAN: Thank you.

CHAIRPERSON ELA: It looks like Dan

has a question.

MEMBER SEITZ: Actually, I wanted to ask basically the same question that Asa did, so I'm fine for now.

MR. FELDMAN: Okay, thank you.

CHAIRPERSON ELA: All right. Thank you, Jay. I appreciate your comments. We're going to move on --

MR. FELDMAN: Thank you all for your service, and we'll really miss the departing board members.

It's a tremendous effort on your part, and the community's very thankful to you all.

CHAIRPERSON ELA: We appreciate those words, Jay.

We're going to move on to Terry Shistar, and then Aimee Simpson, and after Aimee, Amalie Lipstreu.

Go ahead, Terry.

MS. SHISTAR: Okay. Am I heard?

CHAIRPERSON ELA: You are heard.

MS. SHISTAR: Okay. My name is Terry

Shistar, and I'm on the board of directors of Beyond Pesticides.

Next slide, please.

Everywhere we look, we see signs of ecological collapse.

Wildfires, the insect apocalypse, crushing populations of marine organisms, organisms large and small entangled in plastic, more and more species at risk, rising global temperatures, horrific storms, and pandemics.

As our organization focuses on one of the most blatant examples of environmental abuse, the dispersal of toxic chemicals across the landscape, we see that organic can be a big part of the solution, but only if it doesn't (audio interference) its core values and practices.

(Audio interference) organic production has been supported as a holistic approach to protecting health and the environment with a deep conviction that food production could operate with nature, while remaining mindful of interrelationships with the natural world.

Organic is not just an alternative for people seeking better food or a more profitable way of farming, but a path to preventing total ecological collapse.

We are not interested in what's less harmful. We urgently want to prevent ecological disaster.

Next slide, please.

According to the regulations, organic production responds to site-specific conditions by integrating biological, cultural, and mechanical practices that foster the cycling of resources, promoting ecological balance, and conserve biodiversity.

Meeting these goals essential to a sustainable future requires strong adherence to organic standards.

Next slide.

Do not allow virgin paper from wood in organic crop production aids.

The Crops Subcommittee proposes to allow planting aids, including paper pots, seed,

tape, and plant collars made from virgin paper.

Virgin paper, especially virgin paper from wood pulp, results in much greater environmental impacts than recycled paper, and does not foster the cycling of resources.

Next slide. Get plastic out of organic.

Scientists are increasingly concerned about the impacts of microplastics, plastic fragments less than five millimeters in size.

Microplastics cause harmful effects through their physical impacts of entanglement and ingestion.

They also carry toxic chemicals on their surface.

Synthetic mulches should not replace natural mulches like hay, straw, and wood chips.

The annotation of bioplastic film should not loosen restrictions.

Next slide. Protect marine life.

We are concerned about the impacts of overharvesting and destructive harvesting of

seaweeds and fish byproducts used as (audio interference) inputs in organic crop production.

The requirements proposed by the Materials Subcommittee should be adopted by the NOSB, along with strong enforcement provisions.

The Crops Subcommittee proposal on fish products is too weak because it is unenforceable and allows the commercial use of (audio interference).

Only fish (audio interference) consumer (audio interference) should be allowed. Thank you.

CHAIRPERSON ELA: It looks like Emily has a question for you.

MEMBER OAKLEY: Thank you for your comments, Terry.

I'm wondering if you had thoughts on the comments from Doug at OMRI about the Materials Subcommittee putting forward something of a roadmap to assess the environmental impact of other natural or non-synthetic materials, especially just in overall keeping with the

comments that Beyond Pesticides presented, all of which were framed within the broader context of organic's impact and interaction with the environment?

So, I was wondering, yeah, if you had any thoughts on that suggestion for the Material Subcommittee?

MS. SHISTAR: I think it's a good suggestion.

And it kind of reminds me of another topic that has fallen to the wayside, which is contaminated inputs.

So, yeah, I think it's a good idea, and I think it'd also be a good idea to take up the contaminated inputs topic again.

CHAIRPERSON ELA: Any other questions from the board?

(No audible response.)

CHAIRPERSON ELA: Thank you, Terry. Much appreciated.

MS. SHISTAR: Thank you.

CHAIRPERSON ELA: We are going to move

on to Aimee Simpson, followed by Amalie Lipstreu, and then Harold Austin after.

Aimee, please go ahead and state your name and affiliation.

MS. SIMPSON: Hello. Can you hear me?

CHAIRPERSON ELA: We can. Go ahead.

MS. SIMPSON: Great. Hi, my name is Aimee Simpson.

I'm the director of advocacy and product sustainability for PCC Community Markets, the largest grocery cooperative in the country. We're based in Seattle, Washington.

It's hard to believe that we have again had to forego the in-person meetings due to the ongoing threat of COVID-19, but here we are, and I want to thank the NOP and NOSB for their flexibility and efforts to ensure that this critical part of the organic framework continues.

What's even more difficult to believe is that in the midst of the pandemic that has highlighted the incredible resiliency of organic producers and the organic supply chain out west,

our producers and farm workers experienced yet another crisis in the form of catastrophic wildfires and nearly two weeks of choking, debilitating smoke.

It has added another layer of economic and emotional strain, and brought into stark relief the necessity to continue pressing forward on efforts to address climate change.

This is an area that organic has already uniquely situated to provide existing and workable solutions, yet we continue to struggle to see the organic program acknowledged as the ready to go agricultural framework with which to kick-start and build climate change policy.

Yes, there are gaps, and we continue to advocate for the NOSB and NOP to address those gaps and inconsistencies.

But the NOP and NOSB must work together to advocate for organic space in the climate solution table.

To achieve this, we support recommendations to add to the NOSB work plan and

agenda item focused on enforcement of soil building, cover cropping, crop rotation, and biodiversity practices required in the organic regulations.

As a part of this work, we also think the NOSB should identify and make recommendations to strengthen organic practices for climate mitigation, adaptation, and carbon sequestration.

The crisis facing our communities have also brought the need to continue to support our organic producers financially, and yet, we've seen little federal relief and unexpected cuts to cost share.

While we understand NOP and NOSB are not the arbiters of the cost share program, it is startling that congressionally-approved funding could be so drastically reduced at any point, but especially now.

We would urge the NOP and NOSB to work to find an immediate solution to the cost share gap, but also to identify ways in which the organic program can play a stronger role in

advocating for the financial support that our organic producers deserve.

Organic continues to matter to consumers, and beyond these broader goals and issues, we must uphold the integrity of the program and label through strong standards and continuous improvement.

This is why we support many of the recommendations and initiatives of the NOSB, including the removal of several 606 items, addition of harvesting annotation of marine macroalgae, and consideration given to the fish oil production standards, from seaweed to wild-caught salmon, and crop inputs to fresh seafood.

We do, however, continue to encourage the NOP and NOSB to develop a comprehensive standard to address this important area of ecological impact.

We also encourage the NOSB to hold a strong line on the addition of exceptions to organic rule, such as fenbendazole.

While we understand there sometimes

can be a reason for these exceptions, there should be an urgent and documented need for making these exceptions.

As a retailer of many brands of pasture raised and free range organic eggs, including an average of 18,000 from much of our own private label eggs, worms have not been an issue warranting this exception.

Thank you for your time.

CHAIRPERSON ELA: Thank you very much. It looks like Emily has a question.

MEMBER OAKLEY: Thank you so much for your comments, both written and oral.

I also just wanted to echo that I believe the Material Subcommittee would also like to work more holistically on marine materials, macroalgae and fish.

It is a challenging topic to break down individually, and we have found that because each use is so unique, and because the stakeholder groups representing each of those uses are also unique, it has been easier to

address it on sort of a first step case-by-case basis, but with the overarching goal of looking over the next several years at the broader impact of each of these materials across subcommittees.

So, I just wanted to clarify or explain that we share those concerns that you and others have expressed, but are taking it sort of bite-sized pieces as we can, at a time.

But thank you for those comments.

MS. SIMPSON: Thank you, Emily. And yeah, we do, more than most, appreciate the complexity of this.

We've done a lot of work on kind of aquatic impacts, and set our own standards on this, so we really do understand that, and we appreciate that you're trying to do something at this step, and, you know, are supportive of many of the recommendations that you made.

As that interim, we just would also encourage, you know, the program to keep moving forward on that comprehensive standard.

Thank you.

MEMBER OAKLEY: Thank you.

CHAIRPERSON ELA: It looks like Wood has a question. Go ahead, Wood.

MEMBER TURNER: Thanks, Steve. Aimee, I really appreciate your comments, and I just wanted to continue on Emily's point there.

I mean, as you certainly have identified, it's a huge amount of work that's gone on by the subcommittee, and really, I just want to say publicly that this, the leadership that Emily's shown on this, it's really helped our group as a whole really kind of understand this more fully, and try to do something.

I think it's directionally appropriate, and leadership oriented is really a big deal.

But I'd love to have you just spend a brief minute just talking about -- if you wouldn't mind sharing a couple of your thoughts on some of the ways that the annotation as proposed could be a little bit more comprehensive to your point?

I can only imagine what it must be. It probably reflects some of my own concerns, but I'd love to hear you just --

MS. SIMPSON: Yeah, no, and I mean, as you know, you have several different kind of annotations going on, but I assume you're talking about the macroalgae.

And I think on the whole, that that was a really good starting point as far as an interim.

You know, I do think that, as someone else raised earlier in their comments -- but, you know, there are some complexities to that that really do beg having details laid out on, you know, how to harvest, and yes, there are individual needs for different products.

But as a whole, the aquatic environment is just really struggling on so many levels.

And so, I think that, at least in the research we've been doing, kind of looking at, like with our Chinook sourcing standards and all

of that, that you do really have to go down to each level and kind of look at them holistically, and tie those together.

So I think that with the annotations, what I saw right now with macroalgae was a great starting point.

I think on the fish oil, I was a little concerned about the bycatch inclusion because just depending on the fishery that you're looking at, you can have, you know, some very highly managed and regulated fisheries that are very good at minimizing bycatch and monitoring that, and other areas that are less monitored.

You can kind of be incentivizing bycatch by allowing that in the inclusion on fish oil.

And I realize they're two separate, but again, they're all related, and I think that's where we've also come from, is that, you know, whether you're selling fish or seafood, or this is a crop input, it's all coming from the same place, and it's all interconnected.

So, these kind of initial steps I think were good ones, but it shouldn't be the end of what you're trying to do, which is bringing all of those together, and having a comprehensive organic, you know, aquatic standard.

MEMBER TURNER: Thanks, Aimee. That's --

CHAIRPERSON ELA: Any other -- all right, I just have one quick question, Aimee.

We don't have lots of time, but I mean, in terms of addressing climate change, obviously that's a huge topic that might equal or exceed the marine materials.

MS. SIMPSON: Yeah.

CHAIRPERSON ELA: How would you quickly propose that we start taking a cut at that?

MS. SIMPSON: Well, I think the best place to start is -- you know, what we've seen in trying to work on at like a state-level legislation, and what we're also seeing kind of at the federal level is, what we run into is that

a lot of people don't recognize that what organic has in its standards already is what they're trying to implement, and they're almost kind of trying to recreate the wheel, and they don't want to say organic for some reason.

So, I think that the work, you know, initially, is to really dig into the standards that are existing, and the regulations that already are emphasizing these concepts that people are now trying to redesign into new legislation, and say no, this is already here, and really identifying and kind of having an outline and recommendation that says here are the elements that are, you know, related to climate change that are in the existing standards, and really emphasizing that those are part of the organic practices, and having that kind of roadmap laid out by the NOSB evaluation and the NOP.

And then, also trying to maybe look at what we have existing through kind of the new lenses that are being applied as far as carbon,

you know, sequestration.

Is there? I know that's a big lift.

That's really complex too, and I totally hear you that that's a challenge, but can we also start to see how this would integrate with -- you know, and whatever side you're on, carbon markets that are really on the horizon, you know, how can we set organic up and the existing regulations to feed into that so that we don't have to recreate this wheel?

CHAIRPERSON ELA: Great. That helps. Thank you for your comments. We're going to move on.

MS. SIMPSON: Thank you.

CHAIRPERSON ELA: Next up is Amalie Lipstreu, then Harold Austin, and followed by Kiki Hubbard.

So Amalie, please go ahead and state your name and affiliation.

MS. LIPSTREU: Can you hear me okay?

CHAIRPERSON ELA: We can. Go ahead.

MS. LIPSTREU: Great, thank you. Good

afternoon, I'm Amalie Lipstreu, the policy director for the Ohio Ecological Food and Farm Association.

Thank you for the opportunity to share our thoughts in this virtual format.

We really appreciate the work of Jenny Tucker, Michelle Arsenault, and all of the NOP staff in keeping this meeting accessible to the stakeholders.

The topic of accessibility.

Let me just reiterate the repeated requests of our OEFFA farmers, that you adjust upcoming meeting dates by a couple of weeks each year to ensure that farmers of different types and locations can participate.

The focus of my comments is the NOSB work agenda in the role of organic agriculture in climate change.

We ask the board to request an update from the program on all previous recommendations that have met the criteria for advancement, but have not moved forward.

It's important for all organic stakeholders to understand why items with overwhelming support from the organic community are not being acted upon.

Secondly, in your role advising the program, please pay close attention to its peer review audits.

This is a crucial way to assess the health of the program and inform the work agenda.

Finally, in your research priority recommendations to the USDA, please emphasize that the department advance research into the role of certified organic agriculture and addressing climate change.

As you know, the organic standards require the implementation of soil fertility and crop nutrient management practices that maintain for improved soil health, things like crop rotations, cover cropping, and the application of plant mulches and animal manures.

The adoption of these practices by conventional farmers is widely celebrated, as it

should be.

However, research indicates that integrated systems of practices based on sound agroecological principle, such as organic agriculture, have the greatest potential to mitigate agricultural greenhouse gas emissions, the (audio interference) stabilize soil organic carbon, and attain the full measure of a system that builds long-term resilience, and provides market recognition of those practices.

And yet, when climate change is discussed, organic agriculture is rarely mentioned.

The research and field data are conclusive enough to warrant USDA making significant investments and educational outreach to promote the value of organic management systems as a way forward in dealing with this impending crisis.

Thank you.

CHAIRPERSON ELA: Thank you. Are there any questions?

(No audible response.)

CHAIRPERSON ELA: I'm not seeing any. I do appreciate your comments.

We are going to move on to Harold Austin, followed by Kiki Hubbard, and then Brian Ward.

Harold, go ahead.

MR. AUSTIN: Can you hear me okay?

CHAIRPERSON ELA: I can.

MR. AUSTIN: All right. Good morning everyone. My name's Harold Austin.

I'm a former member of the NOSB, and I'm the current chair of the Northwest Horticultural Council's Organic Subcommittee.

First, I'd like to thank each of the members of the NOSB and the NOP for your hard work and service to our organic community as a whole.

And to those members that are about to sunset off the board, I want to offer you a special heartfelt thank you for your service done and for the community over the past five years.

Enjoy your next five.

A couple key topics I'd like to provide oral comments on today, one, in the Crop Subcommittee, the list for inerts.

I cannot emphasize enough how important it is that you do not delist this critically important material listing from the National List.

As Jenny stated earlier, there is a proper procedure that needs to be followed.

The proper approach would have been to have moved forward with a separate proposal showing your intended path, and if that had passed when voted upon, then move forward with your motion to delist the list for inerts.

That would avoid any unintentional impact on the organic stakeholders reliant on this listing.

You didn't do that.

If this listing is delisted, it would make almost all of the passive pheromone dispensers and the materials used in them

unavailable for organic crop production.

The three major manufacturers of these materials have already stated to the Northwest Board Council that they would not be able to be ready for this listing to be delisted at this time.

We would essentially lose between 50 to 90 percent of organic tree fruit production across the U.S.

Now, having said that, I would urge the full board to move forward with a vote on a resolution, and this is an allowed process.

Stating for the public record that the NOSB is resolved in working with the NOP to adopt and implement the NOSB 2015 recommendation that was passed, and has yet to be acted upon.

I would also suggest that the Inerts Working Group be reconvened with new members of the EPA, the NOP, and the NOSB working together.

Finally, on that topic, both Emily Brown Rosen and Zea Sonnabend have offered their assistance. Take it.

Materials Subcommittee, the proposal on marine microalgae. I simply cannot support it as it's currently written.

I feel that this would create a lot of chaos that's not necessary in the organic industry as it's written right now, because it's written like nothing we've ever seen before.

I think it still needs to move forward. I think we need to bring it back to the subcommittee for discussion and further review.

Furthermore, the additional listing under 602 is fundamentally not necessary. It sets a very dangerous precedent for future reviews and listings.

This is an extreme overreach (audio interference) should be removed.

I do not support the Sanitizer Panel taking place outside of the normal two (audio interference). Thank you.

CHAIRPERSON ELA: Thank you, Harold. Are there questions from the board?

(No audible response.)

CHAIRPERSON ELA: I am not seeing any. Thank you, Harold, for your comments.

We appreciate you continuing to give us your thoughts even after you are, quote unquote, sunsetted from the board.

MR. AUSTIN: Thanks.

CHAIRPERSON ELA: We're going to move on to Kiki Hubbard, followed by Brian Ward, and then Douglas Deveaux.

Go ahead, Kiki. You're on.

MS. HUBBARD: Hi everyone. This is Kiki Hubbard. I'm the director of advocacy and communications for Organic Seed Alliance.

We are a mission-driven organization that works nationally to ensure that organic farmers have the seed they need to be successful.

I want to thank the NOP for making this fall meeting happen virtually once again given the challenging circumstances, and I'm hoping that everyone's staying well.

My comments that follow underscore the importance of keeping seed and plant breeding

issues at the forefront of the NOSB's work plan, as well as the NOP's priorities for implementation.

I'm going to briefly touch on two areas.

First off, OSA hopes to see the topic of excluded methods back on the agenda at the next NOSB meeting.

We know that web-based crop improvement methods have evolved rapidly, they continue to evolve rapidly, and have effectively outpaced regulations that oversee new forms of ag-bio technology.

Understanding and addressing new breeding techniques that may or may not align with organic standards is important in the context of excluded methods.

And this work is, of course, also important to providing clarity to a number of organic stakeholders, including farmers, seed growers, plant breeders, seed companies, as well as certifiers.

The good work that's already been accomplished by past NOSB members includes passing a decision-making framework in 2016 for evaluating whether a method should be excluded or not, and two, passing a number of proposals since then that update this framework with decisions that are associated with about a dozen methods.

There is still a need to make decisions on a handful of methods labeled as to be determined.

We are eager to see this framework evolve to our completeness, and we're looking forward to future opportunities to work with the subcommittee to ensure a strong decision-making process for excluded methods.

As an immediate next step, we encourage the NOP to adopt the recommendations that have passed to date, and again, to ensure that this topic is on the next NOSB agenda.

Lastly, we hope to see the organic seed requirements strengthen following the passage of two important proposals at past NOSB

meetings.

These proposals include an update to the organic seed regulation, as well as updates to the seed and planting stock guidance document.

Both of these proposals unanimously passed at the fall 2018 and spring 2019 meetings respectively, and they're now before the NOP, and we encourage their swift implementation to provide more clarity and consistent enforcement of the organic seed requirement.

As the organic industry and broader community works to increase the availability and diversity of organic seed, we believe strongly that policy must follow suit to ensure increased adoption in a measurable and reasonable way.

Please let us know how we can be of service to you moving forward, and I just want to thank you for your time and efforts.

CHAIRPERSON ELA: Thank you very much. Are there any questions from the board?

(No audible response.)

CHAIRPERSON ELA: Thank you. We're

going to move on. Next is Brian Ward, then followed by Douglas Deveaux, and John Martin.

Michelle, you said you didn't see Brian on the list?

MS. ARSENAULT: Yeah, I'm not seeing his name, or area code on the list, but he may be out there.

CHAIRPERSON ELA: Brian, if you're out, could you let us know?

(No audible response.)

CHAIRPERSON ELA: I am not hearing from him, so we will jump over.

If there's a technological issue, Brian, please let us know and we'll come back to you.

So, next up is Douglas Deveaux, John Martin, followed by Allen Philo.

Douglas, please go ahead and state your name and affiliation.

MS. ARSENAULT: I'm also not seeing Doug, Steve.

(Simultaneous speaking.)

CHAIRPERSON ELA: Okay, yep, you told me that.

MS. ARSENAULT: Yeah.

CHAIRPERSON ELA: What about John Martin?

MS. ARSENAULT: John's out there. I saw his name on the lists.

CHAIRPERSON ELA: Okay, John, we're going to put you up, followed by Allen Philo and then Daniel Hazen.

And I think we were going to have a break scheduled after Allen, but I think we'll continue for a little bit longer here until about half past the hour.

So, go ahead, John.

MR. MARTIN: Hello, I'm John Martin, president of BioStar Organics, LLC.

BioStar's a producer of two of the products specifically named in the petition, SuperSix liquid organic fertilizer.

I think it's important to note that in nature, ammonia and ammonium are naturally

occurring forms of nitrogen that are produced as organic material decomposes.

This process is part of the decomposition of all organic materials, including those organic materials that are in or applied to soils.

BioStar's an organic waste to energy and organic fertilizer company that was formed in 2009 with the mission of processing organic waste to produce renewable energy and organic fertilizer, while at the same time helping to eliminate environmental pollution and curb global climate change.

When organic waste is stored in environments that contain no oxygen, such as landfills and manure storage lagoons, the natural decomposition of the organic material produces methane, greenhouse gases.

It's 21 times more harmful to the environment than carbon dioxide, and also ammonia and ammonium.

BioStar collects organic waste, and

utilizing its technology, isolates the organic material and anaerobic digesters poured (audio interference) in the organic material is combined with water at a rate of eight to ten percent solids, and then, in an oxygen-free environment, is heated and mixed for 20 to 30 days.

During that time period, the organic material decomposes and methane gas is produced, which is then repurposed for use as renewable natural gas.

Also, during the digestion process, ammonia and ammonium are produced.

After digestion and removal of the methane gas, the remaining material, which is called effluent, and contains both macro and micro nutrients, including nitrogen, phosphorus, potassium, carbon, and sulfur, is cleaned for disposal.

BioStar's technology filters and removes all the suspended solids (audio interference) effluent.

The nutrient-rich material is utilized

in composting, thereby adding needed nutrients to a composting operation.

The remaining liquid only contains dissolved solids, including nitrogen, ammonium, and potassium.

At this point, the BioStar technology removes water in order to concentrate those remaining nutrients.

During the process, there is no extraction of nitrogen or ammonium.

The water removed process of reverse osmosis membrane, where a clean water is produced.

Our development of this fertilizer and technology goes back over a decade now to 2009.

We first received an OMRI certificate on this project in 2012, with commercial scale production beginning in 2017.

During that time, on multiple occasions, our manufacturing processes and facilities have been inspected by OMRI, CBFA, and WSPA.

We have welcomed this level of scrutiny, as no one in the industry is more concerned about the integrity of our products than us, their manufacturers.

During the past decade, we have worked with these MROs and have shown (audio interference) process (audio interference) considered synthetic.

NOP synthetic versus non-synthetic (audio interference).

CHAIRPERSON ELA: All right, thank you. Are there questions from the board?

SECRETARY BUIE: I have one question.

CHAIRPERSON ELA: So, yes, go ahead. It's --

SECRETARY BUIE: Yeah. This is Jesse. Oh, one of the other stakeholders mentioned the concern about fraud in this production process.

Can you comment on that? Are you aware of that?

MR. MARTIN: Yes, sir. In fact, we addressed that last year in an investigation by

OMRI.

I guess sometime in the past, there was some fraudulent use of synthetic nitrogen in some organic fertilizers in the state of California, and there was some concern that we couldn't tell the difference between synthetic and non-synthetic ammonia.

The fact is, it's a very simple test that is performed.

The test costs about $10, and there's an N isotope test that can differentiate between (audio interference) synthetic.

That's the process that we have instituted, and (audio interference) more about that from our other speakers.

SECRETARY BUIE: Thank you.

CHAIRPERSON ELA: I have a question, as well. And I'm just trying to figure out how to word it.

Well, we have had some issues in the past with anaerobic digestion, looking at some of the materials coming out of those, of whether

there were any prohibited methods used in terms of what helped create that digestion, as well as all the input going to the digester.

Could you speak to that a little bit?

MR. MARTIN: Sure. So, in our process -- and obviously, we've been inspected multiple times since 2012 when we first had our product listed.

In the ingredient list, it states specifically what we use as ingredients, and it's all organic material.

Manures from either chickens, hogs, cows, turkeys, or food waste that's pre- (audio interference).

It's pre-consumer food waste. Nothing that would be taken from a garbage bag.

And so, that material is tested each day before it's inserted into the process of digestion.

We have what's called a substrate receiving tank, wherein we unload all the material on a daily basis, test it to make sure

there's nothing in it that would -- two specific things that we're concerned about, we're concerned about something in it that would be harmful to the bacteria in the digester itself, and number two, something that would be considered non-organic.

So, we have safeguards in place to ensure that the material that we are digesting is in fact organic material.

CHAIRPERSON ELA: Okay. Thank you. Any other questions?

(No audible response.)

CHAIRPERSON ELA: All right, we are going to move on to Allen Philo.

After that, we have Daniel Hazen, and then Tina Jensen Augustine.

We will probably take a break at half past the hour, so we'll see how far we get here.

So Allen, please go ahead and state your name and affiliation.

MR. PHILO: My name is Allen Philo. I am the vice president of business development for

BioStar Organics.

I've been involved in organic agriculture for over a decade, first working at Gardens of Eagan in Minnesota with Linda Halley producing organic vegetables, then at Midwestern BioAg with Gary Zimmer, where I designed their organic fertility program for vegetable producers and worked with producers on improving their fertility and production methods.

For the past four years, I have worked for BioStar Organics.

During this time, I have been asked to speak on vegetable fertility and soil health at organic farming conferences, including MOSES in both 2015 and 2017, and at OEFFA in 2018.

I also hold a bachelor's degree in soil science from the University of Wisconsin, Madison, granted in 2016.

I would like to briefly address for you today some aspects of our product, which is under question due to the petition regarding ammonia extracts, regarding both its production

process and its physical characteristics, in order to help you better understand how this product complies with both the tenets and the spirit of the National Organic Program.

In particular, I would first like to address a question from the discussion document about the difficulty in distinguishing the products presently being produced from synthetically-manufactured nitrogen.

Our products are easy to distinguish in color, odor, and chemical composition.

These characteristics are a result of SuperSix being a concentrate and not an extraction.

To explain this, I am going to ask two questions that you can answer silently about the relationship of our product to the parent materials it is derived from, namely manure and other organic substrates.

First, let me pause (audio interference) it.

If we are applying manure or compost

to a field, which for most farmers, is the base of their organic fertility program, the first question is, if I were to separate the liquid and solid portion of manure or compost, does that change the manure or the compost to a form violating the NOP guidelines?

The second question is, if I were to remove water from the liquid portion of the manure or compost, would that change the manure or the compost to a form violating the NOP guidelines?

The answer to both of these questions is no.

This is, in essence, our production method.

It is a method which separates the liquid and solid portions of the organic substrates, and then removes water.

The product we end up with has the same ratios of primary, secondary, and trace elements present in them, as in the liquid portion of the starting materials.

This includes a high level of carbons in the form of humic and fulvic acids to the point where our products contain three times more carbon than they do nitrogen.

This resulting product is gentle in the soil environment, and especially when used as part of an organic program, can actually foster and even increase biological activity in the soil system.

A detailed explanation of this is in our written comments.

Again, these same characteristics that make the product gentle on soils also make the product easy to distinguish from synthetic forms of nitrogen.

This, together with the tracking program that Dan Hazen will describe, ensures that fraud is of small concern with our products in particular.

We cannot speak about other manufacturing techniques, however, that may produce other products more similar to synthetic

forms by utilizing stripping technologies.

We thank you for the opportunity to provide comments on this petition, and I'm happy to answer any questions you have regarding our comments and products in the future.

Thank you.

CHAIRPERSON ELA: Are there questions from the board?

(No audible response.)

CHAIRPERSON ELA: Thank you. I'm not seeing any questions, so we will move on to Daniel Hazen.

After Daniel, we have Tina Jensen Augustine, and then Jennifer Taylor.

I am guessing we'll take a break after Tina's comments. So go ahead, Daniel.

(No audible response.)

CHAIRPERSON ELA: Daniel, we're not hearing you. You may be on mute.

(No audible response.)

CHAIRPERSON ELA: Still not hearing you.

MS. ARSENAULT: I just --

MR. HAZEN: How about now?

MS. ARSENAULT: There we go.

CHAIRPERSON ELA: That's better, yep. Go ahead, Daniel.

MR. HAZEN: Good to go? Okay, thank you.

CHAIRPERSON ELA: Yes, state your name and affiliation.

MR. HAZEN: Greetings. Thank you for the opportunity to address the two organics ammonia petition.

My name is Dan Hazen and I'm president of Perfect Blend Organics.

We're the largest manufacturer of organic fertilizer here in Washington state, and have been producing innovative products since 2001.

The petition technology has been registered since 2012, and it follows the NOP production tree on the non-synthetic side.

It's 100 percent organic, utilizing

the same ammoniacal nitrogen (audio interference) that is in our dried chicken litter products.

The product produced is a carbon-based liquid, and is not harmful to the soil. It was developed with BioStar.

It's a manure liquid concentration method.

We believe this method is a solution to the huge environmental manure issues facing our industry today.

The product has been shipped across the U.S. and to more than a dozen states for the past three years, and we've experienced zero cases of potential fraud.

I agree, fraud in organic should be of concern for all of us, but I also believe the NOP should be commended for the checks and balances they've implemented to protect the industry, specifically NOP 5012 that governs the approval of liquid fertilizers combined with inspections of both manufacturing facilities and regular

(audio interference) on farm certifications.

We have been inspected eight times in the past 24 months for scheduled, for unannounced, and have passed all eight. We have competent inspectors.

Also, UC Davis Isotope Lab has a simple and cost-effective test that costs $11 and easily verifies the liquid as an organic.

Perfect Blend established a verification program with (audio interference) CDFA.

All production has a specific log, lot numbers, and inventoried samples.

If a certifier pulled a sample from the field and the isotope analysis appears to have a synthetic component, the certifying agency will request a sample from us, receive it with that specific lot number to compare the test.

This process is no different than monitoring any other liquid product currently in the marketplace. It works.

We believe in integrity of the organic

community, and our ability to police together.

BioStar and Perfect Blend, we have been open honest partners, and have worked with OMRI and the CDFA in full transparency.

Question for the committee.

Did True inform this committee that from 2012 to 2017 they had a five year exclusive marketing agreement with BioStar for the same ammonia product that did not get produced on a commercial scale?

Is this a disingenuous attempt by True to eliminate competition and potentially represent an improper use of the NOSB?

The petition received 40 comments. Nine were in support, 31 requested the petition be denied, and the product remain listed.

We respectfully ask the petition be rejected. Thank you.

CHAIRPERSON ELA: Are there questions from the board?

(No audible response.)

CHAIRPERSON ELA: I have a question.

In terms of the bacteria that are used in the digestion, are those naturally occurring bacteria, or are they engineered?

MR. HAZEN: In our particular process, there's no bacteria interjected into the system at all.

CHAIRPERSON ELA: So, there's bacteria that's already occurring in the manures and product (audio interference)?

(Simultaneous speaking.)

MR. HAZEN: Correct.

CHAIRPERSON ELA: And is that true of BioStar, as well?

MR. HAZEN: Well, BioStar has different types of processes.

Our process is slightly different in that our product is a manure-based product, whereas in some cases, theirs is a digestion process.

So, you'd have to ask that of John Martin, who might still be on.

PARTICIPANT: So, John is still on.

CHAIRPERSON ELA: Yeah, I should've asked him.

PARTICIPANT: John's on, but I --

CHAIRPERSON ELA: We're --

PARTICIPANT: I can answer that.

CHAIRPERSON ELA: So John, sorry. I know, I should've asked that when you were there.

Well, if you could submit that to us, and like submit it to Michelle, that would be greatly appreciated, but we can't really go back.

So, but yeah, if you could submit the answer to that question to Michelle, that would be wonderful.

I have a question from Mindee.

MR. HAZEN: Hi, Mindee.

MEMBER JEFFERY: Hi, thank you.

I just really appreciate the level of detail that you're giving in your comments about the process of this particular material, and I also just want to appreciate the work that goes on in California, having sat on the California Organic Products Advisory Committee for five

years.

I really appreciate the CDFA, and the issues that are raised inside of organic integrity (audio interference), and just note that I appreciate the attention towards democracy in this petition in that I want to hear all of this information as we work through what's best for organic from the entire community's perspective, and forming consensus is really important to me.

So, thank you for all the information.

MR. HAZEN: Yeah. And I appreciate the comment, and being, as I said, in the industry since 2001, and creating innovative products, one of the concerns that I would have is that, you know, American agriculture -- and it's been my entire life -- I'm just so proud of the innovation that we have in this country, and to be in a situation to whereby, what, 2050, we got to feed 10,000,000,000 people?

It's not going to be about opening more arable land, it's going to be about

producing a more nutrient dense food production.

And this product does exactly that, and it also eliminates potentially the huge manure issue that we have across this country.

MEMBER JEFFERY: Yeah, that's a really important highlight. Thank you.

CHAIRPERSON ELA: It looks like Emily has a question.

MEMBER OAKLEY: I think he sort of addressed it.

I wanted him to elaborate more on how he sees this as a solution to manure issues across the industry?

MR. HAZEN: Yeah, I can maybe (audio interference) a little bit on that.

When you look at the issues in our waterways, you know, of the phosphate issues, this product basically has no phosphates.

We can basically remove the phosphates through the use of ultrafilters, and think about how that would advance Ag, and how that would clean up our environment.

I think the more important thing is is when you start to hear folks -- and I would challenge the committee on this -- there's a lot of opinions about whether or not ammonia is good for the soil or bad for the soil.

This is a carbon-based product.

It's not something that you see on the commercial or conventional side to where there's no carbon components at all.

So, it actually is very helpful. I would really point to -- I think the speaker is 74, 75 slot.

His name's Dr. Jerry Hatfield. Jerry's a soil health expert.

He's been with the Soil Tilth Lab, the USDA for 34 plus years as laboratory director. He's researched products like this. He fully understands the soil.

So, I would encourage the committee to reach out to an individual like that to really get a clear, full understanding of how ammonia does work in the soil.

I'm not an agronomist, okay, but certainly we go to folks like him to make sure that whatever we're doing does have a sustainable component.

And again, we've been in this thing for 19 years, and we like to think that we're one of the leaders from an innovative perspective.

CHAIRPERSON ELA: Dave, it looks like you have a question.

MEMBER MORTENSEN: Yes. Thank you, Daniel.

Did I understand correctly, one of your colleagues indicated that it's a carbon-based source of nitrogen -- and those are words you used as well a couple of times.

And if I understood correctly, the carbon and nitrogen ratio is three to one. Was that accurate?

MR. HAZEN: It'll vary. It can be at times up to five to one.

Understand what we're starting with is the particulate, it's coming through the

airstream that's basically introduced into water.

It's like a washing machine.

It can recirculate 100 gallons a minute, and we're introducing fresh water while pulling the concentrated wash water from the vessel and that remaining particulates, and we filter it through the use of the centrifuge, and then we evaporate it off concentrated up to six percent.

But yes, it does have a carbon component, and that goes back to the whole testing side of it, that this product is easily tested to be considered, you know, like the difference between a conventional ammoniacal nitrogen and an organic ammoniacal nitrogen.

MEMBER MORTENSEN: Yeah.

And I guess I would say that one of the concerns the subcommittee had is we're looking at a system where we're considering other sources of nitrogen, as well.

And so, just for example, like pea straw, or winter rye, or alfalfa, or any number

of cover crops that would be widely used in part of an organic production systems plan.

The carbon and nitrogen ratios of those things in contrast ammonia extracts, which were three to one, are more in the ballpark of 30 to 40 to 50 to one carbon to nitrogen.

And so --

MR. HAZEN: So ---

MEMBER MORTENSEN: Maybe just to finish, you know, from the point of view of soil health, and, you know, recycling and creating and capturing nitrogen through the systems plan, we continue to have concern about -- while you refer to it as carbon-based, it's a highly concentrated form of liquid nitrogen that's being applied in this case.

MR. HAZEN: So, to answer your question, if I may, I think one of the things sometimes folks don't do is give our organic growers enough credit. They're very diverse.

So, in this particular case, we have growers who actually take only 25 percent of this

type of a product.

They blend it in with an amino acid, okay, which is much, much higher on a carbon to nitrogen ratio.

And so, they're basically applying a 75 percent amino acid along with a 25 percent mixture of this particular product.

But this product is basically just one more tool that we're putting in the growers' toolbox to help them grow a crop to its full genetic potential.

I think that a lot of times where people would become concerned is, okay, they're going to go 100 percent with this particular type of product.

The organic growers are very, very sophisticated. They're not going to do something like that.

In fact, we have folks to where they might use so many gallons per acre, and then they open up their beds in the fall, and they're throwing down a ton per acre of a granular

fertilizer that we produced.

And so, they all take a very, very holistic approach.

And again, this is just one more tool in the growers' toolbox. We're just a small cog in a very, very big wheel.

MEMBER MORTENSEN: Thanks.

CHAIRPERSON ELA: Rick has a question.

(No audible response.)

CHAIRPERSON ELA: Go ahead, Rick. If you are going ahead, you're on mute.

(No audible response.)

CHAIRPERSON ELA: Ah, we're still not hearing you, Rick.

MEMBER GREENWOOD: How's that?

CHAIRPERSON ELA: There you are.

MEMBER GREENWOOD: Okay, great. Yeah, I just had a question. You had mentioned in your process that you add fresh water to your system.

What happens to the liquid? I assume eventually it goes somewhere?

I'm just interested in how you handle

wastewater, if that's part of the process, and where that goes, in terms of environmental --

MR. HAZEN: So, there's literally not a single ounce of wastewater, so imagine it kind of being a machine that's removing particulate, okay?

And then for that particulate, the ammonia exists as well, and then it goes into a centrifuge, and the centrifuge then removes the balance of the particulate.

And at that point in time, it goes through an evaporator, and it's a vacuum evaporator.

That way, it doesn't off-gas the ammonia component of the liquid product.

And then on the backside as it's being boiled off, you have a condensate. Okay?

And that condensate is basically fresh water, and so that condensate, that's the portion that goes back into the -- we'll call it the particulate remover piece of equipment.

And so, it's just a full system.

When you go and you look at -- and John, maybe he can answer this or provide this data -- but when you go and you start to look to look at a product being removed, and, you know, whether it be hog lagoons, or other dairy digester, manure digesters, they basically will produce -- and I forget how many gallons of the SuperSix -- but the reality of it is is that they're removing all of the phosphates, and then they're returning hundreds of thousands of gallons of fresh water that is of drinking quality that can be either discharged back into the dairy or back into the streams.

And they have the permits to demonstrate that.

So, it truly is a solution to, again, the problems that our organic dairy industry is facing, and literally just a manure issue --

(Simultaneous speaking.)

MEMBER GREENWOOD: Okay, no, yeah. Thank you.

CHAIRPERSON ELA: All right. Thank

you very much, Daniel. I think we --

MR. HAZEN: Thank you so much for your time.

CHAIRPERSON ELA: Yep. I think we're going to take a ten minute break now.

We'll come back at 46 minutes after the hour, and we'll head on to the next set of speakers.

Just so you know, when we come back, Tina Jensen Augustine will be up, followed by Jennifer Taylor, and then Dave Carter.

So, take a ten minute break, and then we'll be right back. Thank you, everybody.

(Whereupon, the above-entitled matter went off the record at 1:38 p.m. and resumed at 1:48 p.m.)

CHAIRPERSON ELA: Hello everybody. We're going to get restarted here again after our break.

So, Michelle, do you have anything to add before we get started again?

MS. ARSENAULT: Nope, I think we're

all set. Thanks.

CHAIRPERSON ELA: Okay. We're going to start off with Tina Jensen Augustine, followed by Jennifer Taylor, and then Dave Carter.

Tina, are you on the line? And if so, state your name and affiliation, and you can start with your comment.

MS. JENSEN AUGUSTINE: Okay, thank you.

My name is Tina Jensen Augustine, and I'm with the Organic Materials Review Institute, or OMRI.

OMRI's an accredited, third-party material review organization.

I'd like to comment today on the Crops Subcommittee's proposal on paper planting aids, and I'd also like to thank the subcommittee for their work on this issue.

Paper planting aids are an important tool for producers, and potentially very tricky for material reviewers.

OMRI generally supports the proposed

definition and annotation for paper planting aids, but we request some clarifications and revisions, which are detailed in OMRI's written comments.

Specifically, OMRI has questions about the definition requiring qualified personnel from a third-party to verify the 80 percent bio-based content, either by laboratory testing or composition review.

The procedural aspects built into this part of the definition are not totally clear who is a qualified third-party reviewer, and what are the criteria for composition review?

These pieces also don't really belong in the definition.

The focus should be on the 80 percent bio-based content.

Currently, the USDA runs the BioPreferred program, which assesses the bio-based content of products using the same test methods identified in the proposed definition.

OMRI supports requiring testing as a

clear way of determining bio-based content, and does not see the need to specify qualified third-party review in the definition, as this standard applies to all the (audio interference) material review.

OMRI also sees an opportunity to improve upon the proposed definition.

The other ingredients besides the cellulose-based paper in these products have been a concern to organic stakeholders.

A requirement for 80 percent bio-based content addresses those concerns to some extent.

However, 20 percent of these products' composition is open to non-cellulose, non-bio-based components.

OMRI suggests that limiting non-cellulose-based additives to strengtheners, reinforcement fibers, adhesives, and binders as described in the 2019 TR.

We go further in preventing the inclusion of unintended additives that are not consistent with organic principles.

Lastly, the proposed annotation for paper planting aids makes provision for the addition of (audio interference) pesticides for nutrients.

These are distinct from the uses the paper planting aids were petitioned for, and their inclusion would make the review and allowance to such materials unnecessarily complex.

Pesticides have their own specific review criteria around inert ingredients, and often require EPA registration.

If planting aids containing pesticides are to be reviewed as pesticides, would they still fall under the allowance of paper planting aids on the National List?

OMRI focuses its communication of allowed inputs around the use or uses for which they are allowed.

Combining planting aids with pesticides or nutrients makes allowances less clear.

This approach also contradicts the position taken in NOP Policy Memo 13-3.

The memo states that the use of an algaecide, disinfectant, or sanitizer -- I'll just stop there. Thank you.

CHAIRPERSON ELA: Thank you very much. Are there questions from the board? Oh, Mindee has a question. Go ahead, Mindee.

(No audible response.)

CHAIRPERSON ELA: Mindee, we're not hearing you.

MEMBER JEFFERY: Sorry. Can you hear me now?

CHAIRPERSON ELA: We can.

MEMBER JEFFERY: Tina --

MS. JENSEN AUGUSTINE: Hi Mindee.

MEMBER JEFFERY: Thank you so much for your comments, and for all the work that you do, and OMRI does in the organic world.

In the sense of supporting the paper planting aids, but having questions about definitions, would your suggestion be that we

move forward with the proposal and continue to do work, or go back to subcommittee and work on the definitions in the sense of making progress on this material?

MS. JENSEN AUGUSTINE: That's a great question.

I'm not totally familiar with the proceedings and the steps that the subcommittee takes in terms of moving the proposal forward.

I would like to see this proposal move forward, but with some of these revisions that we've outlined.

I think that getting it right before, you know, and certainly before it gets put into regulation is going to be really important for both producers and material reviewers.

CHAIRPERSON ELA: I have a question.

And I'm kind of laughing because in the spring, when we had it up for discussion, a lot of people said, well, don't just use the test.

They did ask for qualified reviewers,

so we sort of responded to that one with a couple other things.

MS. JENSEN AUGUSTINE: Yeah.

CHAIRPERSON ELA: But what, I guess adding, you know, the 20 percent in that you said we --and I can't come up with the language right off my head, but the strengtheners, binders, et cetera, what other things besides those would you be worried that might get put into those paper pots?

It seemed like, to me, that list actually kind of encompassed almost everything.

MS. JENSEN AUGUSTINE: That list does encompass almost everything that is currently put into those.

I think what we would be concerned might be other things, could be plastic coatings, or colorants, or what we have seen, as the product manufacturers are very innovative, and, you know, they might -- it's hard to predict what else someone might put in there, but I think that limiting the function of those additives to the

ones that have already been identified will help kind of keep these products within the realm of what the NOSB has reviewed and approved.

CHAIRPERSON ELA: Great. Yeah, thank you, and I appreciate your comments on the nutrients and pesticides.

That's another one we're kind of caught (audio interference) in between because we had a number of groups ask us to specifically put that in the last comment period, so I'm not sure which is the best way to go.

But thank you for your comments. We do appreciate it.

MS. JENSEN AUGUSTINE: Thanks, Steve. Yep.

CHAIRPERSON ELA: We're going to move on to Jennifer Taylor, followed by Dave Carter, and then Jaydee Hanson.

Jennifer, you are up.

MS. TAYLOR: Thank you. Can you hear me?

CHAIRPERSON ELA: We can hear you. Go

ahead.

MS. TAYLOR: Okay, great. All right. Good afternoon. Has my time started?

CHAIRPERSON ELA: It has. Go ahead, Jennifer.

MS. TAYLOR: Good afternoon. I'm Jennifer Taylor, an organic small farmer in Georgia and associate professor at Florida Agricultural and Mechanical University.

I am here today representing IFOAM North America, a regional body of the IFOAM Organics International.

IFOAM has members in over 100 countries and territories with over 700 affiliate members worldwide.

Our work builds capacity to facilitate the transition of farmers to organic agriculture.

It raises awareness of the needs for sustainable production and consumption, and advocates for a policy environment conducive to agroecological farming practices, organic farming systems practices, and sustainable development.

As National Organic Standards Board members, you have an opportunity through your great service to be good organic stewards of organic agriculture.

I have served on the National Organic Standards Board, and I know how difficult and challenging your work will be.

You may have an impact on millions of lives in the United States and all over the world, potentially for generations to come.

It is important then to pause and reflect on the bigger organic picture, and understand the context of our vital work.

The IFOAM principles of organic agriculture, health, ecology, care, and fairness are essential for the organic good, well-being, and quality of life.

These principles form the foundation, our root of organic agriculture, and the standards.

The standards should be established not only for the economic benefits to organic

farmers, agribusinesses, and organic marketplaces, but also to support well-being and health of our environments, building healthy soils, and healthy plants, and healthy animals for the health of consumers, and well-being and fairness to local, national, and global communities.

Access to healthy organic foods and the benefits of organic farming systems is for everyone.

IFOAM holds that inclusion and social justice are an essential part of organic capacity building, and should be essential factor when promoting organic growth.

As important as the standards are, the standards can only do so much.

Organic agriculture needs targeted participatory education, hands-on training, and technical assistance on organic farming systems for Black, indigenous farmers, and farmers of color and their communities.

For disadvantaged farmers, for under-

served small farm populations and their communities.

Small-scale organic farmers hold a vital role in our communities as resources for fresh, local, seasonal, organic produce.

We ask the National Organic Standards Board to recommend and promote participatory capacity building strategies on organic farming systems and well-being to support and enable the thriving participation and organic livelihoods of Black, indigenous farmers and farmers of color, and their communities.

Socially disadvantaged --

CHAIRPERSON ELA: Jennifer?

MS. TAYLOR: Yes?

CHAIRPERSON ELA: I'm going to have to step in. Your time is up.

MS. TAYLOR: Okay, thank you.

CHAIRPERSON ELA: But we do appreciate your comments, and it looks like Emily has a question for you.

MS. TAYLOR: Great. Hi, Emily.

MEMBER OAKLEY: Hi, Jennifer. And I know we're not supposed to do this, but this isn't a question.

I just wanted to thank you sincerely for those comments, and I hope this can also be taken into consideration for future board appointments.

MS. TAYLOR: Thank you.

CHAIRPERSON ELA: Dave also has a question for you, Jennifer.

MS. TAYLOR: Hi, Dave.

CHAIRPERSON ELA: Dave, you are on mute.

MEMBER MORTENSEN: Hello, Jennifer. I also wanted to thank you for being reminded of this incredibly important frame of thinking about organic agriculture and access to food.

I also was really intrigued to hear you calling for a more participatory model, and it has me thinking about things that could be incorporated in the research priorities.

Thank you.

MS. TAYLOR: Thank you so much.

CHAIRPERSON ELA: Jennifer, I have a question for you before we move on.

How do you think the NOSB -- what could we do to increase diversity and, you know, really try and address some of the issues you just talked about?

MS. TAYLOR: Oh, I think it's really important that we purposely target our Black, indigenous farmers of colors, under-served small farm population, and providing participatory capacity building on organic farming systems, and well-being strategies, because by providing this type of education, and training, and hands-on assistance, you are not only improving the health and the benefits of organic agriculture to the people, but you're also sharing in the access and promoting outreach -- you'd want to call it -- to other communities outside of our own communities, and to other neighborhoods outside of their own.

So, it becomes an important strategy for us to use in order that the benefits and the

organic movement gain access outside of our own communities.

CHAIRPERSON ELA: Great. Thank you.

MS. TAYLOR: Thank you.

CHAIRPERSON ELA: Thank you for those thoughts, and I hope we can continue as a board to work with you.

I know you've given lots of input to continue to promote exactly those things.

MS. TAYLOR: Yes. We (audio interference) happy to work with you. Thank you.

CHAIRPERSON ELA: Great. We're going to move on to Dave Carter, followed by Jaydee Hanson, and then Meagan Collins.

Dave, please go ahead.

MR. CARTER: Mr. Chair, members of the board, I'm Dave Carter, former chair of this board, a bison rancher, and principal of Crystal Springs Consulting.

I'm here today on behalf of Merck Animal Care to support approval of fenbendazole as an emergency treatment in organic laying hens

and replacements.

More than a decade ago, this board recommended approval of fenbendazole as an emergency treatment in organic dairy cattle based upon clear evidence that fenbendazole addresses emergency infestations without harming beneficial insects or damaging the health of the soil and water.

This allowed for the removal from the National List of another parasiticide that did not have these attributes.

Dairy farmers are not alone in struggling with internal parasites.

Poultry producers have struggled as well, and those struggles are increasing as organic birds spend more time on soil.

I fully support the organic requirements that synthetic parasiticides be allowed only in the absence of viable natural alternatives, and only when practices such as pasture management and species selection do not succeed.

As shown by scientific literature and by several comments filed by organic egg producers, a viable natural alternative control major (audio interference) for internal parasites has not yet been identified.

There are also misconceptions on how effective some preventative practices can be for poultry.

One is the two square foot per bird recommendation.

Space per bird is based on animal welfare, and not parasite control.

Conditions conducive to parasites vary greatly from region to region and season to season, based upon moisture, temperature, and soil conditions.

Unusual weather events can increase the presence of these parasites.

Producers of ruminants can manage parasite exposure by utilizing practices to keep their animals from grazing close to the soil, but that's not an option for pastured poultry.

Chickens get their beaks right down into the dirt as they feed on worms and grubs.

This increases their exposure to internal parasites.

Without an alternative for emergencies, parasite outbreaks intensify, and birds suffer and die.

This is the antithesis of humane husbandry expectations that consumers have for organic.

Two other issues are important. One is labeling.

Some commenters have said that if fenbendazole is approved for organic layers (audio interference), there will be egg carton labels that are USDA organic without the use of synthetic parasiticides.

Organic dairy producers have used synthetic parasiticides in emergency situations since October 2002, and I have yet to see a milk carton with such a label.

The others have potential for organic

spent layers treated with fenbendazole for being utilized to (audio interference).

The protocols in place for organic dairy and (audio interference) animals would apply to spent layers, and in reality, very few spent layers end up in the human food market.

Organic growers are dedicated to bringing to the market high quality products that come from healthy, humanely raised animals.

Fenbendazole will help organic egg producers live up to that ideal. Thank you.

CHAIRPERSON ELA: Very well-timed, Dave. Let's --

MR. CARTER: Yeah, you know, the former chair used to give out little awards if you came in on time.

CHAIRPERSON ELA: Well, I'll work on that. We'll see. There's two candidates in the running right now, so.

It looks like Sue has a question for you.

(No audible response.)

CHAIRPERSON ELA: Sue, you're still on mute.

MEMBER BAIRD: Ah, is that better?

CHAIRPERSON ELA: There we go. Go ahead.

MEMBER BAIRD: Okay. I said thank you for your comments and being a past chair of the board.

And it says in your comments that you actually assisted development of the petition for organic dairy cattle.

Have you been involved with posting of birds to see what the gut looks like when it is infested with the worm populations?

MR. CARTER: Well, I've been working with some of the folks in Merck, who have shown that, and I don't want to have a spoiler alert here, but Blayne Mozisek, who will be speaking here in just a bit, does have some indications.

It's not pretty. I mean, the suffering that the birds go through when they're infested with these parasites is pretty severe

and inhumane.

MEMBER BAIRD: Right. My degree, master's in poultry diseases -- and we posted a lot of birds, and I will say that their gut is horrible looking.

Bloody, everywhere. So, do conventional poultry operations use fenbendazole?

MR. CARTER: Yes. They do use fenbendazole. That does not have a withdrawal period for conventional agriculture.

And of course, fenbendazole has been around for ruminants for many years, and then more recently has been approved for poultry.

But, you know, the reason that I worked on the petition originally for fenbendazole years ago was because what was on the National List originally was so detrimental to dung beetles and earth worms, and here was fenbendazole as something that did not have those impacts.

To me, it was a no-brainer to put one on and take one off.

MEMBER BAIRD: Correct. The TR seemed to indicate there could be damage for the dung beetles and things, though.

MR. CARTER: Well, it's less than. Nothing is completely safe.

CHAIRPERSON ELA: Dave? Dave, could you speak up a little bit? You're a little bit faint.

MR. CARTER: I'm a little bit faint?

CHAIRPERSON ELA: Yeah, we can hear you, but not super well, so if you could just speak a little louder and go ahead and answer the question.

MR. CARTER: Okay. No, the scientific literature has shown that yeah, there is some impact, but in terms of maintaining the life cycle of the dung beetles, the fenbendazole is benign.

MEMBER BAIRD: Okay.

MR. CARTER: And Blayne Mozisek is actually going to address some of the issues that are in the technical review.

MEMBER BAIRD: All right. Thank you.

CHAIRPERSON ELA: Dan, you have a question.

MEMBER SEITZ: So, one thing that concerns me about this proposal is that in the case of a flock of hens, my understanding is that you would dose the entire flock prophylactically, and the comparison you're making is to grazing cattle, where if you identified an individual cow that had an issue, you could dose that individual cow with fenbendazole.

So, I'm not seeing the comparison between dosing an entire flock of laying hens and treating individual cows as being an apt comparisons.

That's one thing I'd like you to address, the difference there of prophylactically applying this.

And then the other is, I've spoken to many egg producers who supply our local co-op here, and none of them have ever even considered using this.

Some didn't ever hear about it, and have not had this problem.

So I'm wondering why it is that you on one hand are seeing a big problem here, and on the other hand, in talking to producers, they don't see this as a problem at all, and would actually be concerned with this use.

MR. CARTER: So, two questions there. I'll take the last one first.

Again, you know, the existence of parasites and the exposure to them, as I said in my comments, varies from region to region and season to season, and if you have warm wet weather events happen, then they increase, and the like.

So, you know, if you look at the written comments, there were several comments that were filed from producers who are experiencing some problems, and in fact, one who said that they're converting back to conventional.

In terms of flocks versus individual

animals, when you have parasites, that an outbreak occurs in a flock, particularly an emergency level, a high level, it sweeps through the flock.

It's not just isolated.

If you have just a few isolated birds that has some existence of parasites, that does not constitute an emergency.

An emergency would be where you'd have the widespread exposure.

And I don't mean to be putting all this pressure on Blayne who will be speaking here in just a bit, but they actually did some surveys of growers this last summer and have some information to share on that.

CHAIRPERSON ELA: Asa has a question.

MEMBER BRADMAN: Yeah, I just wanted to follow up.

You used the word withdrawal period, and I just want to see if you would comment on the use of a withdrawal period and the relevance to this material in poultry?

MR. CARTER: I would say that you would use the same standard for basing a withdrawal period as you did for the use of it in organic dairy.

The FDA has looked at this pretty thoroughly and has a pretty sound, scientific basis for listing the withdrawal period or lack thereof that they have for this material.

MEMBER BRADMAN: Okay, thank you.

CHAIRPERSON ELA: Thank you very much, Dave, and can you give me any advice of how to get out of the chairmanship?

MR. CARTER: Well, it's not a life sentence, Steve, so yeah. But --

CHAIRPERSON ELA: All right.

MR. CARTER: So, I'll give you some --

CHAIRPERSON ELA: I'll call you privately on that.

MR. CARTER: I'll give you advice on that, you give me advice on how to stay out of the forest fires that are in this area. Yeah.

CHAIRPERSON ELA: Fair enough. Sounds

good. Well, thank you.

We're going to move on to Jaydee Hanson, and then Meagan Collins, and then Blayne Mozisek.

Jaydee, you're up. Go ahead.

MR. HANSON: Thank you, and good afternoon.

I'm Jaydee Hanson, policy director for the Center for Food Safety.

We thank the members of the NOSB for your very extensive work.

I want to comment quickly just on three things.

One, excluded methods.

The center urges the NOSB to ensure that excluded methods are kept out of organic production, and so, move forward in its evaluation of the remaining new genetic techniques with urgency using the process and the criteria you laid out in 2016.

On marine macroalgae as a crop fertility input, Section 205.602 lists non-

synthetic substances that should be prohibited in organic crop production.

The Center for Food Safety recommends the annotations that specify the parameters for harvest of marine algae so that some marine algae could be used.

These four harvest parameters all attempt to preserve the ecological integrity of marine ecosystems.

The first would prohibit harvest in conservation areas, and other areas identified as important or high value habitats.

Second would prohibit harvest methods like bottom trawling and other harvest methods that prevent reproduction and diminish the regeneration of natural populations.

Third, repeat harvest should be prohibited until biomass and the architecture that is the density and height of the targeted species approach is that of undisturbed natural stance (audio interference).

Fourth and finally, bycatch must be

monitored and prevented or eliminated in the case of special status species.

Finally, for microalgae, a robust guidance is needed to clarify the requirements as most certifiers and inspectors are not familiar with marine ecosystems.

We further suggest the following.

We need to clarify marine algae listings on the National List by adding their Latin binomials.

Moreover, the approval of algae needs to be site-specific.

Some algae are also extremely endangered in particular locations.

You might need a separate listing for California than, say, Washington state.

On fenbendazole, we appreciate the hard work of the committee, but believe more work is needed.

Is that the end of my time?

CHAIRPERSON ELA: That is the end of your time.

MR. HANSON: Okay. Well, you have our comments.

CHAIRPERSON ELA: Yeah, Sue has a question for you.

MR. HANSON: Yes?

(No audible response.)

CHAIRPERSON ELA: Sue, you're still on mute.

MEMBER BAIRD: So sorry. I do it every time.

I would like to hear you continue your thought on fenbendazole, if you don't mind. You got cut off, and I was just getting into this thing.

MR. HANSON: Well, we oppose the use of fenbendazole as it's being presently proposed.

We recognize that fenbendazole is permitted under restrictive conditions for other livestock species, but it's permitted with a withholding period for each class of animals.

The residues of fenbendazole will be present in eggs, and you should require a

withholding period that eliminates, to the greatest extent possible, the chemical residue.

Consumers of organic products expect that there won't be chemical residue in their food.

Laying hens treated with fenbendazole could also be used for human food.

This makes it necessary for NOP to establish withdrawal periods for hens while they are laying, and for hens when they're used for human food. Thank you.

MEMBER BAIRD: But you don't understand that it is prohibited for slaughtered animals, so there's no way it could get into the food as a meat product?

MR. HANSON: Well, it should be, but --

MEMBER BAIRD: It is.

MR. HANSON: Yeah. I mean, okay. Then it should be for egg laying hens, as well.

MEMBER BAIRD: Sure. And it would fall under the same annotation if it were passed,

but I appreciate that.

So, specifically, it's just the residue in the eggs that you are concerned about?

MR. HANSON: Well, this is essentially an antibiotic.

I mean, you need to be treating it like you do other antibiotics, and having withholding times because it is an antibiotic.

And, you know, antibiotics are to be used for the health of the animal so that they don't suffer, but they should not be used routinely.

And you should have withdrawal periods.

MEMBER BAIRD: Okay. Thank you.

CHAIRPERSON ELA: Emily, you have a question.

MEMBER OAKLEY: I do. Thank you for your comments, especially your comments regarding marine macroalgae.

And I noted that you suggested the board continue working on clarifying marine

macroalgae with Latin binomials.

And this, as you probably remember, came out as a proposal from the Handling Subcommittee in 2017.

MR. HANSON: Yes.

MEMBER OAKLEY: And then there's an identical one in Crops.

MR. HANSON: Yes.

MEMBER OAKLEY: And the board received comments from stakeholders saying that they didn't have adequate time to provide comment at that spring meeting, and could the board please reissue the document for the fall?

Which the board did, but then the board received no comments on it at that time.

So I'm wondering if you have suggestions for how the board might continue this work?

MR. HANSON: Well, back in my early days, I worked for the National Marine Fisheries Service, and we had to deal with the issue of multiple fish names in different parts of the

country all the time.

And as you're trying to regulate things, you really need to make sure that it's clear what you're regulating, and you can't do that without using the Latin binomials.

MEMBER OAKLEY: So, I mean, I think most of the comments at that time that were requesting more time -- or many of them came from producers or manufacturers of ingredients using, you know, seaweed -- I'll use that term in this case.

And so really, I think what kind of stalled some of that work was not really knowing the industry perspective, and I was wondering if you had thoughts for how we might engage the industry perspective if we were to continue that work?

MR. HANSON: I would suggest that, you know, that the National Organic Program actually approach the various services in the coastal areas and states -- you know, the State of California has regulations for harvest.

The state of Oregon does, the state of Washington does. I believe Maine does, as well.

I would look at some of the folks that are trying to regulate this for both the purpose of harvest, but also to like, you know, make sure that others, (audio interference), don't collapse because they depend on these algae.

MEMBER OAKLEY: Thank you.

CHAIRPERSON ELA: We have two more questions. Wood, then Dan, and we're starting to run a little bit behind, but go ahead, Wood.

MEMBER TURNER: Thanks. Jaydee, really quickly, you made a comment about bycatch, and I wanted to make sure I understood what you were trying to say there.

Were you saying that bycatch as a term is not too broad, and that there should be a species-specific call out for any bycatch inclusion? You know?

(Simultaneous speaking.)

MR. HANSON: Well, it needs to be species-specific.

You know, you have species that, you know, attach to the holdfast of some of these large algae.

And, you know, at the very least, you need to be listing what can't be taken with the harvest of the bycatch, otherwise you will contribute to the elimination of those.

And again, there are species that are locally endangered and there are species that are nationally endangered.

You should include both, which is why I say that you need to have probably area-specific guidance.

MEMBER TURNER: Thanks.

CHAIRPERSON ELA: Last question.

MEMBER SEITZ: I appreciated your comment on fenbendazole as potentially raising consumer trust issues in the organic standard, especially if you have an entire flock that's doused and there may be residue in eggs, even if it's considered to be a residue at a level that would not harm someone.

Could you talk just a little bit more about the potential consumer trust issues that you see in the use of fenbendazole?

MR. HANSON: Well, some other folks have talked about potential, you know, additional labels, or different, you know, additional ads.

You know, you don't want there, you know, to be a different standard for organic, and something that kills worms than in something that kills bacteria.

You need to have, you know, one standard, and that is that you only use these chemicals when they're needed for the health of the animal.

And that you then require a withholding period, and if you can't in that withholding period get the chemical residue out, then you don't sell them as organic.

CHAIRPERSON ELA: All right.

Sue, unfortunately, I see you have your hand up, but we need to move on a little bit, so maybe you can ask that question when we

get down to Blayne's time.

Meagan Collins is next, then Blayne Mozisek, and then Shannon McCormick.

Meagan, please go ahead.

MS. COLLINS: Hello. My name is Meagan Collins, and I will be commenting on behalf of the Accredited Certifiers Association.

The ACA is a nonprofit created to ensure consistent implementation of USDA organic regulations through collaboration and education of accredited certification agencies.

Our membership includes 64 accredited certification agencies worldwide, including all 47 U.S.-based certifiers.

Thank you for the opportunity to provide comments to the NOSB on the most recent discussion document on human capital management.

This issue is central to the growing success of the organic industry, and for upholding integrity and consumer trust in the seal.

The industry faces challenges, but

there are opportunities to address them, and this is an important time to begin these conversations.

A risk to the organic industry is the ever winding inspector shortage, the lack of competitive pay, and fair compensation is an issue in recruiting and retaining qualified personnel.

Lower cost inspections have an effect on quality, and quality inspections and review work are essential to uphold the organic integrity and deter and detect fraud.

Nevertheless, there are several opportunities to address these challenges with recruiting and retaining qualified staff.

For instance, opportunities lay in encouraging the future generation to pursue careers in the organic industry and professionalizing inspecting as a career.

Specifically, engaging with youth through high schools, FFA and 4-H programs.

Furthermore, there is a great

potential for collaborating with universities, creating trade schools or online programs, advertising on job boards, and recruiting directly from the industry.

To increase diversity, the industry can partner with historically Black land-grant universities for paid internships, and make training available in multiple languages.

The ACA is a great organization to bridge these relationships with universities around the nation.

These programs could also be coupled with IOIA for mentorship, so new individuals entering the industry are trained and ready to start their careers.

All of these efforts can be targeted in specific regions to fulfill those needs.

Finally, certifiers need to offer competitive wages for inspectors and staff.

However, the rising cost of small farmers' introduction cost share affects certifiers' ability to balance the --- for

(audio interference) these competitive wages.

With that being said, we would like to emphasize that the organic industry needs additional financial support to address these human capital issues.

The NOP needs funding to support the industry and these training needs, otherwise the cost of paying and training for these qualified inspectors falls on certifiers, which in turn increases the cost of certification of farmers, and ultimately increases the price of food for consumers.

Related to this, reducing the cost share program, is detrimental to the industry at a time when more funding is needed.

The ACA looks forward to future discussions on this topic and ways we can participate in strategic planning to develop solutions.

Thank you.

CHAIRPERSON ELA: Thank you very much. Are there any questions?

(No audible response.)

CHAIRPERSON ELA: I don't see any, so thank you. We appreciate your thoughts, Meagan.

We are going to move on to Blayne Mozisek, followed by Shannon McCormick, and then Conor Mulroney.

Blayne, please go ahead.

DR. MOZISEK: Good afternoon everyone. My name's Dr. Blayne Mozisek.

I'm a board certified poultry veterinarian with Merck Animal Health, and I'm here today to speak in support of adding fenbendazole to the National List so that organic producers can have a means of ridding their flocks of parasitic worms in emergency situations.

What you see here on this slide is a veterinarian's oath.

When I took this oath over a decade ago, I vowed, among other things, to protect animal health and welfare, and prevent and relieve animal suffering.

That is what brings me here today, and that is why Merck Animal Health is supporting this petition.

Next slide, please.

My time is brief, so I'd like to focus on two critically important statements made within the technical review published by USDA's Ag Marketing Service on May 13.

This paragraph in particular, this sentence within the technical review, has caused concern among those involved in the petition process.

Taking into account the context of the paragraph, this sentence implies that due to differences in metabolic activity and/or developmental stage, fetuses, pregnant women, infants and children are at greater risk from fenbendazole residue, and that current risk assessment models do not take these subpopulations into account.

Understandably so, this statement has been the focus of many comments of concern

submitted to this board.

I agree the statement as written is concerning.

However, if one were to actually read the scientific article study for themselves, they would find the statements misleading.

The article published by the Joint FAO WHO Committee on Food Additives is a review of the most recent developments and exposure assessment and hazard characterization of residues of veterinary drugs, and how these are important elements in the development and improvement of risk assessment processes, a core mandate of the committee who authored this review.

Nowhere in the entire 13,000 plus word document are the phrases metabolic activity, developmental stage, and risk assessment model ever mentioned.

Neither are the words fetus or fenbendazole.

Next slide, please.

The last sentence of the same paragraph cites a 2018 article from Bobkov and Zbinden.

This sentence implies that fenbendazole has a medium likelihood of being a food safety risk.

However, if one were to review the article cited, as you can see here, its title clearly states this review discusses the risk of occurrence of a veterinary drug residues in poultry, and at no point is food safety discussed.

And in fact, the only use of the phrase food safety is to describe the author's association with the Institute of Food Safety and Analytical Science for the Nestle Research Center.

It's also important to note that the article clearly states that the information presented within it does not pertain to eggs.

Additionally, the word fenbendazole is utilized once within the body of the article,

where it's included in a list of drugs of the benzimidazole class of anthelmintics.

So to clarify, the author designated all poultry anthelmintics as having a medium level of likelihood of occurrence of being found in the food supply.

This designation was based on global reports of incidents, where the maximum residue limit for an anthelmintic was exceeded.

Data cited include China, the EU, Canada, and no reports from the U.S.

Again, nowhere in this entire article are food safety risks discussed.

At best, these statements are misleading, and at their worst, they're entirely false and put into doubt the factual integrity of the entire board.

CHAIRPERSON ELA: All right, thank you. Thank you, Blayne. Emily has a question.

MEMBER OAKLEY: Thank you for your comments.

How often would you say or estimate

that fenbendazole is used as an emergency treatment in conventional poultry?

DR. MOZISEK: We base those treatments on monitoring flocks, and as I stated in my written comments, and what I've suggested, emergency situations be based on the burden within the flock.

And so, I've got a slide later. If I have time, I'd like to show it.

It shows the survey that we took of organic growers and where that theoretical threshold -- if it were to exist, where it lies within the results that we found.

And it'll show the number of flocks that were above, and, you know, most were below.

However, some would need to be treated in the case that I've shown.

MEMBER OAKLEY: So could I just follow up? When they would need to be treated, what would the frequency be per flock, do you think?

DR. MOZISEK: Again, that's dependent on the exposure and the level of burden from the

flock.

I mean, there's literature out there that cited -- I can't go back and remember off the top of my head, but it's months between treatments.

And again, this is really dependent on, you know, the region and where the birds are at, individual or flock burdens.

So, the data that we took from flocks when we measured, you know, flocks across the country, it's an average of the entire flock, right?

And so, we come up with one burden number that represents the average of approximately 24 samples that were taken within the population that were to be, you know, emergency treated, if need be.

Sorry, I can't give a very specific answer because it really is flock dependent and situation specific.

MEMBER OAKLEY: I totally understand and appreciate that, I'm just trying to get a

sense of how frequently this might be used in some instances.

DR. MOZISEK: You know, I think as we've heard from speakers today, there are places in the United States where they won't need to be treated at all because the region and climate within that region is very low, there's a very low burden, and there are others where it's significantly worse, like we see in the Southeast.

There are more birds in the Southeast.

I can tell you that the fenbendazole affects the worm life cycle such that the life cycle is approximately 30 days.

My recommendation for growers is to monitor the worm burden every eight to ten weeks.

So theoretically, you know, if we were monitoring, let's say every ten weeks, and we found a theoretical burden that, you know, the level were to increase above the threshold every ten weeks, that would be, you know, the minimum time between treatments. Eight to ten weeks.

MEMBER OAKLEY: Thank you so much.

CHAIRPERSON ELA: We have a bunch more questions, and so, I'll ask the board to keep them focused.

Sue, you have a question.

(No audible response.)

CHAIRPERSON ELA: And Sue, you are still on mute.

MEMBER BAIRD: Every time. I'm so sorry. I said thank you for this, and your written comments were very, very helpful for me to understand.

You did some grafting, and you kind of alluded to that in your comments to Emily, but you did a survey of the organic producers and determined how often that there -- they found the eggs had worms in them.

Could you elaborate on that?

DR. MOZISEK: Yes. Thank you for the question. If you can go to the next slide, that data is presented. Thanks.

So this graph or graphic is actually

not of worms within eggs, but it is of worms within fecal samples.

So, we solicited samples across the United States, and we solicited actually different organic certifiers, individual growers, whatever we could to get the word out as much as possible.

Two hundred and four samples were received into the lab, so we utilized the fecal flotation method that was described in my written comments.

And within all those samples, if you can see here, 54 percent were positive.

And then at the threshold that you see there, is 50 eggs per sample is what we consider -- above that we consider the heavy burden, and over ten percent of those were positive above that threshold.

So, the Y axis there, each one of those numbers is the age of the flock, so you can kind of see that.

MEMBER BAIRD: Would there be some

consideration then -- people are concerned about the residual -- and you made a point that aspirin has residual, but we didn't put an annotation on it.

Would there be a consideration though that we might limit the applications to just the replacement hens as opposed to laying hens?

DR. MOZISEK: You know, unfortunately, you know, worms burdens don't become an issue once birds go into production.

So, you know, I would say that while that would be helpful for those producing (audio interference), you know, for organic egg production, as these hens get older, they're still exposed, and the likelihood of them incurring a worm burden --depending on their region, again, environment --exists just as much as when they were young.

MEMBER BAIRD: I see. So that really wouldn't help?

DR. MOZISEK: It wouldn't help the individuals that are in egg production, correct.

MEMBER BAIRD: Okay. This lady --

CHAIRPERSON ELA: Sue, we --

MEMBER BAIRD: I'm sorry?

CHAIRPERSON ELA: Sue, we've got four more questions. We have four more questions from board members, so would it be okay if we moved on?

MEMBER BAIRD: Yeah, I suppose so. Okay. I would hope that they read the written comments. Okay, yes, thank you.

CHAIRPERSON ELA: Sorry, Sue. Asa?

(No audible response.)

CHAIRPERSON ELA: You are still on mute.

MEMBER BRADMAN: Sorry. Can you hear me now?

CHAIRPERSON ELA: Yes.

MEMBER BRADMAN: In the reference that you mention, the first one that you felt like was misappropriated to that citation, I just want to say that that sentence is absolutely true, and there's dozens of other references that would've

been appropriate.

I mean, young children, you know, eat, breathe and drink more than adults, and they're also exposed in utero.

So anything that's in their environment, approximate environment, in general, kids get exposed on a higher level per unit of body weight.

And maybe the reference they put there wasn't the best, but that's certainly, you know, a concern with any residue.

And in terms of EPA now, I mean, residue, at least related to the pesticide, needs to be evaluated in that context.

I know FDA is also taking that approach in many instances.

So, you know, that's something that still has to be considered.

Then, and this figure. I want to understand this figure a little bit more.

It says eggs per sample. It says 204 samples with 54 percent positivity.

When you say eggs per sample, (audio interference).

It's not clear to me the Y axis here. Is it in absolute terms, or if there's some relative information about infection rates?

DR. MOZISEK: Sorry about that. So, each number that you see along the Y axis, that's the age of the flock of the sample, where the sample originated.

And the sample is based on a per gram basis. I think five grams are used, so they could send in --

(Simultaneous speaking.)

MEMBER BRADMAN: -- the X axis then, not the Y axis.

DR. MOZISEK: Correct. I'm sorry.

MEMBER BRADMAN: Okay. Okay, keep going. So, and the Y axis is per sample --

(Simultaneous speaking.)

DR. MOZISEK: These are the eggs per sample.

So eggs per sample is the eggs that

were found on the microscope slide after the sample was analyzed by fecal flotation.

So the actual count of worm eggs on the slide that were found per sample.

MEMBER BRADMAN: Right, but how many eggs? Like, out of how many eggs were tested? In other words, was it 1,000 eggs per sample, or --

DR. MOZISEK: These are fecal samples submitted from individual flocks.

MEMBER BRADMAN: Okay.

DR. MOZISEK: And the test is looking for the eggs of the parasite.

MEMBER BRADMAN: Got it.

DR. MOZISEK: You know, we can correlate the parasitic burden within the bird of the amount of eggs being excreted by the parasites.

MEMBER BRADMAN: Okay. So, and is it a combined sample of fecal material, or are these single samples that are looked at individually?

DR. MOZISEK: Growers were asked to

submit -- I mean, dependent on the size of the facility, approximately six different -- submit fecal samples from each barn, and each sample from each barn would include about four to six locations within the barn, and four to six fecal droppings within each one of those samples.

So, it was meant to be a good representation of the barn, and then that sample, once it arrived to the lab, was homogenized, and an aliquot of it was taken out and analyzed to find the number of eggs.

MEMBER BRADMAN: All right, thank you.

DR. MOZISEK: You're welcome.

CHAIRPERSON ELA: Dave, you have a question.

MEMBER MORTENSEN: Yeah. Just quickly, following on Asa's first question or first point about children and expectant mothers being particularly sensitive.

It's true that this mode of action of the compound is a tubulin inhibitor. Is that correct?

DR. MOZISEK: It's a micro tubulin inhibitor that's specific for the parasitic worm. Yes, that's right.

MEMBER MORTENSEN: Yeah. That's what I thought.

And so, that is something that disrupts mitosis and cell division in growing organisms. Is that correct?

DR. MOZISEK: It has an effect on, yes, the cells dividing, yeah.

MEMBER MORTENSEN: Yes, and no --

(Simultaneous speaking.)

MEMBER MORTENSEN: So, one of the concerns that we've had a number of as we look at this is, is a compound that's active in that way -- is always going to raise a flag over above and beyond the fact that it's a synthetic pesticide that's widely used in conventional agriculture.

So, you know, this issue of residue is not something that is taken lightly as we think about the potential impacts of a practice in organic agriculture where folks would expect not

to have synthetic compounds, and certainly not those that inhibit cell division.

Thanks.

DR. MOZISEK: Well, the product --

(Simultaneous speaking.)

DR. MOZISEK: Sorry, go ahead.

CHAIRPERSON ELA: Go ahead, if you can give a quick answer. We're starting to run out of time here.

DR. MOZISEK: Well, I didn't really hear a question there, but fenbendazole's been on the market, available for use in conventional agriculture for decades, and we didn't know of (audio interference) risk associated with any residues.

And it's one of the main reasons that we've been able to show that a zero day withdrawal is efficacious for this particular product, so.

I would encourage you all to read through the rest of my slides there.

The transcripts are available, as well

as the written comments, and they inform you more so on some of the other information I've found.

Thanks for your time.

CHAIRPERSON ELA: Mindee? Well, just we have a couple more here.

DR. MOZISEK: Okay.

CHAIRPERSON ELA: But I'm going to encourage board members to be quick. So, Mindee.

MEMBER JEFFERY: Hi, thanks. I was wondering if you are seeing a correlation between the presence of eggs in your samples and the flock size?

DR. MOZISEK: No, we're not.

And actually, if I could ask you to move to the next slide, I show a great example of pasture management, and why -- well, this is one.

I'm sorry, there's another slide, too, but this is just a great example.

The life cycle of parasites of ruminants are very different, and pasture management works well for them, and rotation works well because there's a vulnerable portion

of this life cycle that's spent on the foliage of the pasture.

So by controlling that foliage or limiting access, we can prevent that, whereas the poultry parasite, those eggs are excreted in fecal matter onto the ground, where they mature and become infectious and wait for the next host to come around and pick them up.

It's a direct, simple life cycle.

Pasture rotation doesn't really affect -- and there's data to show it -- that has zero effect on, or very limited effect on the poultry parasites.

And if you go to one more slide? I'm sorry, it was the next one actually I was trying to show you.

And this is an example of GAP 5 chickens produced in California.

You know, they have a ton of space, but in this particular scenario, they're not utilizing it, and we know, birds of a feather flock together, right?

So, we can give them space and they still will congregate. That's their nature, it's their behavior.

CHAIRPERSON ELA: Do you have a quick question?

MEMBER GREENWOOD: Steve, yeah, it's Rick. A very quick question.

What temperature does fenbendazole degrade?

And the reason I ask this -- and I've asked it in previous years -- chicken products and egg products are eaten cooked, and I'm just wondering, even though we don't want residue in organic products, is this really a human health issue that we've talked about with Asa and children exposed, if the fenbendazole is degraded when the item is cooked?

So, I was just wondering if you have a number how many degrees centigrade does it take to degrade fenbendazole when it really has no biological activity after that?

DR. MOZISEK: All right, well, you

know, as we've shown, and the (audio interference) is trying to show that there's a food safety risk, there is not.

And however, the fenbendazole will not be degraded at temperatures that we associate with cooking.

So yes, the residue would remain after normal cooking temperatures.

MEMBER GREENWOOD: Thank you.

CHAIRPERSON ELA: Okay, the last. Very quick question, Nate.

MEMBER POWELL-PALM: Very quick. Thank you for your comments.

I believe you mentioned earlier in your oral comments that you were noting in your survey producers leaving organic certification, going back, reverting back to conventional production. And I was wondering if I understood right that you're basically directly correlating that with parasite load in the organic flocks?

DR. MOZISEK: I believe that was Mr.

Carter that made that comment, and I have read that comment.

It was submitted prior to the meeting, so that would be available.

But yes, from what I've read, that particular comment that you're referencing, this grower once was growing organic poultry for egg production, for organic egg production, and due to the level of increased mortality and morbidity associated with the parasite load, he had to transition back to just a cage-free.

MEMBER POWELL-PALM: And so, that would be a sample size of one grower reporting that, correct?

DR. MOZISEK: One comment that was submitted that made that reference, yes. To my knowledge.

MEMBER POWELL-PALM: Thank you.

CHAIRPERSON ELA: All right. Well thank you, Blayne.

I let that go on longer than I normally would because I know it's a topic of

major consideration to the board.

DR. MOZISEK: Thank you, all.

CHAIRPERSON ELA: We are going to move on. Just a reminder to the board we are about a half hour behind at this point.

So I'm fine with asking questions, but if we can keep them focused, that would be awesome.

We have Shannon McCormick coming up, then Conor Mulroney, and then Erin -- oh gosh, my glasses -- Bardagjy.

I apologize. I think I messed that name up. So Shannon, go ahead.

MS. McCORMICK: Hello. My name is --

CHAIRPERSON ELA: Yes, you're on.

MS. McCORMICK: Great. My name is Shannon McCormick. I am a material review officer for Oregon Tilth.

Oregon Tilth would like to thank the National Organic Standards Board for the opportunity to comment.

We appreciate the continued dialogue

to ensure the NOP pesticide inert requirements align with the most current EPA safety standards.

In 2015, the NOSB made a formal recommendation to the NOP to revise the annotation for EPA List 4 inerts for use with crop and livestock pesticides.

The NOSB recommended three replacement EPA lists, including the EPA Safer Chemical List.

The NOP has not accepted the recommendation.

Oregon Tilth supports the NOSB's plan to collaborate with the EPA to determine the most effective and efficient way to amend the regulations.

To prevent significant and potentially devastating disruption to the organic industry, we urge the NOSB to vote no on the motion to remove EPA List 4 inerts from the National List without an alternative in place.

Oregon Tilth instead recommends revising the annotation per the 2015 formal NOSB recommendation before removing EPA List 4 inerts

from the National List.

We also recommend omitting the EPA Safer Chemical Safer Choice List from any proposed annotation change because the Safer Choice List is designed for cleaning products.

There are no pesticides currently approved under the Safer Choice program, therefore, it is not an appropriate alternative for the pesticide inerts in organic production.

If EPA List 4 inerts are removed from the National List without an alternative in place, it would greatly impact the organic industry by prohibiting a significant number of crop, livestock, and post-harvest pesticides currently in use.

Currently, over 800 Oregon Tilth clients use almost 12,000 approved pesticides that may contain EPA List 4 inerts.

These pesticides would each require re-review to determine exactly how many of these inputs contain synthetic EPA List 4 inerts.

A significant portion of these

pesticides could become prohibited with a change or removal of the inerts listing.

In addition, we recommend a minimum of a one year implementation period to allow certifiers, producers, and pesticide manufacturers to adjust to any changes.

Thank you for your time.

CHAIRPERSON ELA: Thank you. Are there questions from the board?

(No audible response.)

CHAIRPERSON ELA: I have a very quick question, and it kind of comes down, if we choose to relist -- and in other words, if we vote no, as you said, there's no incentive for the program to act on this, whereas if we vote to delist, we are putting pressure -- or I feel like we put pressure on the program to do something.

And my concern is if we vote to continue to relist them, we're going to be in the same spot in five years as we are now.

Do you have a thought on that?

MS. McCORMICK: My thought on that is

we are aware of that being the reality.

In terms of any recommendation of action, our main concern is just that a plan B in place before moving forward with removing it from the National List due to the magnitude of impact that it will have on the organic industry.

CHAIRPERSON ELA: Fair enough.

(Simultaneous speaking.)

MS. McCORMICK: -- annotation as written apart from the EPA Safer Chemical List.

CHAIRPERSON ELA: Okay. Well, thank you.

MS. McCORMICK: Thank you.

CHAIRPERSON ELA: We're going to move on to Conor Mulroney, Erin Bardagjy -- sorry, Erin -- and then Chris Schreiner.

So Conor Mulroney, please go ahead.

MR. MULRONEY: Hello. Do you have me?

(No audible response.)

MR. MULRONEY: Can you hear me?

CHAIRPERSON ELA: Yes, go ahead.

MR. MULRONEY: Hello, my name is

Conor Mulroney, and I am the quality manager at Marroquin Organic International.

First, I want to thank the NOSB and the Handling Subcommittee for reviewing the issue on ion exchange.

Marroquin Organic is an organic ingredient supplier based in Santa Cruz, California.

We have been providing the industry with high quality ingredients for almost 30 years.

For the last 20 years, we've worked with AGRANA Starke of Austria as the company's North American sales partner.

We have introduced AGRANA's organic starches, sweeteners, maltodextrins to the U.S. market.

AGRANA was the first manufacturer to offer these as organic, and in March, AGRANA expanded its distribution activities into the starch segment and acquired Marroquin, making us part of the AGRANA Group.

Marroquin and AGRANA Starke wholeheartedly support the decision of the Handling Subcommittee recommending that the NOP continue to classify ion exchange resins as food contact substances, and allow them to continue to manufacture organic products.

Our products are essential ingredients in the organic bakery products, infant formulas, beverages, and other foods.

In making our products, ion exchange guarantees quality, purity, and functionality.

We depend on the reliability of continuing to use these resins without interruption or uncertainty of their NOP status.

In our written comments here and at the NOP spring meeting, we have emphasized the indispensability of ion exchange filtration.

We support the longstanding policy of the USDA NOP on ion exchange resins, and this policy that was adopted in 2002 when the NOP regulations were first implemented is in agreement with the U.S. FDA.

This policy holds that ion exchange resins, the durable substances that filter out unwanted materials by a physical rather than a chemical process, are food contact substances, not ingredients or processing aids.

So, under this policy, ion exchange resins do not have to undergo review for addition to the USDA National List as an allowed substance.

In the intervening 18 years, this policy guidance has enabled AGRANA Starke and other companies to use ion exchange to provide a stable, high quality supply of organic ingredients for the U.S. organic food sector.

Organic ingredients made through ion exchange have made it possible for food manufacturers to develop organic products, and thus grow the entire organic food industry.

Because there are not any scalable options disallowing ion exchange, would cause a massive shortage in the supply of ingredients for the organic sector.

There would be fewer organic ingredients made, and those that we could make would not be fully functional or acceptable in the market.

Ion exchange is a preparation process. And am I out of time?

CHAIRPERSON ELA: You are, yes.

MR. MULRONEY: Okay.

CHAIRPERSON ELA: Are there questions?

(No audible response.)

CHAIRPERSON ELA: I don't see any questions. Thank you very much for your comments.

MR. MULRONEY: Thank you for the Handling Committee for reviewing this, and thank you to the NOSB Board. Thank you.

CHAIRPERSON ELA: You are welcome. We are going to move next to Erin, and Erin, you can tell me how to pronounce your name.

Then we will go to Chris Schreiner, and then to Erika Rohr Luke.

MS. BARDAGJY: Yes. Hi, my name is

Erin Bardagjy. I'm a material review officer for Oregon Tilth.

I'm really excited to have this opportunity to provide public comment on the ion exchange filtration process and the materials used.

Oregon Tilth's been certifying organic producers and handlers since the national standards were implemented in 2002.

Ion exchange has come up a few times over the years, and we have participated in these discussions in an effort to ensure understanding and consistency of their review.

Oregon Tilth fully supports the NOSB's recommendation that the recharge materials, but not the insoluble resins or membranes themselves, must be reviewed and included on the National List.

This is in alignment with previous determinations, and does not change our current processes or adversely affect the industries that rely on this filtration technology.

This is a sound and sensible approach that enables the continued production of commonly consumed foods, such as juice, syrups, and dairy products to be certified organic.

One detail that we feel important to mention is that we evaluate all sanitizers used on resins for compliance with the national organic standards.

This is a detail that might be worth including in the final recommendation to ensure that all materials used are evaluated for compliance with the National List.

We'd like to take this time to thank NOP, NOSB, and all the certifiers and manufacturers for addressing this topic in an open and transparent fashion.

This ensures consistency of their use across certifiers. Thank you so much.

CHAIRPERSON ELA: Thank you very much, Erin. We appreciate your comments.

We're going to move on to Chris Schreiner, followed by Erika Rohr Luke, followed

by Jessica Shade.

So Chris, please go ahead.

MR. SCHREINER: All right. Thank you. Hello NOSB members. I'm Chris Schreiner, the executive director at Oregon Tilth.

And as a leading organic certifier, educator, and advocate, we've been offering organic certification services for nearly 40 years.

I'm here to discuss human capital strategies with a focus on the scarcity of organic inspectors.

Even before the challenges of conducting inspections during a global pandemic, we've known about the scarcity of qualified and committed professionals in organic certification.

This concern has been facing our community for many years.

Back in 1998 when I began working for Oregon Tilth, we had only eight employees. Today, we have 73.

Between 2014 and '19, we saw a 54

percent increase in certified client growth.

Organic success is outpacing the recruitment and retention of a well-trained workforce.

What are some root problems?

Organic inspectors with years of experience are retiring, no longer willing to travel or work the long hours necessary to earn a livelihood.

There's limited opportunities for new inspectors to acquire in the field experience and professional development.

They might attend some helpful IOIA trainings, but then what?

Inspectors are left with no clear career path in an extremely competitive environment where they are often forced to drive down rates, undervalue themselves, and shoulder the expenses of health and liability insurance.

What can the organic sector do?

First, following the lead of IOIA, we must develop and expand additional training

platforms, such as the Organic Integrity Learning Center, to increase opportunities and accessibility.

Second, as more universities develop certificate programs and degrees in organic food and ag, let's work with them to establish a career path and a workforce pipeline for certification professionals.

Third, create mentorship programs that pair new inspectors with experienced ones to learn and develop their skills.

What is Oregon Tilth doing?

We recently decided to begin shifting from using primarily independent contract inspectors to inspectors who are employees.

As staff, they will receive consistent pay at living wages, health insurance, group liability coverage, a retirement plan and paid time off benefits, continued training and professional development, and the opportunity to be part of a team in a mission-based organization.

A lot of attention is placed on defining essential workers these days.

We must recognize how essential inspectors are to the certification process. We must protect their health and safety during this pandemic.

They are on the front lines of ensuring integrity and trust in the organic label. I want to emphasize the urgency and the need for action now.

When proposals in the strengthening organic enforcement rules close important loopholes and exemptions, we can expect a surge in applicants for organic certification.

We must be prepared with a pipeline of well-trained and committed inspectors to meet this increased demand.

Thank you.

CHAIRPERSON ELA: Wow. Well done as well, and you're in the running for the award for perfect timing. There are now three of you.

So, there is a question from Scott.

VICE CHAIR RICE: Hey Chris. Thanks for your comments.

You know, we've heard comments from you and others of the undervaluing of inspectors, and more or less the need to do that to keep certification affordable for the producers, for the processors, all the certified operations out there.

You mentioned one of the things that Oregon Tilth is doing, which is hiring those inspectors and bringing them in-house to offer the compensation, and better benefits and training, and whatnot.

How do you think that keeps those expenses in check versus putting that expense on the inspector?

And sort of what are your thoughts on, like, what the breaking point might be for passing those expenses along?

And any other thoughts on just how to help those, but still remain contractors, have access and affordability on that professionalism,

so to speak?

MR. SCHREINER: Yeah. Great question, Scott. And I guess the short answer is we're going to find out.

We essentially realized that, you know, facing the challenge of supply for organic inspectors amongst contractors, that we're competing for, you know, well-qualified, highly trained inspectors' time with other certifiers.

And across the different inspectors that we've been using on a contract basis -- we work with around 50 -- we see a variety of diverse race.

And one of the things we'll attempt to do, and we plan to do by primarily doing the shift to employees, is establish just a base rate for inspections that we offer for our clients.

So that's one way that we hope to control the costs, and also control consistency year over year for clients with certification expenses.

Now that being said, bringing them on

as employees, there are the admin and overhead expenses associated with that, and health insurance, retirement plan, paid time off.

But, we really feel like that recognizes the value of inspectors, and we feel like we have to do that to take care of them and to really acknowledge the key role that they play.

VICE CHAIR RICE: Okay, thank you.

MR. ELA: Thank you very much, Chris. We were going to move on to Erika Rohr Luke, followed by Jessica Shade, and then Maria Elena Lombardero Ventura.

Erika, please go ahead.

MS. ROHR LUKE: Hi, can you hear me?

MR. ELA: We can.

MS. ROHR LUKE: All right. Thank you for the opportunity to comment to the National Organic Standards Board at this fall meeting. My name is Erika Rohr Luke, and I am speaking today on behalf of Marrone Bio Innovations.

Marrone develops and manufactures

effective and environmentally responsible microbial and plant extract products for integrated pest management. And I would like to speak to you today about the sunset of EPA List 4, the inerts of minimal concern.

Marrone requests that this board does not sunset List 4. Instead, we recommend taking actions which encourage the EPA to re-engage on List 4 maintenance. Second, that the Board does not sunset List 4 without a replacement list in place and with a longer transition period, like ten years.

Third, that the Board does not recommend Safer Choice as a replacement. It's not a good list or a good program for identifying pesticide inert ingredients, as the Safer Choice Program has no expertise or history in evaluating the properties needed to develop safe and effective agricultural inputs that must be formulated to address a diversity of environmental conditions, crop, and cropping conditions and worker and consumer safety needs.

Finally, again, MRC asks that NOSB recommend NOP and EPA to work together with the biological products, grower, and NGO to update the current list of NOP-compliant inerts, as well as more efficient and effective system to encourage innovation in this area.

We make these requests because if List 4 is replaced with Safer Choice, there will be some products that can be reformulated, but many likely won't be able to. And likely none in the shortest timeline that could be implemented.

If a replacement list was in place today and pesticide manufacturers could start reformulating now, it could easily take at least five years for some products to be reformulated and field-evaluated for efficacy based on the lack of limited list of products allowable under Safer Choice. Some may take longer and some may never be able to reformulated.

Once a new formulation is validated, the regulatory process from developing toxicology data and storage stability data and then securing

EPA and state approvals will add another three to five years to bring a new product to market. Farmers will be left for years without safe and effective tools to grow abundant, high quality organic food. Safer Choice lacks entire categories of inerts, including those necessary for dry formulations.

Many ingredients on Safer Choice do not have tolerance exemptions, so they won't be available for use in pesticides. Developing tolerance-exempt pesticides are a key objective and selling point for NOP-compliant pesticides and the growers that use them.

In summary, sunsetting List 4 without a replacement list in place is not viable for pesticide developers and therefore not viable for growers, especially on the proposed timeline.

Therefore, MBI suggests that NOSB work with NOP to directly -- that NOP work directly with EPA's senior level staff to obtain an updated listing of all ingredients currently approved by the EPA that continue to meet the

standards of List 4.

I thank you for your time and consideration of our comments. I had heard some questions posed on the topic earlier, and I would be happy to try to address them if you would like to pose these again.

MR. ELA: Thank you very much. Looks like Asa has a question.

MR. BRADMAN: I think the Board in general feels that there's, that the current situation is broken -- well, I should say I speak for myself. But the current situation is broken, and there are substances on the List 4 that would never qualify as acceptable for an organic pesticide.

So these are synthetic materials. And the goal here is not to replace or, you know, the reason to vote yes or no on it would not -- well, I should say yes for the removal -- would not be to simply replace the SCIL Safer Choice List for what's existing on the, in List 4. Rather, the goal here, based on previous recommendations, is

to kind of open the doorway to a process that would accomplish some of the things that you're recommending.

And so I wouldn't characterize this as just taking the SCIL, which was developed for cleaning and other products in many cases, but there is overlap. But to develop a, you know, organic-specific list of inerts, which we don't have. Right now we have reference to an existing list that is admittedly not maintained and not functional.

So this has been going on for years, and we need some way to move this forward. So I'm kind of making a comment here. But in previous comments by stakeholders, there's been some pretty clear maps to move ahead on this. So I'd be interested in having you comment on those, rather than just saying we need a proposal concurrent with this sunset vote.

It seems to me there's been a lot of history that's already been made, and my question is how to best move that forward. Because the

current situation is broken.

MS. ROHR LUKE: Yes, we agree as well. And as mentioned, this isn't the way to fix it. And it sounds like you're asking for what the new solution that should happen along with List 4?

MR. BRADMAN: Right, I mean, if you look back at past recommendations and quite detailed comments by stakeholders, there's some fairly -- there's some concrete recommendations that would move things forward. So, you know, what do you want that's new that hasn't already been talked about over the last five-plus years?

MS. ROHR LUKE: Well, I would -- we did mentioned that we would like the NOSB to recommend to NOP to work with the EPA and the other stakeholders mentioned, the biological products, the growers, other NGOs to update the current List 4 into something that is NOP-compliant, something that's going to be efficient and an effective system to encourage innovation in this area.

MR. BRADMAN: Thank you. I would just recommend that you really submit some proposals. I mean, I think you should look carefully at what's been talked about over the last, you know, decade really. And, you know, I think that's where the conversation has to go is, you know, I think we have a roadmap. And then moving forward is starting to -- I guess say driving down the road is what we need right now.

MS. ROHR LUKE: Right, yeah, I think the crux of it is I, you know, we're hoping to have the, you know, rather than starting with de-listing List 4, to start with the conversation of, you know, re-engaging the EPA.

MR. BRADMAN: Okay, thank you. I think that recommendation is really important.

MS. ROHR LUKE: Are there any --

MR. ELA: All right, thank you, Erika, we appreciate that.

MS. ROHR LUKE: Great, thank you for your time.

MR. ELA: Let's see, I'm sorry, so we

have Jessica Shade, then Maria Elena Lombardero Ventura, and then Lynn Coody and then Mitch Clark. And I think we might be missing a couple of those people, so I'll also ask Allison Flinn and Emily Musgrave to be ready as well.

So Jessica Shade, please go ahead.

MS. SHADE: Hi, everyone, my name is Jessica Shade, I'm the Director of Science Programs for the Organic Center. We're a nonprofit organization that communicates research on organic. We collaborate with academic and governmental institutions, and we really fill gaps in knowledge areas about organic food farming.

So I'm just going to really quickly highlight a couple of our current projects that were informed by NOSB priorities, and then go into a few suggestions for additions to this year's NOSB research priorities list.

So we were really happy to see that economic and social impacts of organic farming were on the list. One of our current research

projects tries to untangle some of this by quantifying yield impacts of soil health practices with the goal of acting as an immediate incentive for encouraging the adoption of best soil-building practices in organic.

Because it's going to connect all the dots between the most important strategies for building soil health and sequestering carbon that also translate into higher, more consistent yields.

And one of the things that we're hoping for is that by including this category on the list, it encourages more economic measurements to be made in organic studies. Because while we were able to find yield data to connect, to do our analysis, most of the studies don't actually track the full suite of variables that would be needed for a full profitability comparison like input costs.

So that's something that can't be done right now that we would love to see done in the future if studies start collecting that data. So

that's really encouraging to us that that priority is on the list.

We were also happy to see that plant disease management and invasive insects are both on the list. Citrus greening disease is an issue that has been highlighted, you know, by the NOSB research priorities for several years now. And we're really thrilled that we were finally able to secure some federal funding in the form of an OREI planning grant to develop a proposal that takes a systems-based approach to combat citrus greening in organic groves.

We have an open call for organic citrus producers to share their experience with us via a survey, and we're going to be using that information to apply for a full OREI proposal in the next funding cycle.

So it's really helpful that NOSB is highlighting the importance of that issue through the NOSB research priorities, because that helps organizations like the Organic Center, like other academic institutions get large-scale federal

funding, because we can cite it as a priority.

And we also would like to see soil health protection for our organic farmers (audio interference) pesticide residues. I'll leave it there.

MR. ELA: That clock goes fast. Are there any questions? Thank you so much, we really appreciate feedback on the research priorities, because we know they are used, and it is helpful to keep refining and including those.

We are going to move on. Is Maria Elena present, did you find her, Michelle?

MS. ARSENAULT: I have not found her --

MR. ELA: I don't believe --

MS. ARSENAULT: Yeah, I've not found her in the list, Steve.

MR. ELA: Okay, so we are going to move on to Lynn Coody and then Mitch Clark, Allison Flinn, and Emily Musgrave.

So go ahead, Lynn.

MS. COODY: Hi, everyone, I hope you

can hear me.

MR. ELA: We can.

MS. COODY: Okay, great. 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.

Paper crop planting aids. OPWC appreciates the revisions to the annotation and addition of the definition. We thank the Subcommittee for its diligence in incorporating feedback from prior public comments. OPWC now concurs with the Subcommittee that this material should be added to the national list.

Ammonia extract. We have reviewed the petition, and based on its contents, have concluded that this material is not compatible with organic production, as it is highly soluble, detrimental to soil organisms, and chemically identical to the ammonia used in conventional production. We do appreciate the Subcommittee ordering a technical report to provide more

information.

List 4 inerts. We strongly disagree with the Crop Subcommittee's recommendation to de-list EPA List 4 inerts during its 2022 sunset review. Loss of this listing would result in tremendous disruption due to the inevitable gap between the dissolution of one system of regulating inerts and implementation of an updated system.

We reiterate our support for the NOSB's prior recommendation on inerts, however, we read the Subcommittee's justification for de-listing is based on orderly implementation of this prior recommendation. This would require bridging the old and new regulatory systems on a very tight timeframe imposed by the sunset process, a goal that based on past attempts is simply wishful thinking.

We urge the Board to re-list inerts and then to work cooperatively with NOP to establish a new system for regulating inerts.

Marine macro algae. We have multiple

concerns about this proposal, which are detailed in our written comments. I will mention a few here.

One, the document for this meeting is the public's first opportunity to see the full text of the proposed annotations. Two, the document comes as a proposal rather than a discussion document, which limits opportunity for growers to provide feedback prior to the NOSB's votes.

Three, we specifically do not support the proposed listing within Section 602. The annotation focuses on practice standards for harvesting marine macro algae. If this topic falls within NOP scope, then we think it would be more straightforward to include such information in Section 203, which would place it with other practice standards used to regulate non-synthetic fertilizer materials.

We reiterate our request to the Board that the Materials Subcommittee work on this issue in consultation with Crops, Livestock, and

Handling Subcommittees to fully assess the impacts of the proposed algal harvest restrictions on all types of organic operations, as well as on material suppliers.

Thank you.

MR. ELA: Thank you, Lynn. If you could have used six more seconds, you would have been in the running for the exact time.

MS. COODY: Oh.

MR. ELA: We appreciate you coming in a little bit earlier, we don't have any complaints.

Questions? I don't see any questions from the Board, Lynn, but we always appreciate your comments.

MS. COODY: Okay, thank you.

MR. ELA: Yup, take care. We're going to see -- is Mitch Clark present? Okay, we don't see Mitch, so we are going to move on to Allison Flinn, and then followed by Emily Musgrave and Adam Warthesen.

Go ahead, I just lost my place,

Allison.

DR. FLINN: Thank you very much. Can you hear me?

MR. ELA: We can.

DR. FLINN: Great. Good afternoon, Mr. Chair and members of the Board. My name is Dr. Allison Flinn, I'm a veterinarian and the Director of Public Policy and Government Relations for Merck Animal Health.

I appreciate the opportunity to speak today in support of approving fenbendazole for emergency use in organic laying hens. We took on this effort in response to requests from organic poultry farmers seeking to access a solution for internal parasites when other management efforts were not successful.

We strive to ensure positive animal health and welfare outcomes in accordance with the needs and desire of farmers to help them obtain the solution that is best for the animals in their care. It is important to note the specific situation in which we are considering

this medicine for use.

We are not here to advocate for disrupting the values of organic production systems. We are here to advocate for helping those birds which may encounter a situation where emergency treatment is the right thing to do. As you heard earlier this afternoon from Mr. Carter and Dr. Mozisek, raising hens outdoors in pasture conditions has a multitude of benefits and presents some potential parasite burden challenges.

We have immense respect for and recognize the hard work, care, and attention to animal health and wellbeing that organic farmers commit to. Consumers place significant value on the benefits of organic production and have high expectations as to the care of animals raised in accordance with organic standards, as was noted earlier today.

Hens that are suffering from a high internal parasite burden experience unnecessary stress. We seek to offer an option for organic

production to intervene if required. A previous meeting highlighted a concern about the lack of clarity in the regulations as to what constitutes an emergency use of fenbendazole. We recognize this concern and agree it should be addressed to provide necessary clarity on this topic.

As I mentioned previously, we do not support unregulated or inappropriate use of this important medicine in organic laying hen operations. Such a practice would not be in line with the standards set out in the National Organic Program.

We submitted written comments which suggest a quantitative approach that could be used and recommend that the poultry veterinary community, being an objective scientific entity, put forward a protocol which could be utilized.

We propose that poultry veterinary experts, such as those members of the American Association of Avian Pathologists or the American College of Poultry Veterinarians, for examples, collaborate to clearly define an objective

assessment of an emergency use situation for internal parasite treatment.

Should such a science-based objective protocol be recommended by this respected group of experts, organic farmers and their veterinarians would be able to accurately document that the criteria had been met to ensure compliance with allowable use cases.

I'll close with affirming a sincere appreciation for the public stakeholder input process. It is so critical to hear all viewpoints, and giving them careful consideration as the Board carries out its important mission.

Thank you.

MR. ELA: Thank you, are there -- it looks like Sue has a question. Guess what, Sue, you're still on mute.

MS. BAIRD: I caught it myself that time. Have you seen an increase in worm populations in organic flocks?

DR. FLINN: I'm sorry, could you repeat that? I had my audio go a little goofy

for a second.

MS. BAIRD: I said have you seen increase in worm population in organic flocks.

DR. FLINN: I would have to refer to our written comments for the survey that we conducted. So any further followup or science-based technical information we would be happy to provide as requested, but I'm not able to answer that.

MS. BAIRD: Okay, thank you. Dr. Donna Kelly, who is a professor microbiology in Pennsylvania Pathology Diagnostic Lab stated that in -- since 2017, roundworms have increased 900%. Heterakis roundworms increased 400%, and blackhead increased by 200%. And she is stating that these worms very potentially would be carrying -- they would carry some kinds of bacterium, enteric bacterium into the eggs.

Do you have knowledge of those kinds of numbers?

DR. FLINN: I would have to defer to my poultry veterinary expert colleagues at this

point, I apologize. Thank you.

MS. BAIRD: Yeah, no worry. I tried to ask him but didn't have time, so. But that was I found fascinating, thank you.

DR. FLINN: Yup.

MR. ELA: Yeah, and I apologize too for cutting you off before, we were just running late on time. But if, yes, you, Allison, if you could submit any thoughts on that to Michelle that could get passed around to the Board.

DR. FLINN: We'd be happy to --

MR. ELA: Next up -- great, thank you so much for your comments. I think what we're going to do is we will go to Emily Musgrave, and then Adam Warthesen, and we'll take another short break before we move on to the rest of the list. We are running approximately 20 minutes behind, but overall I think we're doing pretty well. But we'll keep ourselves focused here.

So Emily, please go ahead.

MS. MUSGRAVE: Can you all hear me?

MR. ELA: Hear you, but you might

speak up just a touch.

MS. MUSGRAVE: Okay. Good afternoon, my name is Emily Musgrave. I'm the Organic Program Manager at Driscoll's. I would like to thank the NOSB as always for their commitment to protect the integrity of the organic program and uphold the vital regulatory processes of the NOP. I would also like to thank both the NSOB and the NOP for their willingness and flexibility to hold two virtual meetings.

My comments focus on biodegradable bio-based mulch, or BBM; marine macro algae and crop fertility inputs; wild native fish for fertilizer production; and the continued listing of EPA List 4 inerts.

I'll begin with the topic of biodegradable bio-based mulch. Understandably, the Board is concerned about the effects of soil health from the BBMs when the material degrades. A four-year research study comparing the soil health of conventional PE mulch to BBMs showed no harmful effects of BBMs on soil health.

Although longer term studies are needed to continue to continue to validate this point, the scientific research conducted to date are good examples of what to expect from BBMs when they degrade. Dricoll's urges the NOSB to rewrite the language in the 2013 policy memo on BBMs that includes requirements manufacturing companies can meet.

Driscoll's does not support the proposal for marine macro algae and crop fertility inputs as it is written, and we believe it should be sent back to the Subcommittee for further work. This is a very complex proposal that impacts one of the most widely used products by organic growers worldwide. We believe this proposal needs further research and discussion in order to get it right, and we believe the Board should get it right.

Driscoll's does not support the proposal on wild native fish for fertilizer production as written. We believe this proposal should also be sent back to the Subcommittee for

further work.

Driscoll's appreciates the Board's continued efforts on the subject of sourcing sustainable marine materials, including those used in liquid fish fertilizers. However, we respectfully ask for more time for the community to weigh in on a change to the regulations that is so consequential to the industry.

Driscoll's supports the continued lifting of EPA List 4 inerts of minimal concern on the national list. Removing EPA List 4 from the national list without another system in place for organic growers would be irresponsible. Driscoll's urges the NOSB to keep the EPA List 4 on the national list until another solution is in place.

I thank the National Organic Standards Board for you service, and for consideration of my comments.

MR. ELA: Thank you very much. It looks like we have some questions. Emily first.

MS. OAKLEY: Thank you, Emily, for

your comments. I was wondering if you could give me some specifics about the marine macro algae document in particular and what further research we need in that proposal to get it right.

MS. MUSGRAVE: Yeah, thanks for the question. I also kind of agree with Lynn Coody's comments that this was the first time seeing it and it was -- those annotations, and it's quite a lot.

So one suggestion we have maybe is holding kind of an industry feedback session on the topic if something like that is possible. So kind of the public and the Board could get some really specific questions about those annotations answered.

MR. ELA: Okay, next, Asa.

MR. BRADMAN: Hi, I wanted to ask, you know, given Driscoll's involvement in the berry industry and the heavy use of polyethylene films in strawberry production, in organic strawberry production, I'm curious, is any of that material recycled? And how is it usually disposed of each

year?

And do you have any growers that you contract with who are using the current biodegradable mulches, and how are they handling it, if that's the case? And by the current biodegradable mulches, these would probably be conventional growers if they're using material that doesn't meet the current organic standard.

MS. MUSGRAVE: Yeah, thanks for the questions, Asa. So your, what was your, the very first question you mentioned? I think there was a couple in there, what was your very first? It was about --

MR. BRADMAN: Disposal of --

MS. MUSGRAVE: Disposal.

MR. BRADMAN: -- used polyethylene films, which are so extensively used in berry production.

MS. MUSGRAVE: Yeah, so it's my understanding that because of, you know, the way it works with those PEs being in the field for so long and, you know, the dirt on them that they're

not -- we've tried. I think our teams have gone to, you know, over 50 different places trying to recycle those, and it's my understanding that we're not actually able to do that.

That nobody really takes them because of, you know, the dirt and how -- I'm not sure into the why, but I know that we're really not able to recycle. Which is why, you know, so many of our growers really want an alternative, because all of that plastic mulch is going to the landfills.

And then as to your -- so the answer to that would be as far as I know, we're not able to recycle that, so that's all going to the landfills.

And then to your second question, I think we really do have some, I know we have lots of organic growers interested in using BBMs, but I do think we are working with some conventional growers to trial these BBMs. And I'd be happy to get back to you on some of the specifics once I talk to our R&D team. But I know there's

definitely a lot of interest there.

MR. BRADMAN: Thank you.

MS. MUSGRAVE: Yeah.

MR. ELA: Any other questions? Thank you very much, we do appreciate it. We're going to go to Adam Warthesen and then take a break. And after break we're going to start with Jake Evans, Ehsan Toosi, and then Ramy Colfer.

So Adam, please go ahead.

MR. WARTHESEN: So thank you. Just do a mic check, can you hear me?

MR. ELA: We can hear you, go ahead.

MR. WARTHESEN: All right, well good afternoon, Board members and staff of the National Organics Programs. Sorry we're not able to meet in person, but like many of you I've become accustomed to this Zoom lifestyle, for better or worse.

At CROPP Cooperative, my role as Director of Government Relations and Industry Affairs is to support our regulatory team, who is going to be commenting later on some of the

materials in front of the NOSB. But I also do work on policy and advocacy at state and federal level. So today my comments are going to be more reflective of expansive rulemaking efforts that the National Organic Program is involved in.

I would say this is that, you know, critical to a healthy and competitive organic theory sector is consistent application of the standards. And regrettably, the National Organics Program and USDA has just utterly failed to accomplish on the top of origin of livestock.

I think we have a really clear situation here that's broadly recognized within the organic dairy industry and across the organic community that we have one set of certifiers and their clients with an interpretation of the regulations over here, another set of certifiers and their clients with interpretation of the regulation over here.

And what ends up happening is a gulf in between them on what is the appropriate conditions for how dairy animals achieve organic

status. This is not new because in 2013 we had an OIG report. In 2015, there was a proposed rule, 2019 a second comment period on that proposed rule.

And in those comments that were provided, it was virtually unanimous in support for allowing a one-time event that permits the transition of a conventional herd to organic, and then thereafter a dairy farmer or producer would only source those dairy animals managed organically as from the last third of gestation. So the continuous transition of replacement stock would be prohibited.

So not only has this sort of ability for the Agency to give us a final rule and determination on this, which has created this competitive harm, been hard on the industry, but it's now out of step with federal law.

The Further Consolidation Act of 2002, which was the appropriation bills we passed in December of this past year, stated that not later than 180 days after the date of enactment, the

Secretary of Agriculture shall issue a final rule based on the proposed entitled rule origin of livestock.

We are now -- that was June 17. Now we're 125 days past that date. So I want to, you know, commend the Board, who previously in October of 2017 had a recommendation that urged the Department to continue to advance this, to remain consistent and to, again, sound off on that expression. The industry has demanded this, Congress is aligned with this. It really needs to become the, you know, the conclusion.

MR. ELA: Thank you very much, Adam. Are there any questions for Adam?

All right, appreciate it, Adam. We are going to take a short break. If we could reconvene, we're running about 20 minutes behind, yeah, about 20 minutes behind. So maybe if we could reconvene at, like in seven or eight minutes rather than the full ten minutes, so that would be at 44 minutes past the hour. So we'll talk to everybody in like seven or eight minutes

again. Thank you.

(Whereupon, the above-entitled matter went off the record at 12:36 p. and resumed at 12:44 p.m.)

MR. ELA: All right, this is Steve again. I think we will go ahead and restart here. And we're running just a little behind but it looks like we can make some of that up. And so Michelle, are you ready?

MS. ARSENAULT: I am ready. The next set of speakers has a slide deck, so I'll just wait for Jared and/or Devon, I don't know who'd projecting them right now, to get those up and running. I just saw the screen blip, so I think they're all cool.

MR. ELA: So we are going to start with Jake Evans, followed by Ehsan Toosi, and then Ramy Colfer, and then after that Michael Menes.

So Jake, are you ready? Do we have Jake?

MR. EVANS: Yes, I'm on, I'm on.

Steve, can you hear me?

MR. ELA: Okay. Yup, we can hear you. Go ahead, Jake.

MR. EVANS: Next slide please, if you can, Steve. Thank you.

Good afternoon, I'm Jake Evans, founder and CEO of True Organic Products. We are the largest organic fertilizer supplier in the US, serving the vast majority of organic produce birding (phonetic) and specialty crop growers in the nation.

With over 20 years in the organic industry, I've had the pleasure to work with some of the best organic farmers in the world. I've seen soils come back to life by focusing on microbial health. I have seen growers innovate by understanding what their ground needs to be healthy, feed that need, and create the most nutritious crops while producing near conventional yields.

I have seen conventional farmers migrate to organic practices after experiencing

disease and pest suppression on the organic ground. I have seen the complete transition of organic soil biomes and soil (unintelligible) while adjacent conventional fields are completely sterile.

All this being possible by feeding the soil carbon-rich compost, plant and animal materials found in nature, utilizing microbial breakdown to transform nutrients and crops, fulfilling the original principles of the organic movement.

Unfortunately, despite all this good, I have seen fraud in the crop input that's unimaginable, fraud at all levels, the manufacturer level, the distributor level, and the grower level. The crop input category has had and continues to have substantial regulatory challenges. True Organic Products funded the private investigation into Port Organics, which led to an FBI sting which found massive fraud of blending of synthetic ammonia and fish.

The industry couldn't detect the basic

of blending of fish with ammonia. How will they regulate synthetic ammonia blended with ammonia extracts utilizing the same tools we had ten years ago, including isotope ratio? OMRI made this clear in their written comments.

True is not submitting this petition for a competitive advantage or competitive reasons. As an industry leader, True has been contacted and explored multiple domestic and international ammonia suppliers, being well-educated in the process. I respect many of those who support ammonia extract and believe they have good waste management intentions.

While True has had an opportunity to bring ammonia extracts to the masses, we have not. We firmly believe AE is not right for organics. In all my years in the industry, I have yet to see a crop input material which will have a more negative impact on our entire industry and will defy the progress and the principles of an entire organic program.

Ammonia, the most commonly used

synthetic fertilizer, is ammonia, regardless of how it's produced. The soil doesn't know the difference, the plant doesn't know the difference, the regulators don't know the difference, and I don't believe the farmers will use them differently.

Thank you for your time and the review of this petition, and I look forward to some other comments from my associates. Thank you.

MR. ELA: Are there questions from the Board? I just have a question. In terms of, we heard from previous speakers that the difference between carbon -- that it was pretty easy to check per carbon-nitrogen ration from synthetic ammonia versus organic ammonia, so to speak. Could you speak to that?

MR. EVANS: Yes. The problem with that, what will occur is in a pure form, the isotope is a tool. The problem is is when you blend those together, there is a large gap. And organic ammonia, being about 20 times more high, of a higher cost than synthetic ammonia, blending

ten or twenty percent in, synthetic into organic, is big range and there'll be a gap that isotope ratio will not detect. And that's the range that major fraud will occur.

When you have tanks of synthetic ammonia at ranches with growers and you have an organic ammonia, and maybe a grower is having a bad month and he could blend a thousand gallons over to the organic tank and save 30 or 40 or $50,000, that's a risk for fraud.

When there's a small distributor that sells organic ammonia, when he has his chemical tanks and also supplies organic farmers with their fertilizer and maybe he has some bills haven't been paid, and he could blend 100 or 200 gallons in and increase his profit margin three or four hundred percent, that's huge risk for fraud.

When there's suppliers internationally and domestically that could produce -- that could blend 10-20% in, that's where the fraud risks occur. And that's what happened with Port

Organics, and I believe that's what will happen with this product. And there's no tool to detect that.

MR. ELA: Great, thank you for elucidating that. Any other questions? All right, we will move on. Thank you, Jake.

MR. EVANS: Thank you.

MR. ELA: Ehsan Toosi, I don't, I probably mispronounce your name, but you are next up, followed by Ramy Colfer, and then Michael Menes.

Ehsan, go ahead.

DR. TOOSI: All right. Can you hear me?

MR. ELA: We can hear you.

DR. TOOSI: Okay. Could you go to the next slide, please. Yes.

Good afternoon, everyone, my name is Ehsan Toosi. By training, I'm a soil scientist and obtained my PhD ten years ago. Since then, I've worked as a researcher in academia, and later joined the Ag industry. And the focus of

my research publications on my work has been soil carbon and oxygen cycling, specifically in relation to sustainable agriculture.

I have been a member of research and development at True Organic Products for the past two years.

Regarding the AE technology, I have a consideration that I would like to share with the Committee. One of the principles of organic cropping as an approach to sustainable agriculture is improving soil fertility to biological processes, commonly referred to as soil biological fertility.

Ammonium and nitrate are plant-available nitrogen forms. Naturally ammonium supplied to plants occurs during microbial breakdown of complex compounds in soil, the so-called ammonification process. Direct addition of ammonium to soil is not a natural process, so even if it is technically non-synthetic, it should not be allowed in organic farming.

The practice, I mean the direct supply

of ammonium to soil, minimally involves the soil food web because it bypasses many, many processes in the soil nitrogen cycle. And this is not in line with a principle of organic farming.

I appreciate your time and I'm happy to take any questions.

MR. ELA: Thank you. Are there questions? I will just ask the question again is that we've heard before that if there's a ammonia extract that has a high carbon-nitrogen ratio, does that carbon get sequestered in the soil the same as if you were adding a, like a manure or something else that's not broken down?

DR. TOOSI: So if there's a source that the carbon to nitrogen ratio, and nitrogen's in the ammonia form is high, is a chance to carbon sequester in short, right?

MR. ELA: Correct.

DR. TOOSI: Yes. Typically, the larger C to N ratio is, the higher probability of carbon sequestration is. But that's just from the chemistry of the input. In the management in

the determines (audio interference) end of the day, for example, the (audio interference) and other inputs that how much carbon sequestration you have.

But yes, when you have a lower C to N ratio, probably you have higher losses of carbon of the input to the atmosphere during the biological processes. Usually microbes, they decompose about half of the carbon from the input and it goes back to atmosphere. Half of that remains in the microbial biomass and it returns to soil over time.

MR. ELA: Great, thank you. Are there any other questions? Thank you, Ehsan. We are going to move onto Ramy Colfer, followed by Michael Menes, and Jessica Knutzon.

Go ahead, Ramy.

DR. COLFER: Okay, can you hear me?

MR. ELA: We can.

DR. COLFER: Okay, great. Thank you for listening to us today. My name is Ramy Colfer. I have worked for the last two years in

the Research and Development Department at True Organics. Before I came to True, I spent 18 years working in the Internal Farming Department at Earthbound Farm, where I was involved with our production. And before that, I received at PhD at UC Davis.

What I learned during my time farming at Earthbound Farm was that in order to solve problems in organic farming, you really need to take a approach that embraces ecological and biological processes, and these processes take time.

For instance, for fertility management, you know, we would utilize practices such as cover crops, using organic amendments such as natural organic fertilizers and compost. And these are carbon-based, very complex molecules that break down slowly through microbial activity by feeding the soil food web.

And similarly with pest management, we've used things like promoting biological control using insectary strips, like shown here,

as well as using botanicals and microbial products, crop rotation, and good variety selection.

And really, all these approaches take time, they require a lot of planning, and they also require a little hammer approach. Really, it's little steps that do little things and in accumulation they solve big problems.

And my concern is with these new ammonia products that they are immediate, they have immediate, quick responses, and they are a big hammer. And I'm afraid the problems that they could create if they become commonly used will be much like what we see in conventional agriculture.

And I fear that, you know, if they become widely used, we could see excessive vegetative growth, which could lead to increased pest and disease problems, as well as increased risk for environmental pollution. And for these reasons, I encourage the Board to prohibit the use of ammonia products in organic farming.

Thank you.

MR. ELA: Thank you. Are there questions from the Board? All right, thank you very much. We are going to move on to Michael Menes, followed by Jessica Knutzon and Kyle Bailey.

Michael, please go ahead.

MR. MENES: Very good. Thank you, can you guys hear me okay?

MR. ELA: We can hear you.

MR. MENES: Great. If you could go to the next slide, please. My name's Mike Menes. I've worked for True Organic Products for 11 years now, and I've been given the opportunity to get involved in the organic industry from the many aspects. This includes serving on the OTA Board of Directors and also on the California Organic Products Advisory Committee. And also various other task forces.

One of my most profound experiences is submitting a petition to the NOSB specifically for ammonia extract. So I truly thank you for

the opportunity to comment on something that I consider a pivotal point in the organic movement and the organic industry.

You've now heard from my esteemed coworkers, who have provided some insight from their perspective roles on the negative impacts in the use of ammonia extract. To complete the narrative, I want to reiterate that the definition proposed in the petition is purposefully broad.

We have a slightly better understanding of the multiple ways, where and how to make ammonia extract. In the end, the focus should be on the finished product. What is in the bottle, where does the biology happen, and is it found in nature? Does it fit into the organic principles? These are fundamental questions.

So, many alternatives already are approved for organic farming that do not bypass the soil food web. I'll give an example of this would be liquid fish.

I will add that I am in support of the

liquid fish petition, given that it does include the waste-derived -- includes waste derived from human and animal consumption. Liquid fish is found in nature and it does fit into organic.

I submit to you today that this a foundational question. AE is not compatible with organic farming principles. Multiple technologies exist, some of which are already in play, so the ball is rolling. Focus on the end product, and you will see that it is not found in nature. It does not feed the soil, but bypasses it. And furthermore, the methods for testing it are unclear.

I ask that you review the process for the petition to prohibit ammonia extract and continue to be -- for it to continue to be expedited. Thank you for your diligence in the perfecting of the organic industry through the principles and the organic seal. Thank you.

MR. ELA: Are there any questions from the Board? Mike.

MR. MENES: Steve, you cut off there

on me.

MR. ELA: Sorry about that. You all make a number of liquid fertilizers. And I guess I would be curious, one, of how different liquids don't bypass the soil, as you're talking about.

And then also would there be any benefit to putting a percentage, like if I grow apples, you know, I can supply 20% of my nitrogen needs through liquids and the rest through some kind of soil application of a solid. Would there be any benefit or difficulty in doing that?

MR. MENES: Okay, so two questions there. The first one I would just mention that how do you define a liquid fertilizer that's suitable for use. And I go back to being mostly like a carbon base, a protein base, and not all the way back to the fundamental starting material.

But also, where is that biology happening? Is there something that's happening in the soil that constitutes feeding the soil and feeding into that soil food web. All of this

really is in the petition, going back to that.

And what was your second question again there, Steve? It was --

MR. ELA: Oh, it was would there be any benefit to, I mean, there are a number of liquid fertilizers out there. Is there any benefit to limiting the total amount of nitrogen that might applied to a crop, you know, like through a percentage or something. I mean, sodium nitrate we had said it can only be 20% of the crop needs. Would that be an approach to take with something like this?

MR. MENES: Yeah, absolutely. Yeah, there's certainly an option to follow that same kind of approach. My first concern would be what Jake had mentioned to, alluded to earlier, was the organic fraud potential for that. Again, we've outlined the fraud potential in there and the fact that it's very similar, so similar that you can hardly tell the difference between.

If you allow a little bit, would that, would somebody take advantage of that? So I

would be cautious about that, that use of that in a smaller percentage. But at the same time, that would still be open to that, knowing that there's a real organic fraud potential there.

MR. ELA: Great, thank you. Any other questions?

Thank you very much, Michael, we do appreciate it.

MR. MENES: Thank you.

MR. ELA: We were going to move on to Jessica Knutzon, Kyle Bailey, followed by Allison Carrington.

Jessica, are you here? Go ahead please, and state your name and affiliation.

MS. KNUTZON: Hi, I'm Jessica Knutzon from CP Kelco. You can go ahead and move to the next slide please.

Thank you all for the opportunity to present our oral comments on behalf of CP Kelco. These comments are in reference to our written comments that were submitted earlier. Two of my colleagues will be presenting next, with more

information around low acyl gellan gum. So if I don't cover something that may answer some questions, my colleagues definitely will.

To start off, I want to go through the process of how gellan gum is made. All gellan gums, both high acyl and low acyl, are made from the same bacteria, which is found in nature on water plants such as water lilies. With a nitrogen and carbon source, that bacteria is fermented and then pasturized.

For both high acyl and low acyl gellan gum, the pasturized product is precipitated, dried, and milled. However, the low acyl has two extra steps before being precipitated that gives it some different properties than high acyl gellan gum. The de-isolation and the clarification processes impart unique attributes to low acyl gellan gum, which I will review in just a moment.

Low acyl gellan gum has the same CAS number as currently NOSB-approved high acyl gellan gum and is labeled as gellan gum on the

label, as is high acyl. Next slide, please.

Aside from the minor differences in the manufacturing process, high acyl and low acyl impact complimentary functionalities. Low acyl gellan gum has a very dense network, is highly aggregated, which leads to more brittle texture and more clarity. High acyl has a less dense network that allow -- sorry, pardon, than low acyl. It is less aggregated, resulting in a soft, flexible texture and some opaqueness. Next slide, please.

So some of the key properties that my colleague Kyle Bailey will go through next for low acyl gellan gum are its high gel strength; its excellent flavor release; it has amazing stability with heat and acid; has sparking clarity; has flexibility when melting and setting, which is important for many applications; and it is compatible with other hydrocolloids. Next slide, please.

And some of the key applications that you'll find low acyl gellan gum in are ready-to-

eat water gels, baker fillings, confectionary. And those first three are important because this creates a vegan option whenever you want to replace gelatin in certain products. For -- you can use it in yogurt, sorry, dairy-based yogurt. Now we have to clarify.

And fruit preparations and spreads that are outside of the standard of identity. It can be used in icings and frostings and different types of beverages. Again, as I mentioned the stability in acidic environments makes it very unique. And in other applications such as toothpaste, sun screen, body mist and washes and nutraceuticals. And my colleague will go more into these as well.

Made it with three seconds.

MR. ELA: Perfect, thank you for that. Unfortunately, three seconds doesn't quite qualify you for the perfect time, but it's pretty darn good, we'll give you the gold star for that.

MS. KNUTZON: I usually go over, so I'm proud.

MR. ELA: Okay, that counts. Are there any questions? All right, thank you very much, Jessica.

MS. KNUTZON: Thank you.

MR. ELA: We are going to move on to Kyle Bailey, followed by Allison Carrington and then Patty Lovera.

Kyle, please go ahead.

MR. BAILEY: Great, thank you. Can you move to the next slide, please.

My name is Kyle Bailey, and I too am with CP Kelco. And I am also speaking in support of the addition of low acyl gellan gum to the list of non-agricultural synthetic ingredients allowed in organic products.

As you can see in this chart that I have, I've got a comparison of low acyl gellan gum versus other gelling agent hydrocolloids that are currently allowed to be used in organic products. And we'll highlight some of the specific functionalities that low acyl gellan gum brings to formulators.

One main attribute is low acyl gellan gum to form fluid gels at very low use levels and deliver longterm suspension of insoluble particles, such as fruit pulp, jelly pieces, or spices and herbs. Fluid gels formed with low acyl gellan gum have a minimal impact on mouthfeel viscosity, unlike alginates, and are highly transparent, unlike high acyl gellan gum.

Kappa carrageenan's use as a suspending aid is really limited to dairy-based beverages because of the interaction with the protein, while iota carageenan is typically in dressings or alternative dairy milks at the expense of a more viscous mouthfeel.

Another major good point of its functionality is its ability to provide heat-stable gels. These heat-stable gels can be used in bakery fillings and water dessert gels. As another example, low acyl gellan gum can be used in both neutral and acidic fillings, such as chocolate and fruit respectively, to provide structure and prevent the filling from boiling

out the baked good, resulting in excellent consumer acceptance.

Perhaps, more importantly, it can function in these types of environments without constraints such as pH or soluble solids in the way that both pectin -- both types of pectin have to. Thus, low acyl gellan gum can work in a broader working range and allow manufacturers to streamline their ingredient usage.

In summary, the unique qualities of low acyl gellan gum as seen and discussed here today allow for its use as a single ingredient across a wide variety of food and beverage applications and allow for different functionalities such as gelling and suspending. In terms of gelling, low use levels go a long way and can provide very firm textures.

And lastly, it is stable to both acidic and neutral conditions.

I urge the NOSB to approve the petition to have low acyl gellan gum approved to the list of non-agricultural synthetic

ingredients, and thank you for your time today.

MR. ELA: Thank you, Kyle. Are there any questions from the Board? I don't see any questions, so appreciate it, Kyle. We're going to move on to Allison Carrington, followed by Patty Lovera and then Stephen Walker.

Allison, please go ahead.

MS. CARRINGTON: All right, can you hear me?

MR. ELA: Hear ya.

MS. CARRINGTON: Excellent. So my name is Allison Carrington, I work for a city council based out of Atlanta, GA, and I wish to thank the NOSB for allowing us to speak on the need for organic vegan low acyl gellan gum.

Low acyl gellan gum is nature-derived and it's made to the process of bacterial fermentation, which doesn't rely on other natural resources. It's a very controlled process. And in the next few minutes, I'm going to discuss the significance of having organic low acyl gellan in capsule technology. So we're on the correct

slide now.

So low acyl gellan gum from a structured function relationship allows for the development of two-piece snap hard cap. And when we formulate with this ingredient, we have the ability to create various release times, which are aligned to health claims. So a standard release time in 30 minutes, 15 minutes, or delayed release, like enteric properties.

Using that variability some of the consumer health ingredients that can be delivered with these capsules are pertinent to digestive health, nutritional oils like fat-soluble vitamins. We can target male-female population needs, looking at different ages, parameters. We can also offer an animal-free solution in a capsule. Next slide.

So why is organic low acyl gellan gum the optimum choice? Well, what we've done is upon investigation or examination, we've looked at other possible alternatives.

So xanthan and locust bean gum, well,

we utilize them within the system. The viscosity is so high that when we look at depositing droplets into the pin, it prevents this from being created. So that capsule shell, the actual integrity cannot be formed.

Pectin on a standalone use basis has a very low viscosity, a lot of splashing. It also produces a film that's more on the weaker side. Agar itself is very inefficient because of the extended setting temperatures.

So to give you a comparison of why we believe a low acyl gellan gum is aligned with this application. And the last slide, please.

So vegan organic capsules with low acyl gellan gums offer the following functional characteristics. That polymer film I just spoke about, it has great integrity, the shelf-life is high. It has a very rapid setting, resulting in dry, cool caps with good mechanical properties for the consumer to consume.

There is very consistent capsule lot-to-lot quality achieved, which ensures the claims

of release time. So we're looking at a capsule that's organic that has the ability to share optimum utilization and absorption of active ingredients in the human body.

Lastly, organic low acyl gellan gum is the best solution for the vitamins, minerals and supplements market.

So in closing, we've been observing very high consumer demand towards the (audio interference) label and the organic supplement industry. And so we know the facts presented today, and I'm going over, I took some of Kyle's time. We know the facts presented today show that organic low acyl gellan gum is the only solution that really meets the consumer needs in the capsule market.

So I thank you for your time.

MR. ELA: Thank you, Allison. Any questions for Allison? All right. Thank you again, Allison, have a good day. We are going to move on to Patty Lovera, then Stephen Walker, followed by Michael Crotser.

Patty, please go ahead.

MS. LOVERA: Can you hear me?

MR. ELA: We can hear you.

MS. LOVERA: Okay, great. Hi, everybody, my name is Patty Lovera, and I'm the Policy Director for the Organic Farmers Association. Today I'm going to cover a couple of topics impacting organic farmers that the National Organic Program is considering. And on Thursday, OFA's Director will comment on several specific issues on the NOSB agenda.

The first issue I'm going to cover is organic certification cost share. So not surprisingly, OFA members are very upset about the decision by the Farm Services Agency to cut 2020 reimbursement levels for the organic certification cost share program.

We understand that NOP and AMS no longer administer this program, but we urge them to -- the NOP in particular to reach out to FSA to try to better understand how this happened. It seems like there's been a lot of confusion and

bookkeeping and delays that led to this situation this year and how we can prevent it in the future.

A second ongoing topic that we just heard about a little while ago is in dairy. We were also disappointed that the NOP did not meet the deadline set by Congress for finalizing a rule on the origin of organic livestock.

We urge the NOP to work as quickly as possible to address this longstanding gap in the organic standards and level the playing field for organic dairy farms. And we hope to hear an update on the status of that rulemaking at the full meeting next week.

On container and greenhouse operations, OFA continues to be concerned about inconsistent enforcement of the three-year transition after the use of a prohibited substance. The memo from the NOP in 2019 left many questions unanswered in this area.

This summer, OFA, the National Organic Coalition, and the Accredited Certifiers

Association conducted a survey of USDA-accredited certification agencies to assess how certifiers interpret the standards for transition within greenhouse, hoop house, hydroponic, and indoor operations.

Thirty-four certifiers responded, and their responses indicate a wide range of interpretation about how long these operations must wait after the application of a prohibited substance.

So we're encouraged that the ACA working group is focused on this issue, and we urge the NOP to work closely and collaboratively with the ACA to provide some clarity on this question as soon as possible.

And then finally, on the strengthening organic enforcement rule, one topic that we've specifically wanted to flag here at the NOSB meeting is the topic of grower groups. So OFA's aware that there are successful and well-run grower group networks around the world that provide a viable way for small producers to

participate in the organic market.

But we believe that this issue deserves a more thorough conversation among the entire organic community on how to strike the proper balance between allowing this unique system and reducing the potential for violations of the standards for unfair economic conditions for growers. The best place to have this discussion is the NOSB.

So we suggest taking the grower group section out of the proposed rule so we can have this conversation without delaying the rest of the rule, which needs to be implemented as soon as possible.

Thanks.

MR. ELA: It looks like Scott has a questions for you.

MR. RICE: Yes, thanks, Steve. Thanks for your comments, Patty. And in regards to your comments on the Organic Cost Share Program, that is something in CACS Subcommittee and in other calls with the NOP, I definitely raised similar

concerns. Our own agency has had just a tremendous amount of frustration ourselves, and I just wanted to let you know that, you know, that is on our radar. We've brought it up to the program, and Jenny and her team have been really responsive in doing what they can. But as you noted, it's out of their responsibility directly, but, at the very least, it felt like they were really hearing that concern and did what they could to kind of reach out to their colleagues but still, obviously, frustrating.

MS. LOVERA: Thanks. Yes, we also think there's also lots and lots of education to do that maybe NOP could help FSA get out to their county offices. The reports we get about the confusion and the process just keep on coming, so there's still more work to do for organic, in that sector, I think.

MR. RICE: Yes, definitely. Thanks.

MR. ELA: Emily has a question.

MS. OAKLEY: Thank you so much for the work that was done on the survey to certifiers

regarding requirements for the transition period under various different applications. It was extremely detailed and covered probably every conceivable situation in the three-year transition period may or may not be applied by a certifier. And I saw the results were very varied, and there was significant variation, at least in some areas, between the way that certifiers are or are not applying three-year transition period. So this is actually, not surprisingly, a question for the program if they've seen these survey results, and, if so, what their thoughts on that are.

MR. ELA: We will see, does anybody from the program want to respond to that?

DR. TUCKER: This is Jenny. I just went off mute. Can you hear me?

MR. ELA: Yes.

DR. TUCKER: Okay. I just received that survey this week. It came to me through a couple of different avenues so appreciate the work that went into it and look forward to

reading through it and see what we can -- I would like to better understand what the survey asked and what the responses were. So thank you to everybody who participated in that process.

MR. ELA: Thanks, Jenny. Any other questions? Thank you, Patty. Much appreciated.

We are going to move on to Stephen Walker, the Michael Crotser, and then Alison Watkins.

Stephen, please go ahead.

MR. WALKER: Good afternoon. I'm Steve Walker from MOSA. MOSA certifies 2200 organic operations, so we manage a lot of skills, experience, and logistics. I'm grateful for the discussion on the human capacity element of our work.

We support strong standards to maintain organic success, fill gaps, and uphold trust. Usually, we find improvements are well targeted, but we're conflicted, as these often place more burden on certifiers. Our capacity is near tapped, and more requirements can make

certification less accessible. Sometimes, regulatory process gets in the way of our organic vision for a thriving organic world. That vision includes all in this movement.

It seems no new rule simplifies processes for the humans involved in our work. Reviewers and inspectors still burnout when their work becomes detail obsessed, managers are challenged to align systems, communication, and training with new requirements, and farmers spend more time on records and pay more for certification as we try to stay fiscally sound.

So as we improve our label, we also look for practical respite where risk assessment might lighten some burdens, like we consider use of innovative technology for parts of inspections and risk-based inspection scheduling. We also call for timely NOP clarification when rule interpretation is inconsistent.

I've been joking that my task here is to distill an 11-page written comment into three minutes. I won't try too hard, and I don't talk

that fast anyway. So just read our comments, but here's a few points. What's working well? NOP interface, the learning center, and good collaboration with other humans in our unique line of work. Cost share helps make certification accessible. Our regulatory sector is not reasonably funded. Certifiers can't continually fund our burdens on the backs of organic farmers, especially in this uncertain global landscape. We ask for federal organic fiscal research and policy support to be on par with that for conventional agriculture.

We recognize pre-competitive challenges, including finding training and retaining inspectors and review staff, competitive pay, geographic gaps, and labor laws for contractors. We're concerned about prescriptive training and qualification requirements. Education, training, and life experience beyond organic ag provide useful, necessary skills. Organic specifics are teachable. Softer skills are more elusive.

These include critical thinking and diverse communication skills, farm-side manner.

I hope this discussion will ease our burdens and help us maintain our passion for organic and its needed positive global impact.

MR. ELA: Thank you, Stephen. Are there questions? I don't see any. Thank you for your presentation. Oh, wait, Mindee has a question. Hold on. Go ahead, Mindee.

MS. JEFFREY: Thank you. It's more of a comment really. I just really appreciate the tenor of most of this communication, the humor and positivity.

MR. WALKER: Well, thank you. It's nice to hear. I like jokes.

MR. ELA: Me, too. All right. Thank you, Stephen. We're going to move on to Michael Crotser, followed by Alison Watkins, and then John Hendrickson.

Michael, please go ahead. I'm not seeing Michael. Michelle, is he here?

MR. CROTSER: Hello. Can you guys

hear me all right?

MR. ELA: We can. Go ahead, Mike.

MR. CROTSER: Okay. I apologize about that. It's great to hear all the familiar voices out there and good to join online for the NOSB. I wish we were all in person to see friends and colleagues, but we'll have to settle for the next best thing.

I'm Michael Crotser. I'm the certification manager at CROPP Cooperative. We appreciate the work of the NOSB and the NOP to support organic agriculture, and thank you for the opportunity to speak today.

Today, I'll comment about sunset review of whey protein concentrate, WPC. We support removing WPC from 205.606(c). CROPP Cooperative represents, roughly, 2,000 family farms across the United States. One primary goal of the cooperative is to market organic goods on the behalf of our farmers and add value across our supply chain. CROPP Cooperative is a major supplier of organic WPC. We produce liquid whey

through organic cheese production. Our whey is condensed and sent to co-packers to be processed into WPC.

WPC production also yields lactose, thus marketing of these two products are closely linked. WPC is used to add protein to foods, such as infant formula, bars, sport drinks, and adult nutritional beverages. We have a good understanding of this supply chain.

Organic dairy whey is now profitable and maximizes the value of our supply chain. Utilizing whey reduced the costs of our goods, minimizes whey disposal, and provides new markets for organic goods. Both international and domestic markets are important.

Sixty percent of our whey is processed into whey powders, and we plan to utilize our entire supply. A search in the Organic Integrity Database shows 24 certified entities that offer whey protein concentrate, whereas a search for the acronym WPC has 5 listings. Currently, non-organic WPC can only be used in certified organic

products if the WPC. Therefore, replacing non-organic WPC with organic WPC will not significantly impact the current supply of organic WPC.

Today, organic WPC is fully available in form and volume and the supply will grow. In fact, our WPC supply is greater than market demand, whereas large volumes are sold on the conventional market.

The processing infrastructure has grown dramatically since WPC was placed on the National List. There is no need to list WPC on 205.606, and CROPP Cooperative encourages the NOSB to recommend the removal of WPC.

And those are my comments. And thank you for your time to speak today.

MR. ELA: Thank you very much. Are there any questions? All right. We appreciate your thoughts.

MR. CROTSER: Thanks, everyone.

MR. ELA: Yes. And then we're next up with Alison Watkins, then John Hendrickson, and

then Beth Rota. Go ahead, Michael. Alison, I mean. I'm sorry.

MS. WATKINS: No problem. My name is Alison Watkins, and I'm the Scientific and Regulatory Manager for the International Food Additives Council. IFAC is a global association representing manufacturers and end users of food ingredients, including a number of substances permitted for organic food production.

IFAC strongly supports the Handling Subcommittee's recommendation to relist waxes, wood rosin at 205.605(a), as well as a recommendation for the technical correction to remove the references to wood resin and only refer to wood rosin in the listing. Wood rosin is an important material for organic food production.

IFAC also strongly supports the Handling Subcommittee's recommendation to relist calcium phosphates at 205.605(b). Not only do calcium phosphates provide critical technical functions in numerous organic foods, they also

serve the public health by providing two essential nutrients in food calcium, which is underconsumed by most Americans. They may also be used to replace sodium phosphates in food and lower the sodium content.

The 18 colors derived from agricultural products in 205.606 are essential to the organic production, as most, if not all, of them lack sufficient supply of organic alternatives to meet the demand. Organic juices are not standardized across the entire market for shade, and most are weaker in strength by 30 to 50 percent and more expensive than their nonorganic alternatives.

We also reiterate that there are no organic purple potato juice or organic paprika currently and a very limited supply of organic carrot juice, black and purple carrot juice, grape skin extract, grape extract, and elderberry juice. Unless adequate organic supplies can be confirmed, IFAC supports relisting all of these colors.

Inulin-oligofructose enriched, IOE, is used as a source of dietary fiber to reduce sugar content in many foods. Fiber is another widely underconsumed nutrient, so IOE helps food producers and consumers fill the fiber gap. There are no commercially-available organic forms of IOE. Therefore, we strongly support the Handling Subcommittee's recommendation to relist.

Finally, IFAC supports relisting corn starch. There are not enough certified organic acres of corn planted in the U.S. today to meet the demand with the organic market. According to the USDA, the U.S. produces 14.4 billion bushels of corn based on the 2018 - 19 data. According to the U.S. Green Council, the U.S. produces, roughly, 39 million bushels of organic corn each year, which means, roughly, 0.3 percent of the 14.4 billion bushels of corn produced in the U.S. each year is organic. As in our comments, native corn starch is central to the production of numerous organic products, from the organic bakery products to gummies and jelly beans.

IFAC supports the petition to add low acyl gellan gum to the National List and the Handling Subcommittee recommendation regarding exchange filtration. Thank you.

MR. ELA: Thank you. Are there questions? I have a quick follow-up. I just didn't get things written down fast enough. You said there was no organic purple carrot juice, or what were the two you said specifically?

MS. WATKINS: Organic purple, organic purple potato juice and organic paprika are the two that we said no.

MR. ELA: Okay. And you say there is some supply of the others but just not enough or in the wrong form?

MS. WATKINS: Yes, yes, limited supply of the remainder.

MR. ELA: Okay. It looks like Asa has a question.

MR. BRADMAN: Just to follow-up on Steve's comment, you said most, if not all. Which are the ones would you say are in better

shape in terms of organic supply?

MS. WATKINS: I would have to consult with our color suppliers to answer that question accurately. We did go into detail on a number of them in our written comments, so we do have some additional information in our written comments.

MR. BRADMAN: Okay. Thank you.

MR. ELA: Dave, you have a question.

MR. MORTENSEN: Yes. I was surprised to hear that 0.3 percent of the harvested corn is organic. Do you have any figures on what it would take in the way of an increase in organic corn production to meet the demand? It seems to me to be a crop that we certainly should be able to produce and meet a demand in the national level.

MS. WATKINS: Yes. The specific data that I received was the last to the 2019 data, but I can reach out to our corn suppliers, starch suppliers, and ask if they want to supply any additional information on that.

MR. MORTENSEN: Yes. I guess,

particularly, maybe not so much acreage of organic corn in the U.S. but what it would take in terms of acres with some average yield to meet the demand in the U.S. for these products. Thank you.

MR. ELA: Emily has a question.

MS. OAKLEY: Thanks. Just a quick follow-up to Steve's question. You said that there is no organic paprika available. Does that mean in the quantity that you need it? Because when I do a search on the Organic Integrity Database, I see quite a number of producers growing organic paprika.

MS. WATKINS: Well, so I will follow-up with our color suppliers on that, but paprika, the paprika extract, so that would be the paprika, taking the organic paprika into the extract. But I will follow-up on that.

MR. ELA: Thank you very much, Alison. Appreciate it. We were going to move on to John Hendrickson, then Beth Rota and Eugenio Geraldo.

John, please go ahead.

MR. HENDRICKSON: Hi. John Hendrickson, owner of Small Farm Works, a small family business that sells paper pots in North America, and the person who submitted the original petition to allow paper pots on organic farms.

I'm here to express my support for the NOSB proposal to add 205.2 and 205.601, which will define paper-based crop planting materials and allow the use of such planting aids, including paper pots, on certified organic farms. These materials are environmentally benign and incredibly beneficial, especially for small-scale organic farmers. They enhance productivity, efficiency, and profitability, while decreasing the use of disposable plastics.

My only concerns about the language and specifications in the motion are these: first, there could be misinterpretation of the limitation that paper planting aids contain a minimum of 60 percent cellulose-based fibers. I believe the Committee's intent is that the 60-

percent minimum refers to the natural pulp part of the paper. There are, however, synthetic cellulose-based fibers, such as rayon. Rayon is made from cellulose, but it's manufactures are synthetic, as opposed to natural cellulose fiber. My written comment includes some suggested language to clarify that issue.

Second, as was included in my public comment at the April meeting, I remain concerned about the applicability of ASTM D6866 as a testing protocol to determine the biobased content of paper-based planting aids. According to a head scientist at a university laboratory that does extensive ASTM D6866 testing, this test is not reliable for paper products made from wood pulp.

I look forward to further clarification about how verification will occur and look forward to working with a third party, such as OMRI, to ensure that the paper pots that I sell meet the final requirements set forth by the NOP.

In response to the Committee's desire to see continued innovation and an increase over time in the biobased content of paper-based planting aids, I'm pleased to report that Nitten, the paper pot company whose products I import and sell, has announced the commercial availability of a new paper chain product starting in 2021 that replaces synthetic strengthening fibers with natural hemp fibers. We're anxious for this new product to be used and evaluated by farmers in the U.S.

Nitten is committed to providing products that are ecologically sound and to improve them over time and, as such, I'm in favor of the NOSB periodically revisiting this annotation to increase the percentage of biobased ingredients as innovation and advancements are made by the manufacturers of paper-based planting aids.

Finally, I'd like to sincerely thank the members of the NOSB Crop Subcommittee who have worked on this rather complicated issue of

paper-based planting aids and have developed what appears to be a sound and practical proposal. I urge you all to bring this matter to a vote and to vote yes to allow organic farmers to use paper pots and other paper-based planting aids.

Thank you very much for your time.

MR. ELA: Very well done on time, John. You're definitely in the running with the others that did that exactly. It looks like Dave has a question for you.

MR. MORTENSEN: Yes. Just a thank you to John for his patience, one; and for providing information when we, you know, when we needed it to help inform our thinking. So I just wanted to thank you for that.

MR. HENDRICKSON: My pleasure.

MR. ELA: Any other questions for John? Thank you, John. We appreciate it.

MR. HENDRICKSON: Thank you, Steve.

MR. ELA: We're going to move on to Beth Rota and Eugenio Geraldo and then Alicia Jorgenson. Beth, please go ahead.

MS. ROTA: Good afternoon. I am Beth Rota with Quality Certification Services, a USDA-accredited certifying agent. We appreciate the call for public input and shared solutions related to human capital. A special thanks to Dr. Jenny Tucker for your leadership in this realm.

Effective management of human capital in organic certification is critical to the ongoing success of the organic label. If human capital is not strategically managed, the organic community will face workforce shortages, limits to certification services, and increased risks from fraud.

Organic certifiers are staffed by amazing, dedicated people who are knowledgeable and committed to preserving trust in the organic label. The problem is that our ranks are not growing fast enough to keep pace with the expanding industry. Each year, there are more organic producers and products needing certification. Meanwhile, the maturing

certification process requires more time and technical expertise to review inputs and ingredients, evaluate processes, and investigate potential fraud. Certifiers need staff with specialized knowledge to assess compliance of unique products and operations; and, at the same time, our reviewers and inspectors must be able to serve a very diverse industry.

In some, the workload is growing in size and complexity faster than new staff or contractors can gain the needed experience to conduct certification tests efficiently and effectively. Furthermore, organic certifiers compete with access to a limited pool of qualified and competent individuals, both within and outside of the certification community. We cannot match industry salaries for top talent.

As part of a nonprofit whose mission includes supporting and promoting organic agriculture, we oppose cost-prohibitive certification fees that will limit the types of operation that can afford certification,

especially considering reduced cost-share funding. QCS invests considerable resources and training and mentoring our reviewers and inspectors to ensure our certification program is compliant and a quality service. However, we lose our investment when staff transfer to work for a different certifier or leave the certification community altogether.

Recognizing these challenges, the organic community needs to provide training and incentives for individuals to choose organic certification as a meaningful career path. We suggest exploration of the following opportunity: connecting with students at universities, trade schools, and extension programs through NOP-sponsored webinars about careers in organic certification; an NOP-facilitated internship program that recruits interns, provides basic training, and connect interns with interested certifiers who can offer direct experience; a database of experts and topics such as food science, plant pathology, and pesticide residues

available for contract by certifiers; and interactive certification and inspection job board hosted by NOP.

Finally, increases in cost-share funding are needed for certifiers to offer competitive wages and maintain robust certification programs that meet the needs of the organic community.

MR. ELA: Thank you for those comments. Are there any questions from the Board? Seeing none, thank you, Beth. We appreciate your thoughts.

MS. ROTA: Thanks.

MR. ELA: We are going to move on to Eugenio Geraldo, followed by Alicia Jorgenson and then Jill Smith. Go ahead, Eugenio.

MR. GERALDO: Thank you. You hear me? So my name is Eugenio Geraldo, the Chief Technology Officer for NuOrganics, and I'll be talking to you about ammonia in manures.

Next slide, please. The organic production goals are defined in 7 CFR, and

include foster cycling of resources, to promote ecological balance, and to conserve biodiversity. Next slide, please. An organic plan is a tool to bring the principles of organic production to practice. It includes manuring as a soil fertility management practice. Manures are rich in ammonia and phosphorus and, if not properly applied, can include environmental contamination. The organic plan includes controls to minimize contamination when manures are applied.

Next, please. The current practice of manure application uses about 50 to 75 percent of the ammonia originally present in manures, creating a cascade of environmental impacts. Manure ammonia can be recovered and avoid the resource loss of this valuable ammonia and the environmental impacts associated to the loss to the environment.

Next slide, please. By collecting ammonia, the goals of organic production are fulfilled: Foster cycling of resources as it recovers a loss resource, ammonia, and reduces

the need for imported nitrogen fertilizers. It also promotes ecological balance and conserves biodiversity as it avoids the release of ammonia to the environment and reduces water pollution by enabling precise application of nitrogen and phosphorus. It minimizes leaching of ammonia and nitrates and also the saturation of phosphorus associated with application of manures. Finally, it avoids contamination by pathogens, as required by the U.S. Code.

Next slide, please. Properly used ammonia is a central concept in soil fertility management in organic agriculture. The enhancement of soil carbon and nitrogen cycles catalyzed by microorganisms of the source of the majority of nitrogen for the crop. This is a central concept in organic agriculture.

Ammonia is the preferred nitrogen source for both of the organisms in the carbon and nitrogen cycle that feeds the cycle and provides the food for the plant.

Next, please. As a result, the soil

carbon and nitrogen enhancement in organic agriculture, manure ammonia -- (audio interference)

Nitrogen in this case is not toxic but an enhancer. OFPA provides the regulatory framework to use manure ammonia for environmental protection, soil fertility enhancement, and farmer benefit.

MR. ELA: Thank you, Eugenio. Questions from the Board? I do have one question myself. One of the things that often comes, say, with fish emulsions or manure is it's not just ammonia and nitrogen that you're adding or phosphorus. It's a number of other nutrients that are included in the manure, as well. It seems like when you extract the ammonia from the manure and just apply that, you don't get that whole spectrum of micronutrients. Do you have any thoughts on that?

MR. GERALDO: Yes. By splitting nitrogen and phosphorus from the manures enables you to apply manure, the phosphorus and the

manure to meet the crop needs, along with the rest of all the micronutrients. Then you're not over applying phosphorus and saturating phosphorus in soils, and also it enables you to apply ammonia only when the plant needs in a very precise manner without risk of contamination, as needed. And so you get the best of both worlds and precise application of phosphorus and the micronutrients in the rest of the manure and precise application of ammonia.

MR. ELA: So you're saying that in this ammonia extraction that we've been talking about, such as the petition is about, that after the ammonia or phosphorus is extracted that the manure then would still go ahead and be applied to the crops; is that correct?

MR. GERALDO: Correct. That's correct. And it would be applied in a way that does not saturate the soil with phosphorus. So precisely apply both of them that usually in manures and in a ratio that is not exact for crops. And besides that, you minimize the risk

of pathogenic transfer to foods and feeds.

MR. ELA: It looks like we have some additional questions. Emily first.

MS. OAKLEY: Thank you for your comments. But listening to you explain that, a producer could use the ammonia extract and not apply the manure, correct?

MR. GERALDO: It could be, it could be the case. But according to the needs of OFPA, you need to have the green manures. You also need to have other sources of organic nitrogen. This would be only to minimize the in-season and to provide the in-season needs, just very much the same as you use right now fish emulsions and other fish products. But this would be a locally-sourced nitrogen, and it would be a resource we covered.

MR. ELA: Dave, did you have a question? It looks like you may have pulled your hand down.

MR. MORTENSEN: Yes, I had the same question as Emily. Thank you.

MR. ELA: Okay, great. Rick, you have a question.

MR. GREENWOOD: More of a comment. When I first transitioned to organic for my avocado trees, I went to chicken manure and just about killed my trees because trying to get enough nitrogen in the salts, and avocado trees are very sensitive. So I see a real advantage in being able to split out the nitrogen from the salts, so I can see it could be a very useful product. Just a comment.

MR. ELA: Sounds good. Any other questions? Thank you, Eugenio. We're going to move on. We appreciate your thoughts.

Alicia Jorgenson, followed by Jill Smith and then Kirk Sparks. And we may not, we haven't seen Kirk on the list, so, Kirk, if you're out there, could you let Michelle know? And then if Kirk is not there, we'll go to Jennifer Berkebile.

So Alicia.

MS. JORGENSON: Hi. Can you hear me?

MR. ELA: We can.

MS. JORGENSON: All right. Hello. My name is Alicia Jorgenson, and I'm on the University of California Santa Cruz's 2020 iGEM team. IGEM stands for Internationally Genetically-Engineered Machine, and it is a global nonprofit organization that tackles humanitarian issues through the use of synthetic biology and biotechnology.

Traditional microplastic forming polyethylene films are allowed in organic farming, while films that biodegrade and replenish the soil are prohibited solely because they are produced through recombinant DNA technology. USDA organic regulation 7 CFR 205.2 states that organisms and feed stock must not be derived from excluded methods, which include recombinant DNA technology.

To measure the safety of a product based upon its method of production says nothing about the end product and everything about that method. The exclusion of recombinant DNA

technology implies a bias towards that technology, but there is no apparent rationale as to why the National Organic Standards Board believes organic farming and recombinant DNA technology are incompatible.

This exclusion supports a technology that promotes cancer and global warming in order to support and ethical stand against genetic engineering. We understand that products of GMOs are excluded due to the potential carryover of modified DNA into the environment. Clearly, a validation process must be developed to ensure that modified DNA is not present in the film or the degradation product.

Through prohibiting products of recombinant DNA technology, the NOSB inherently supports the use of nonsustainable petroleum-based films and stands in the way of sustainable alternatives to toxic polyethylene films. We are developing a bacterial cellulose-based thermoplastic mulch film produced by the recombinant kombucha bacterium K. rhaeticus.

Furthermore, each of the components of our plastic will include only proteins, carbohydrates, fatty acids, and lipid products, all of which are working within our bodies at all times. These components may be synthesized and expressed through recombinant DNA technology, though our final product will include no intact DNA. Curing methods may include UV or gamma radiation, temperature exposure, or enzymatic degradation.

In accordance with the European standard EN 17033, all of these biobased materials are fully field compostable and reduce the threat to people or the environment posed by current methods. We see no reason why recombinant DNA technology is incompatible with organic farming, as both practices can be used to the advantage of humankind in a clean and sustainable fashion.

Thus, we ask that the Board reevaluate recombinant DNA technology as a viable method of mulch production. I want to thank the Board for

its consideration.

MR. ELA: Asa has a question for you.

MR. BRADMAN: Yes. I appreciate your comments. I'm not aware of any films that use recombinant DNA products to make an agricultural film. My understanding right now, the primary barrier, at least on one front, for the use of biodegradable films is that all of them contain a significant proportion of petroleum-derived material and that there aren't any available yet that are 100-percent biobased, which is kind of the limitation here.

Now, you bring up this issue about excluded methods, but I'm just curious are there any available agricultural films that meet the 100-percent biobased content that may also, you know, may be produced by excluded methods? I'm not aware of any product like that.

MS. JORGENSON: Yes. So there are some starch-based films and other cellulose-based films on the market. They actually use excess, like, biowaste, so I don't believe any films on

the market do use recombinant DNA technology. This is just a sustainable way to use bacteria that are present, you know, to produce a base for plastic that can be used in the agricultural industry.

MR. BRADMAN: Because the films that you refer to, I'm not aware of any that are being produced and used in agricultural settings, which, you know, require a certain degree of flexibility and strength and that sort of thing. I mean, if you know of 100-percent biobased materials. It seems there's a strong preference in the agricultural sector for plastics or plastic substitutes that are biodegradable. I mean, I would like to hear about that. And then, again, if there are any that are produced that would meet our current annotation, except for the fact that they're produced by excluded methods, I would like to see those products.

MS. JORGENSON: Right. I would have to get back to you on that. I know that the films on the market right now, they have been

approved, obviously. I believe they're 100-percent biobased. I know the starch one and the cellulose one.

The problem with the cellulose one on the market now is that it is not flexible. If you actually have a sample of it in your hands, you can, you know, physically tear it apart. And because these films are used as bed mulches, right, they have to be super elastic, the installation procedure in the field is that the tractor will drive over it as it tills it into the ground.

So that's why recombinant DNA technology would, that's how it would come into play, right? You need to add something to the cellulose in order to make it more elastic, and that component, which is termed a plasticizer, that would be produced through the use of recombinant DNA and technology.

So while there are films on the market that are probably biobased, they are missing components that allow them to be, you know, to

meet the growers' needs, right, to be elastic.

MR. BRADMAN: Yes. I mean, that's what I'm saying, and it sounds like using language like "would be," so you're proposing that down the road, if there are films that meet the needs of agriculture, except for the use of excluded methods, they might be acceptable. And I would like to see those if they're developed.

MS. JORGENSON: Yes.

MR. ELA: One other thing I just want to point out is it's not just the choice of the NOSB to not accept the excluded methods. It's actually codified in OFPA as part of the law, so it's not something that we necessarily have determined ourselves as an NOSB.

But, Mindee, you have a quick question, and then we're going to move on.

MS. JEFFREY: Yes. I think that the beauty of this organic system and the democracy in being part of the USDA is that the rationale for why the organic community has chosen to exclude transgenic technology is all there for

you to read in public documents, and it's a lot about process-based over product-based and that the organic system takes the totality of the uses of its input into consideration before allowing their use, rather than just evaluating the end past potential risk, for example, of the technology.

So I highly encourage anyone who has questions as to why organic looks at excluded methods in the GMO category as not allowable in organic, it's all there for you to read as part of the federal documents.

MR. ELA: All right. Thank you, Mindee. We're going to move on. Thank you, Alicia.

MS. JORGENSON: Thank you.

MR. ELA: Next up, we have Jill Smith, followed by Kirk Sparks, Jennifer Berkebile, and Tasha Sparks. So, Jill, please go ahead.

MS. SMITH: Okay. Can you hear me okay?

MR. ELA: We can hear you.

MS. SMITH: Okay. Well, good afternoon, everyone. I'm Jill Smith representing the Western Organic Dairy Producers Alliance, also known as WODPA. And I'm also an organic dairy producer myself. I'd like to thank you for the opportunity to comment today on behalf of the approximately 285 organic diaries we represent throughout the West.

We appreciate your prior support on origin of livestock and ask for your continued aid in achieving a final rule. We look forward to quickly finding a common sense solution so all dairy operations are adhering to the same standards that are in line with the true intentions of organic dairy production.

WODPA members have worked for years to change this rule in an effort to improve upon organic standards and create consistency across all sizes and types of operations when transitioning. Without clarified guidelines, our family farms suffer the negative financial impacts by the lack of a market for organic

cattle, lower milk prices, and the economic disadvantage we face by raising our young stock organically versus those practicing continual transition.

Sadly, I spoke with an organic dairy producer just yesterday who is shutting down their farm. They can't survive our difficult organic dairy marketplace any longer. And losing this dairy means we're losing yet another one of our founding members of WODPA. They worked hard to build the organization, shared their wisdom, and provided the model for organic dairy producers in the way they cared for their land and animals. The number of organic dairy producers and family farms is shrinking, while the organic milk market continues to grow. Holding everyone to the same standards is essential to our livelihoods.

To that end, we support discussion around the human capital strategy for organic inspectors and reviewers, as it is vital to organic integrity. The size and complexity of

organic operations continues to grow, making it essential for well-qualified inspectors to provide consistent application of guidelines and supporting the overall integrity of organics.

Moving on to substances, we previously provided comments on whey protein concentrate being removed from the National List. Removal was recommended in 2015 and comments at the spring NOSB meeting showed continued support of its removal. The organic dairy product pipeline has continued to grow in supply and processing capabilities, reducing the need for inputs from the conventional market.

Removal of WPC further supports our dairy producers with the usage of our organic milk. We provided written comments on the livestock substances considered for sunset review. We largely support the relisting of these substances, as they're necessary resources to ensure we meet the highest animal welfare standards in caring for our livestock, especially as we face unique situations inherent to grass-

based livestock systems.

Thank you again for the opportunity to provide comments today, and thank you, Board members, for your service to the organic community.

MR. ELA: Thank you, Jill. Any questions for Jill? All right. Oh, Sue has a -- well, maybe she doesn't. Thank you, Jill. We do appreciate it.

MS. SMITH: Thank you.

MR. ELA: Next up is Kirk Sparks. Michelle, you weren't able to find Kirk is my understanding?

MS. ARSENAULT: That's right. I don't see Kirk as one of the participant. Kirk, if you're out there and I'm not seeing you, give a shout out.

MR. ELA: All right. We're seeing if Kirk is there. We're going to move on to Jennifer Berkebile, and after that is Tasha Sparks. And then we're going to cycle back real quickly through the people that we didn't find

when we first called them. And then just so people know, I think we're going to go ahead and do maybe another half hour or so to cover some of the people that are on our wait list.

So go ahead, Jennifer. Or, wait, I just lost my list. Did I get that right? Jennifer, yes, go ahead.

MS. BERKEBILE: Yes. Thank you. Hello, everyone. My name is Jen Berkebile, and I am the Materials Program Manager at PCO. We certify over 1600 organic operations throughout the U.S. Today, I'll be commenting on paper for use as a crop production aid, corn starch, EPA list for inerts, and biodegradable biobased mulch.

I first want to briefly talk about corn starch. The Handling Subcommittee has voted to remove corn starch from 205.606, which would mean that only organic corn starch would be permitted in organic or made with organic products. However, many baking powder products contain corn starch, and the corn starch makes up

less than 70 percent of the product, making even baking powder that contains organic corn starch exempt from certification and not able to be certified. There is no organic baking powder.

Without the option to use a nonorganic corn starch in these baking powder products, it will no longer be permitted in organic processing because, even if organic corn starch is used, the exempt baking powder will most likely not be permitted to be used as an ingredient in an organic product per 205.310(b) because it is processed at an exempt operation. Therefore, baking powder will be effectively no longer permitted for use in organic processing.

PCO appreciates the Crop Subcommittee's work on paper crop planting aids. We support the clear and verifiable definition for these materials at 205.2, as proposed. PCO also supports the listing of paper-based crop planting aids as crop production aids at 205.601(o). We agree with the ACA to allow a pesticide as an ingredient in a paper-based crop

planting aid, the product itself would need to be EPA registered and labeled as a pesticide.

It is also PCO's understanding that the product itself would need to be used as a pesticide to allow any pesticidal ingredients. But because there is no allowance for paper-based crop planting aids as pesticides, this use will not be permitted unless it is separately listed as 205.601 as a pesticide.

Finally, we also support the recommendation to amend the introductory paragraph to 205.601 to clarify that crop planting aids at 205.601(o) do not need to meet the pesticide requirements at 205.206(b).

PCO appreciates that the Crop Subcommittee is working on biodegradable biobased mulch film. We received more comments and questions and feedback on this material than any other from both conventional and organic farmers. We do not support the continuation of the current listing with no change. We support either the removal of the listing for

biodegradable biobased mulch film, as it does not allow for any products currently in the marketplace, or we support a sound and sensible listing that allows for products currently in the marketplace or products that can be developed.

Finally, PCO supports consistent voting on EPA list for inerts for both use in crop and livestock pest control materials. We also strongly encourage timely rulemaking that includes a removal and replacement plan for EPA list for inerts.

Thank you for the opportunity to comment today.

MR. ELA: Thank you very much, Jen. Are there any questions for Jen? Kim has a question for you.

MS. HUSEMAN: Good afternoon. Can you go back through your comment on corn starch and give me an example of a material that you're speaking to?

MS. BERKEBILE: Sure. So baking powder is specifically what I'm talking about.

Baking powder products often contain some corn starch, but they contain less than 70 percent corn starch. So the bulk of the product is a nonagricultural ingredient. That's allowed at 605, but it is nonagricultural. That's the bulk of the product.

And then a small amount of the product, less than 70 percent, is corn starch, which is an agricultural component. Because less than 70 percent of the product is agricultural, it's exempt from certification under the exemptions. So products that contain less than 70-percent organic agricultural components are exempt from certification. However, these products that are exempt, they can't be labeled as certified organic, they cannot be used as ingredients in a certified organic product. So you couldn't use baking powder in a certified organic product even if the baking powder contained organic corn starch, because it's processed at an exempt operation, the corn starch cannot be labeled as organic or used as an

organic ingredient in a certified organic product. And that is at 205.310(b). It specifically says a product produced or handled at an exempt operation cannot be used as an ingredient in a certified organic product.

Does that make sense?

MS. HUSEMAN: Yes. It's long and cumbersome, but, yes, it does make sense. I appreciate you going back through that.

MS. BERKEBILE: Sure.

MS. HUSEMAN: Thank you.

MR. ELA: Any other questions for Jen? Scott, you have one.

MR. RICE: So, Jen, on that note, maybe I just haven't had an opportunity to think through this on the fly, but could you not have that operation opting into certification, or are you thinking that it would just not be sensible for them to do so, or am I missing part of the --

MS. BERKEBILE: I don't think that products that, I don't think that operations that process products that contain less than 70-

percent organic agricultural components can be certified. I don't think they can be certified. So I don't think there is any possibility for these baking powder products to be certified organic --

MR. RICE: Okay, right.

MS. BERKEBILE: -- because the bulk of the product is not agricultural.

MR. RICE: Got it. I was not following that point there. Okay. Thanks.

MR. ELA: All right. Thanks, Jen. Appreciate it.

MS. BERKEBILE: Thank you.

MR. ELA: Next up we have Tasha Sparks, and I believe she was another one that you couldn't find; is that correct, Michelle?

MS. ARSENAULT: That's correct. I didn't see Tasha in the speaker list. Tasha, if you're out there, yell.

MR. ELA: I believe one person that we did skip over that wasn't present was Brian Ward. My understanding is that Brian might be

available.

MS. ARSENAULT: Yes. We also have, Alan Lewis is on the line with us, as well.

MR. ELA: Okay. So let's go to Brian first. Brian, go ahead.

MR. WARD: Hello. How are you doing? My name is Brian Ward. I've been with Clemson University for many years, and I don't have a PowerPoint presentation or anything like that. Actually, I don't have my books in front of me to reference certain, you know, numbers and codes and so on and so forth. But I do have one, well, one of the questions I have is about the use of, in the generic rule, about the use of ethylene products on pineapple. And I'm wondering why it's not labeled for use as a ripening agent for, let's say, processing tomatoes. That's one question I have.

The other question I have is that I have a patent on nitrogen ammonium-based fertilizer that utilizes bacteria that are not GMO and are not using unapproved salts but are

utilizing actual soil amendments that are currently OMRI and NOP approved, and these bacterial extract the ammonium from the nitrogen and basically turn it into liquid ammonium. That's a stable product, and I wanted to know why, like in California, they've put limits and registrations on how high the nitrogen content can be. I just wanted to, that's the only two questions I have for this evening. If someone can please share with me. That's it.

MR. ELA: Sure. Thank you, Brian. I think we can't fully go into that, just partly because of time constraints, but I would encourage you to get in touch directly with the program. And, like, for the difference between pineapple and tomato, that would require a petition for an annotation change on our part, so the reasoning would have to be laid out and we would have to review it. And then in terms of the California issue, you would actually, that you would have to contact them directly. We do not control their verbiage. I would just

encourage you to talk to them directly.

Emily, real quickly.

MS. OAKLEY: Yes, I was just going to explain partially the pineapple example. It is a contentious one among some stakeholders, but it also was an example or an exclusion that was allowed because of uniformity of ripening, whereas tomatoes ripen at different times on the vine depending upon the variety or more simultaneously depending upon the variety but don't require the same degree of uniform ripening for commercial viability of the crop. But I agree with Steve. More questions to the National Organic Program will help you answer I think some of those specifics.

MR. WARD: Okay. Do I have a couple seconds, or no?

CHAIR ELA: We actually need to move on.

MR. WARD: Okay. That's fine.

CHAIR ELA: We're a little bit behind time. But I would encourage you to reach out to

the Program with questions.

MR. WARD: Okay. Sounds good. Thank you.

CHAIR ELA: Thank you. Alan Lewis, I actually skipped over you before I went to Brian. Go ahead, Alan.

MR. LEWIS: Sound check. All good, Steve?

CHAIR ELA: You're good. Go ahead.

MR. LEWIS: Great. Well, Steve, I was actually going to yield my time to smarter people than me, but now that the biotech industry has floated the issue of proposing bioplastic mulch or film in the industry, I'm going to use 60 seconds as a reminder that that's going to start with extracting natural gas to make ammonia to put into the soil as we've heard about and then we're going to artificially mutate corn seed and plant that in that sterile soil, raise that up using glyphosate, another dirty ingredient.

Then that corn is going to be converted into high fructose corn syrup, fed into

fermentation vats with another artificially mutated organism that eventually will spit out or poop out a polymer. And all of the spent seed is now a biohazard that has to be incinerated.

So the idea that that's an organic product because the DNA of the last organism has been removed is just preposterous. And let's just nip this in the bud.

And I'm going to stop there and let everyone get to dinner a minute sooner. Thank you.

CHAIR ELA: Thank you, Alan. Any questions for Alan?

(No audible response.)

CHAIR ELA: Always appreciate your thoughts, Alan.

MS. ARSENAULT: Steve, if you're still talking, you were on mute.

CHAIR ELA: Yes, I don't know where I ended up. I took -- picked my finger up.

So, Douglas Deveaux, Maria Elena Lombardero Ventura, Mitch Clark, Kirk Sparks or

Tasha Sparks. Are any of those available?

MS. ARSENAULT: I have not seen any of those folks on the line.

CHAIR ELA: Okay. With that we are going to go to a few people on our wait list even though we're going to go over -- a little bit overtime. We're hoping to get to some of those.

So is Roz Lehman available? And after Roz there would be Doug Middleton and Michael Sligh.

Roz, are you there?

(No audible response.)

MS. ARSENAULT: She was earlier. I don't see her anymore.

CHAIR ELA: All right. How about Doug Middleton?

(No audible response.)

CHAIR ELA: Michael Sligh, are you out there?

(No audible response.)

CHAIR ELA: Michael Hanson?

(No audible response.)

CHAIR ELA: This could be fast.

Vincent Chebny?

MS. ARSENAULT: Vincent's on the line with us.

CHAIR ELA: All right.

MS. ARSENAULT: Get him un-muted here. I've asked you to un-mute your line. I'm not sure if you've having trouble. You may have to hit *6 on your phone. There we go.

CHAIR ELA: So are you finding Vincent Chebny yet?

MS. ARSENAULT: I think he dropped off.

CHAIR ELA: Okay. Phil LaRocca?

MS. ARSENAULT: Oh, no, he's still there. Sorry.

CHAIR ELA: Oh, Vincent is? Okay. We'll go back to Vincent.

MS. ARSENAULT: Looks like he's not -- Vincent, if you're trying to un-mute, you can hit *6 on your phone, or you might have to hit *6 on your phone.

(Pause.)

MS. ARSENAULT: Okay. Steve, I'll chat with him.

CHAIR ELA: Switch with him?

MS. ARSENAULT: If you want, yes.

CHAIR ELA: Okay. Phil LaRocca?

(No audible response.)

MS. ARSENAULT: Phil wants to cancel. And so I just got a message from Noah and Noah's on the line with us.

CHAIR ELA: Okay. We can go to Noah.

MS. ARSENAULT: He's on via phone.

MR. LAKRITZ: Can you hear me?

CHAIR ELA: We can hear you, Noah. Go ahead.

MR. LAKRITZ: Hi. Good afternoon. My name is Noah Lakritz and I'm a policy and outreach specialist with California Certified Organic Farmers, CCOF. CCOF represents over 4,000 certified organic farms, processor/handlers and certified organic businesses throughout North America.

Today I'd like to focus my comments on three areas: First, I'd like to discuss the effects of delisting or annotation changes for widely used ingredients and encourage the NOSB to consider the process that certifiers and producers would have to take to comply with those changes. Second, I'd like to highlight the importance of NOSB review of novel ammonia products. And finally, I'd like to highlight a suggestion we have regarding the human capital management discussion document.

CCOF encourages NOSB to be mindful of the potential effect that delisting or annotation changes can have for materials prevalent in organic systems. One complicating factor is that the presence of widely used listed materials and multi-ingredient blends broadens the range of products potentially affected by delisting and annotation changes. This may complicate the process of verifying product compliance. To ensure the organic system can adapt a significant phase-in period and efforts to ensure viable

alternatives are allowed should a company changes to the listing of widely used materials.

CCOF supports the relisting of aquatic plant extracts to the National List. Eight hundred and eighty of our certified organic farmers list aquatic plant extracts in their organic system plans. We are not aware of any commercially available alternatives to these products. Delisting of these materials would require that organic farmers make substantial adjustments to their long-standing fertility management plans.

Similarly over 1,000 CCOF members list liquid fish products in their organic system plans. We wanted to highlight a potential challenge with -- can you still hear me?

CHAIR ELA: Yes, we can still hear you. Go ahead.

MR. LAKRITZ: You can still hear me? Okay. Sorry.

This definition limits fish waste to being a byproduct of fish harvested for human

consumption. This may be hard to verify as the eventual use of harvested fish may not be apparent at the point of harvesting or even initial processing. One potential use not encompassed by this is fish harvested for use in pet food, which was mentioned earlier.

We are particularly concerned with the Crops Subcommittee's proposed delisting for EPA List 4. Most if not all commercial pesticides approved for use in organic production include inert ingredients. CCOF does not support any change that would exclude all commercially available pesticides for organic producers.

We would also like to restate our encouragement for the NOSB to prioritize the review of novel ammonia fertilizer products. CCOF encourages the NOSB to seek information and to pursue discussion regarding the potential for fraud in the production of ammonia extract.

And it looks like I'm out of time, so I'll have it there, but we appreciate the Board's consideration of the human capital management

discussion document. Thank you.

CHAIR ELA: Thank you, Noah. Are there any questions for Noah?

Wood has a question.

MR. TURNER: Thanks, Noah. Noah, does CCOF think that the aquatic plant extract annotation doesn't need to be -- doesn't have any merit in being improved or changed in any way? It's good as is?

MR. LAKRITZ: I can't comment specifically on that. I think that CCOF is open to continued improvement of the standards, but we just wanted to restate sort of a general comment that these really widely used materials, there has to be extra care with changes, annotation changes and delisting because we just don't want to upset the balance in the system and we want to make sure that certifiers, MROs and producers have time to adjust.

CHAIR ELA: Any other questions?

(No audible response.)

CHAIR ELA: Thank you very much, Noah.

MR. LAKRITZ: Thank you.

CHAIR ELA: We do appreciate it.

Sarah Reed I believe is on.

MS. REED: Hi.

CHAIR ELA: Sarah, would you like to ahead?

MS. REED: Yes, can you hear me?

CHAIR ELA: Go ahead. We can.

MS. REED: All right. Hi, my name is Sarah Reed and I'm the handler certification director at California Certified Organic Farmers, CCOF. I'm going to comment on the sunset reviews of cornstarch, carnauba wax and orange shellac. And I believe cornstarch may have already been brought up, but I'll go through my comments as well.

Consideration of cornstarch on 205.606 brings forth a layered issue. As the Handling Subcommittee noted in their discussion various forms of organic cornstarch appear to be available and abundant, however cornstarch is not always used as a stand-alone ingredient in

organic process products.

For example, cornstarch is often present in baking powder. Since baking powder contains less than 70 percent cornstarch, baking powder cannot be certified organic even if the cornstarch is certified organic. If cornstarch is removed from 205.606 and is considered an active ingredient in baking powder, then organic handlers may not be able to use baking powder in organic claim level products if the baking powder contains cornstarch. The result could be that only made with organic claim level products could contain baking powder.

A possible correction could be to add an annotation to cornstarch at 606 limiting its use as an ingredient within baking powder, and we understand that that would be a separate future NOSB agenda item.

So I'm going to pivot to carnauba wax and orange shellac, which brings up similar issues. As noted by the Handling Subcommittee these ingredients are frequently combined with

other ingredients to form multi-ingredient fruit coatings. CCOF is not familiar with the percent organic content of these materials, however, if there is typically less than 70 percent organic content in the finished product, then fruit coatings containing carnauba wax, containing organic carnauba wax or organic orange shellac may not be eligible for organic certification.

Without a clear pathway for certification of materials with products containing less than 70 percent organic ingredients organic processors could lose access to fruit coatings and baking powder if these materials are sunset.

Thank you for your time and consideration.

CHAIR ELA: Thank you very much, Sarah.

Any questions for Sarah?

(No audible response.)

CHAIR ELA: All right. We appreciate it.

And we're going to go back up to Vincent Chebny, who we had trouble getting un-muted.

So, Vincent, you are on.

MR. CHEBNY: Ah, yes. Can you hear me?

CHAIR ELA: We can hear you.

MR. CHEBNY: Okay. Great.

(Audio interference)

CHAIR ELA: Vincent, you're pretty distant and not very distinct. Maybe could you move closer to your mic or something?

MR. CHEBNY: Yes. Is that any better? Can you hear me now?

CHAIR ELA: That is better. Let's try that.

MR. CHEBNY: Okay. Great. So -- (audio interference)

CHAIR ELA: Vincent, I'm going to interrupt again. You're still -- it was better for a minute there, but then we lost you again. It's very distant.

MR. CHEBNY: Can you hear me now?

CHAIR ELA: Marginally.

MS. ARSENAULT: Vincent, if you want to hang up on the computer and dial in on the phone, I think we may have a better connection.

MR. CHEBNY: Okay. Great.

MS. ARSENAULT: Do you have the --

CHAIR ELA: We'll keep your slot.

MS. ARSENAULT: Yes.

MR. CHEBNY: Can you hear me better now? No better?

CHAIR ELA: It's a little better.

MR. CHEBNY: Okay. I'll get off and then I'll call in --

(Audio interference)

CHAIR ELA: Okay. Yes, let's try a call-in. We'll come back to you, Vincent, here in a second.

Is Fritz Dramm available?

MS. ARSENAULT: Fritz is on the call with us.

MR. DRAMM: Yes, sir.

MS. ARSENAULT: There he is.

CHAIR ELA: All right.

MR. DRAMM: Yes, I am.

CHAIR ELA: Yes, go ahead, Fritz.

MR. DRAMM: Well, thank you very much for allowing me a few minutes here. I'll do my best to strike right down to that last tick of the clock so I can win a prize.

Again thank you to the NOSB, the Board members and the NOP for allowing us to provide comments. I did provide some written comments recently on the topic of 205.601(j)\(h) which helped define and gave some clarity to what fish offal inputs might go into a liquid fish fertilizer product which we make.

Dramm Corporation is a small organization in Wisconsin. I'm the manager of fertilizer production at our plant in Algoma and we've been making a liquid fish fertilizer product for about 20 years now. A very simple sort of thing.

But I just -- really just wanted to

echo my written comments and say that we appreciate the attention to the topic and that -- just to -- maybe to explain to everybody else for their appreciation and understanding what we do is we collect fish offal scrap from commercial operations around the Great Lakes. And we collect basically just about as much as we can every year. And it's a challenge sometimes getting enough.

But in all cases what we are collecting is -- including bycatch and the processed offal from operations. And so we get a range of racks and fish guts and heads and skins, and whole fish for that matter, too. It varies from state to state around the Great Lakes, so -- what fish we'll actually get. As an example, here in Wisconsin the DNR will actually take the female fish that are caught in a DNR weir that harvests eggs and they'll actually take the smaller fish and donate those to a food pantry.

In Michigan for instance if you cut a fish while you're doing this sort of processing,

taking those eggs -- if you cut a fish, you cannot resell it. So we end up getting that fish there.

So I guess my point is it's a mix of things every year. It's very difficult to identify any one particular species that we do -- let's not say -- we know what species we are bringing in, we just don't know the balance of the volume that's coming our way. So I don't know if that's helpful to anybody or not, but that is something that we -- or that I think is important to mention.

I think other than that we probably have other topics and issues along the lines of liquid fish fertilizer products that we'd like to discuss, but at this point right now I don't know that we're quite prepared to dive in with great vigor and trying to change anything. We're pleased with --

(Audio interference)

MR. DRAMM: So unfortunately I didn't hit my zeroes. Darn it. But I appreciate again

the opportunity and I yield my time.

CHAIR ELA: Thank you. Emily has a question for you.

MS. OAKLEY: Thank you for your comments, and thank you for your written comment as well.

And there was some suggestion by some commenters in their written comments that this proposed annotation, while it might only affect let's say 40 percent roughly of the currently un-relisted products, that it would affect a large percentage of the material available because those producers are producing a large amount of the liquid fish products that are consumed by producers. Do you have any thoughts on that?

MR. DRAMM: Yes, internally we've had a brief discussion about that in the last couple of weeks, but I don't believe that that impact would strike close to home for us necessarily. I really would probably want to fall back and put some thoughts together with some of my cohorts here before I said anything more, Emily. I'm

sorry for lack of a detailed answer there.

MS. OAKLEY: No, no problem. Thank you.

CHAIR ELA: Thank you very much, Fritz. We do appreciate it.

Okay. Michelle, have we got Vincent?

MR. CHEBNY: I'm back.

CHAIR ELA: That is so much better. Thank you, Vincent, for bearing with us.

MR. CHEBNY: Oh, great.

CHAIR ELA: Go ahead.

MR. CHEBNY: I'm glad to hear that. Once again, my name is Vincent Chebny. I'm with Trece Incorporated. I'm the laboratory research and development manager.

At Trece we make semiochemical-based monitoring products, mating instruction control products, gustatory stimulant and adhesives for insect trapping. And the reason why I'm attending this meeting is that -- because I have a concern for the delisting of the inert ingredients that are allowed for this organic

production.

We currently produce over 23 semiochemical products that are formulated with approved inert ingredients on the Inert 3 and 4 list, and so removal of these ingredients would essentially eliminate all of the semiochemical products that we offer for use in organic production.

And so the consequences of delisting any of these products would be loss of monitor products that we make, which are semiochemical monitor dispensers. And these are used in industry to gauge whether there's a pest problem and when it's time to apply a control material to target the pest problem. So without this organic growers, they don't have the ability to apply the control material efficiently because they don't know when the insects are in the field. And this will also lead to higher crop loss from insect damage and also poor utilization of these control materials.

Quickly No. 2, the loss of the mating

disruption product from delisting these inert ingredients. They won't be able to be sold at all, and so they will not be able to decrease the population of these insects by disrupting the mating. And so that has an effect on your crop damage. So without this they're going to have -- growers are going to have to apply larger amounts of control materials and suffer a higher loss of crop damage from these insects.

Our No. 3 product that I would say would be -- you know, a hurt to the industry is our gustatory stimulant products. So we aid these to be able use with pesticides to lower the amount of the controlled pesticide materials. Growers can lower their pesticide usage 2 to 10-fold. So if they're not able to use these registered products using these inerts, then they're going to have to use more pesticide and hopefully they won't have as high insect damage.

And so these 3 and 4 Ingredients Inerts, they're requiring our formulation of products they help control the active ingredient

usage and without controlling the active ingredient it will just be degraded by the environmental conditions, which is light and oxygen, heavily. So we rely on these inert ingredients to protect them from degradation. And so control release and protect from the environment is very important in formulating any product, especially ours.

So that's kind of where I'm at in our concerns for removing these Inert Ingredient 4 lists, and I'll leave it at that.

CHAIR ELA: All right. Thank you, Vincent.

Any questions for Vincent?

(No audible response.)

CHAIR ELA: All right. We appreciate you hanging with us here to make your comment.

MR. CHEBNY: Thank you for having me.

CHAIR ELA: Yes.

I know everybody is tired. I'm thinking we'll do one more and call it a day. Michelle has gone down the list and Mike Dill is

the only one she can find.

So, Mike, if you're willing, we'll go to you and then wrap this up. And the other people that we didn't get to on the wait list we'll try and get back to you on the coming -- the Thursday public comments.

So, Mike, go ahead.

MR. DILL: All right. I am here. Can you hear me?

CHAIR ELA: We can hear you.

MR. DILL: All right. Perfect. Well, thank you for holding off for one last comment. My name is Mike Dill and my comments are on behalf of Organically Grown Company, an OPWC member organization.

I'd like to comment on the Subcommittee recommendation to remove EPA List 4 from the National List. We agree that it's time to make some progress, however, we cannot support the proposal as it's written. We think it is irresponsible for the Board to propose moving forward without the due diligence required for

such a significant change.

I actually find it quite alarming that the Crops Subcommittee is proposing a vote of this magnitude without having providing stakeholders sufficient information. In the fall NOSB packet there was no needs assessment, no analysis, no comparison, no timeline to completion, no memorandum of understanding between NOP and EPA, no formal agreement, and most importantly nothing that quantifies the impacts of farmers, input manufacturers or the supply chain from the potential loss of hundreds of inputs.

I'm also left wondering if you can consider -- or you consulted material manufacturers to learn how many years it takes to formulate, conduct field trials, reformulate, create packaging, seek federal and state registration, then manufacture, distribute these new products.

I'm also wondering if you've researched how this impacts -- or how this could

impact currently allowed National List materials that require inerts for their functionality like Bt, for example. Will the current Bt active ingredients work if formulated with safer choicing ingredients? I think we need to know that.

I also didn't see a technical report or a aide-by-side comparison of the list for inerts and safer choice ingredients. Since pesticide formulations are proprietary, the public cannot advocate for individual ingredients as we would for other National List materials. Thus, it would make sense for the NOSB to research and have analysis done by someone who has access to the ingredients used in formulated products, and a technical report would serve this purpose.

How can you -- how can organic stakeholders like me and you make an informed decision given the level of information provided here? The most telling statement in your recommendation is one that leads the reader

hanging. You state of the 365 inert ingredients that are used in OMRI listed products 153 appear on the Safer Choice List. So what about the other 212 ingredients? There's no further mention or consideration to them in this recommendation.

It was mentioned repeatedly today that there were several options over the years to move forward, so I'm left wondering why those didn't end up in the proposal for the public to comment on and how with all those options we ended up with Safer Choice being the proposed path forward despite it not being an appropriate solution and contains ingredients that have no business being in the pesticide?

With Safer Choice, we're no longer talking inerts. We're talking ingredients. And I guess I ran out of time.

CHAIR ELA: Mike, thank you for your comments.

Are there questions for Mike?

(No audible response.)

CHAIR ELA: Mike, I'm just going to ask you real quick -- Asa's got a question after me. So I mean we're faced with the quandary of I think -- like such as in 2015 where if we relist the list for ingredients; I mean it's a broken list, there's no way to add new ones to it, that we're stuck with an old system and there's no way to encourage the program to move forward on some other choice, whether it be Safer Choice or something else. If we delist, vote to delist, then we prod the program into having to do something with what is now a broken list.

What would -- so we're kind of caught in this quandary. What is -- in a -- for a sunset we can't actually propose new annotations or new materials. We're just looking at that sunset by itself. So how would you propose we proceed?

MR. DILL: Well, I absolutely understand the issue that you're facing, that we're all facing, and I think we all want to move forward, but putting the pressure on the NOP is

not the right move. And I don't think that's fair from the NOSB that has the responsibility to come up with a thoughtful proposal to an end plan, so it seems like we have half of it figured out. That's -- and that's that we want to move forward. But we don't have a viable solution to actually achieving that end.

And I look at -- like in SOE the NOP proposed for instance that for imports that we work with CPD and develop a program to track and approve all those imports and issue import documentations, or certificates. So that actually takes partnership with another agency. And I don't see how we can just say that we want to develop a relationship. And that's quoted in the proposal. It says that we want a relationship with EPA.

But if that's not done -- and we haven't started that. And we don't even know if they're on board. And if this is going to be a proper path forward, it just seems way too premature. We can't let that hang out there and

just hedge our bets on the fact that EPA is going to agree with allowing Safer Choice ingredients in pesticides. I don't even think we know if that's doable yet.

And if I look at Safer Choice and look at all the ingredients that they have, I mean they have different classes that include skin conditioners, fragrances, colors, antimicrobials, it just doesn't seem like that is the right solution here when we're talking about pesticide inerts and then we're switching it to a list of ingredients that contain skin conditioners.

So I think the only path forward is to reconvene the task force, make a goal that we are going to have a proposed solution where there's an agreement in place between the agencies involved, that we create that list, we review all the materials, do the proper analysis of what's going to be left off, what's going to be included, and then move forward with either a petition for a new listing that has either a category or the individual ingredients, and that

would allow us the opportunity to the next time this sunsets. Then we can delist that.

But in the meantime at least we have two lists that we can be working off and we can give folks time to reformulate their products, do all the trials that they have to do and really just -- you know, this is a big deal. We can't just reformulate overnight. I think we've heard that from several commenters today that actually work with inputs. And just putting the pressure on the NOP is not the right way to go about this. And hedging our bets on EPA wanting to move forward with this as well.

CHAIR ELA: Thank you. Yes, I'm sure that will be part of our Board discussion.

Asa, one last question.

MR. BRADMAN: Yes, I mean I think you highlight some of the challenges for the current industry, and I guess there's also concern that -- for example, there's a suggestion that this is a 10-year process, and we're essentially already five years into it. I mean there was a series of

recommendations made in 2015 and earlier that began to actually address many of your concerns and little or no action has been taken since then.

I mean I totally agree that we need a working -- there needs to be a working group on this and it needs to be active. And there needs to be a review of both the materials on List 4 and List 3. And where there may be overlap with the Safer Choice -- the SCIL list, I think there's a bit of a misperception here that the -- we're talking about replacing List 4 with this SCIL list. Rather, that is really a suggestion for a process; and this goes back years, many years, to provide a framework to work with EPA to evaluate inert ingredients.

And we do have this problem that it's been broken, but it's been broken for a long time. I mean we've lost -- from your perspective it sounds like we're just starting it fresh and we're not -- from what I see we're not starting fresh. This has been going on for a long time

and has not been properly addressed. And then there are materials in List 4 that I think many would -- like patently are not acceptable in organic.

So I agree we need to move forward and how to do that is -- I think is what we're all trying to figure out.

MR. DILL: Yes. No, and I totally agree. And like I said, I think we all agree, everyone wants to move forward, but I would like to see some sort of process where we can either vet a couple different options. You said there are several options out there. I personally -- and it sounds like a lot of other folks don't agree that Safer Choice is the way to do forward, but if we can have -- and I'm not sure if this is allowed or not, but if we can have a sanitizer panel outside of the NOSB meeting, can't we do something similar to that with inerts where we can do some work outside of the two yearly meetings and actually make some progress and get some stakeholder input on what the actual path

forward should be?

When I read the proposal it just sounds like we're going to delist and we're going hedge our bets on Safer Choice. I mean that's what comes across in the fall packet. And I think that's -- right now with everything we've had to do in the last six months -- first we didn't see any indication that this was going to happen after the spring meeting.

Then we had SOE, which consumed the entire organic trade, and that was the main focus over the last 90 days, which overlapped with this NOSB meeting. We just didn't have the time to really get in there and think about what other processes could be put in place, what other options we have. And I hate to say it, but we just didn't have the band width to do the homework that we normally would on an NOSB meeting because of SOE.

So I just think that it's premature to delist without any kind of a process, a clear process forward, and I'm afraid of what we'll end

up with because Safer Choice doesn't seem like the right option and I think we really need to sit at the table, NOP with EPA, and just develop an organic-specific list based off of EPA List 4. We set up the criteria. And perhaps we can use the criteria that Safer Choice has in place, but we can't use their list because it includes so many items that have no business in a pesticide product.

MR. BRADMAN: Yes, I think what you're --

CHAIR ELA: I think --

MR. BRADMAN: we're describing is potentially what -- can I make one more comment, Steve?

CHAIR ELA: Sure. Asa, hold on. So if it's a comment, no. If it's -- we're well over time now and some of this is really a discussion for the full Board meeting. So I don't mean to cut you off, but we've given Mike a lot more time than some of the other speakers. But I would love to hear your comments in the

full Board meeting, Asa.

MR. BRADMAN: Okay.

CHAIR ELA: So, Mike, I appreciate it, and we appreciate your thoughts as well as though those of others.

MR. DILL: Thank you very much.

CHAIR ELA: With this -- I know we went considerably over time. Thank you for everybody's patience. It makes for a very long day, but I really want to reiterate that we do appreciate every stakeholder's viewpoint on this really. It really does help our deliberations on all these materials.

So I want to remind people that we do have another public comment session on Thursday in the same format. We'll go through that as well. We'll try and get to a few more wait list people.

Michelle, or any of the program people, do you have any further comments before we call the meeting or adjourn until Thursday?

MS. ARSENAULT: I have nothing to add.

Just the link that you guys used to join the webinar today is the same link for Thursday, and it's available on the National Organic Standards Board meeting web page, or wherever you got it the first time around. So thank you, everyone.

CHAIR ELA: All right. Yes, thank you, everybody, for hanging with us. Thank you for the Board for hanging with us and we'll talk to you again on Thursday.

All right. Everybody have a good day or evening, or whatever it is. Take care.

MS. ARSENAULT: Thank you, everyone.

(Whereupon, the above-entitled matter went off the record at 5:48 p.m.)

UNITED STATES DEPARTMENT OF AGRICULTURE

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NATIONAL ORGANIC STANDARDS BOARD

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PUBLIC COMMENT WEBINAR

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THURSDAY,
OCTOBER 22, 2020

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The Board met telephonically at 12:00 p.m., Steve Ela, Chair, presiding.

PRESENT
STEVE ELA, Chair
SCOTT RICE, Vice Chair
JESSE BUIE, Secretary
SUE BAIRD
ASA BRADMAN
JERRY D'AMORE
RICK GREENWOOD
KIM HUSEMAN
MINDEE JEFFERY
DAVE MORTENSEN
EMILY OAKLEY
NATE POWELL-PALM
A-DAE ROMERO-BRIONES
DAN SEITZ
WOOD TURNER

STAFF PRESENT

MICHELLE ARSENAULT, Advisory Committee Specialist, Standards Division

JARED CLARK, National List Manager, Standards Division

DAVID GLASGOW, Associate Deputy Administrator, National Organic Program

DEVON PATTILLO, Agricultural Marketing Specialist, Standards Division

JENNIFER TUCKER, Ph.D., Deputy Administrator, National Organic Program; Designated Federal Official

SHANNON NALLY YANESSA, Director, Standards Division

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

12:00 p.m.

MS. ARSENAULT: Welcome, everybody. It looks like we have a good number of folks on the phone with us already and I imagine join as the day goes on. All right. So just a few housekeeping issues before we get started before I turn it over to Jenny.

So first of all, thank you for joining the second day of the comment period for those of you who were on Tuesday. Everything went really well on Tuesday. Thank you guys so much. I thought it was a little quiet in the chat box. So hopefully, you guys will chat with each other, say hello. We've all been separated for so long.

So if you're on line, you should be able to see an instruction slide. Jared, are we previewing? There we go. Now you're seeing me, huh? How about we put the instruction slide.

There'll be an instruction slide on the screen intermittently with phone numbers in case you're having audio issues and you want to dial

in instead of being on the computer, that we'll have that available. I've also added it to the chat box. So if you're (audio interference) phone number, you'll find it there as well.

If you're having any technical issues, you can go to the Zoom.com website. Their help center is pretty responsive and really helpful. You can live chat with them or you can call them on the phone as well for quicker access.

We are recording the webinar, and I'm going to start the record button. There we go. So we're recording the webinar. We also have a transcript, as we usually do, available after the Board meeting concludes next. It usually takes a couple weeks for us to get the transcript. We have to make it ADA compliant before we post it on the website. So that'll delay it a little bit.

We've asked the -- speakers had to sign up in advance in order to talk, and Steve is going to call on folks in the order that's on the schedule that we sent out. And so we're asking everybody else or even the speakers to make sure that you

mute your mic while we're going along. And then you can unmute yourself as it gets near your time to speak. Or we can unmute you from our end as well.

If you hover over your Zoom screen, you'll see a chat box at the bottom. You guys are welcome to chat amongst yourselves. We're not answering technical questions via the chat, and chat is not part of the official record. So we'll just leave it open so you guys can chat with yourselves.

You'll find your mute button and your video button in the lower left-hand corner of the Zoom window. So you can mute and unmute yourself there. If we see noise on the line, we'll mute you from our end as well.

I'm going to start a timer at the beginning of speakers' comments. And you'll also see the timer in a pinned window on your screen. At the end of three minutes, you'll hear a very loud beep. So I don't there'll be any issue with you knowing what time to stop talking.

And then Steve will ask any Board members if they have questions. So don't mute yourself right away after you comment is done. There may be follow-up questions.

I'm going to -- let me set a couple seconds on the timer so you can see it. All right. Jared, do you want a spotlight? Oh, no. That's me, all me. Let me switch webcams here. All right. So hopefully, people can see the webcam if you're on the computer with us. And in two seconds, you will hear a very loud beep.

All right. That marks the end of your (audio interference). We ask that you end your sentence and keep your mic on so in case there's follow-up questions from the Board. All right. I'm going to turn the mic now over to the NOP, National Organic Program Deputy Administrator Jenny Tucker. Jenny?

DR. TUCKER: Hello, everyone. It's great to see so many names back for a second day of public comment. I also see some new names on our participant list today. And so I am going to

repeat our introduction and call to order that we did on Tuesday to formalize the kickoff of today's session.

And so Michelle, thank you so much for a great logistic lead in and all the work that's gone into preparing for today. My name is Jennifer Tucker. I'm the Deputy Administrator of the National Organic Program.

First, welcome to all our National Organic Standards Board members. We are meeting again online during unique and challenging circumstances. Your continued dedication and flexibility have allowed this ongoing practice of engagement and transparency to continue.

I would particularly like to acknowledge our five Board members who are beginning the last meeting of their terms. And so that's Jesse Buie, Emily Oakley, Dan Seitz, A-dae Romero-Briones, and Scott Rick. I am sorry to not be able to give you a huge hug of thanks for all your work during this meeting and the meetings that have come up before.

We're grateful for your hard work and service for the last five years. Let's give them all a round of a Zoom applause, and this is how we do that for folks who have not been with us before. So this is what Zoom applause looks like.

To all our public commenters, thank you for sustaining this participatory process in this format again this fall. We thank you for signing up to have your voices heard. I also thank our audience. You serve as important witnesses to this public meeting process, and we're grateful that you're here.

This webinar continues a series of virtual webinars that will occur over multiple days. This is the second day this week. There will be three days next week. And then one day in November we'll have a panel on sanitizers. Meeting access information for all meeting segments is posted on the NOSB meeting page on the USDA website.

Transcripts for all segments will be posted once completed. This meeting, like other

meetings of the National Organic Standards Board, will be run based on the Federal Advisory Committee Act, FACA, and the Board's policy and procedures manual. I will act as a designated federal officer for all meeting segments.

To close, I want to thank the National Organic Program team for their amazing work in getting us here today. So when I mention your name, if you could go off camera just so everybody can see you and to go ahead and wave. You've already heard from Michelle who does an amazing job in working with this Board and with the community throughout the year.

We also have on with us Devon Pattillo, policy analyst extraordinaire. We have Shannon Nally Yanessa who is our Standards Division Director, David Glasgow who is an Associate Deputy Administrator. And I want to welcome our new National List Manager, Jared Clark. So Jared's now been with us for a few months and has done stellar work in his new role. So we're very happy to have him here.

I also want to thank Steve Ela, Chair of the Board, who led our virtual meeting so well on Tuesday and last spring and who I know will do the same for the rest of this meeting. Steve, you are an amazing collaborative partner, and we thank you very, very, much. I'm now going to hand the mic to Shannon Nally Yanessa, the Standards Division Director, who's going to do a roll call of NOSB members and NOP staff. Thanks so much for being here, everybody.

MS. NALLY YANESSA: Thank you, Jenny. Good morning, good afternoon. Good to see everybody back again for day two of the public comments. So roll call for the NOSB members, Steve Ela?

MR. ELA: I am here.

MS. NALLY YANESSA: Thank you. Scott Rice?

MR. RICE: Present.

MS. NALLY YANESSA: Thank you. Jesse Buie?

MR. BUIE: Present.

MS. NALLY YANESSA: Thank you. Sue Baird?

MS. BAIRD: Here.

MS. NALLY YANESSA: Asa Bradman?

MR. BRADMAN: Here.

MS. NALLY YANESSA: Jerry D'Amore?

MR. D'AMORE: Here.

MS. NALLY YANESSA: Rick Greenwood?

I'm not -- oh, there. Okay. I see Rick. Kim Huseman?

MS. HUSEMAN: Present.

MS. NALLY YANESSA: Mindee Jeffery?

MS. JEFFERY: Good morning.

MS. NALLY YANESSA: Good morning. Dave Mortensen?

MR. MORTENSEN: Present.

MS. NALLY YANESSA: Emily Oakley?

MS. OAKLEY: Present.

MS. NALLY YANESSA: Nate Powell-Palm?

MR. POWELL-PALM: Present.

MS. NALLY YANESSA: A-dae Romero-Briones?

MS. ROMERO-BRIONES: Present.

MS. NALLY YANESSA: Dan Seitz?

DR. SEITZ: Present, hi.

MS. NALLY YANESSA: Thank you. And Wood Turner?

MR. TURNER: I'm here. Good morning.

MS. NALLY YANESSA: Good morning. That completes the roll call for the NOSB. So I'm going to hand the mic back over to Steve Ela who is the NOSB Chair.

MR. ELA: Thank you, Shannon. Much appreciated and good morning or I guess good afternoon to everybody. Thank you so much for your participation last Tuesday on our virtual public comments, and we look forward to another session today. I do want to say we may -- on Tuesday, we did run a bit over to try and incorporate some of the people on the wait list. And that may also happen today as well just because I had lots of people.

I'd like to go over a few things. First of all, I want to note the five new members that

are going to replace the five members that are going off. We look forward to these five new members on the Board, and you will officially start in January. But I know some of you may be on this meeting today. Hopefully, we don't scare you off and look very much forward to having you participate on the Board.

The public comment policy that we follow today is from our policy and procedure manual. If you need any details, you can refer to that. But just as a quick overview, all speakers who will be recognized did sign up during the registration period. As I mentioned, we do have a wait list from that registration period that we'll try and get to.

Speakers will be called upon in the order of that schedule. And each of you will have three minutes, and we will have time for questions from NOSB members. When you do start to give your public comment, if you would please give your name and affiliation for the record. That way, our transcriptionist can know who you are.

We do not allow proxy speakers. And most importantly, individuals providing public comment shall refrain from making personal attacks or remarks that might impugn the character of any individual and also even impugn their intentions as to what they were thinking. If that happens, I will do my best to immediately cut you off and ask you to rephrase. And if it continues, we will move on to the next speaker.

The process is I will announce the next speaker and then the person or two after them so those people can be ready to speak. Each speaker has three minutes as Michelle noted, and the timer will start when the speaker begins. When the timer goes off, please complete your sentence and end your comment when you hear the timer. That is such that we can go ahead and give time to the Board to ask questions and be fair to our following speakers.

Board members will indicate to me if they have questions by raising their hand. And I will recognize them in turn. If for some reason

you can't raise your hand on Zoom, please feel free to interrupt me as we start to move to the next speaker and we'll make sure and get to you.

Only NOSB members are allowed to ask questions, and I will ask the NOSB Board to ask questions rather than make comments. We do not have a large amount of time for each speaker, and I would like to make the most use of each speaker we can by asking them their thoughts rather than making comments of our own. We will have the full Board meeting next week to interact among ourselves and make comments as to how each of us feel on a certain topic. Are there any questions from the Board?

If not, we will go ahead and jump in to the public comments. Our first speaker today is going to be Bjarne Pedersen. I know Bjarne is traveling, and so we may have to skip over him and come back to him. Next speaker after Bjarne is Kaat -- and I'm sorry, Kaat -- Kaat Bracquine and then Robin Hadlock Seeley followed by Albert Straus. Bjarne, are you on the phone?

Okay. We will -- he let us know that he might not be present. But we'll circle back to him at the end of the day. So Kaat, are you present?

MS. BRACQUINE: I am.

MR. ELA: Okay. And you can tell me how to properly pronounce your name. But --

MS. BRACQUINE: All right.

MR. ELA: -- please go ahead.

MS. BRACQUINE: Okay. So my name is Kaat Bracquine, and I'm speaking on behalf of Lonza. Thank you for putting up these slides which we indeed have here as a support to the information shared. So thank you for the opportunity for Lonza to express our support for the NOSB to vote in favor of adding low acyl gellan gum to the National List.

When you go to the next slide, you'll see that we want to bring really specific attention to the market segments of dietary supplements supplied by Lonza with our Capsugel capsule portfolio. So as you do know, there is a growing demand for organically certified dietary

supplements. And therefore it's also crucial to ensure that the regulatory framework enables the manufacturing of a vessel for the delivery of these nutritional ingredients that are in line with the demands for organically certified products.

Lonza has been engaged in the research and development of organically certifiable capsules since many, many years. And as you can see on the next slide, the qualification of gelling agents, which is an important capsule ingredient -- Capsugel ingredient, does require careful evaluation. So not only does the gelling agent facilitate manufacturing of the capsule and that can be seen on the left-hand side.

These are the two functionalities that the gelling agent needs to fulfill to be able to make the capsule. It also strongly determines the performance and the functionality of the capsule as a dosage form for the user. So it needs to have certain robustness for mechanical resistance. And most importantly obviously, it needs to disintegrate for content release in the body.

So going to the next slide, we can show that our R&D experts have actually studied very carefully all the currently listed alternatives on the National List but none of which have provided satisfactory results so far. So as an example, the high acyl gellan form but also the gums listed actually, they are not compatible with the required manufacturing conditions to be able to make the film and the capsule. And also potentially, the results -- not potentially but actually -- the results in poor quality capsules.

Now you do see that carrageenan is indicated with a question mark. Carrageenan is indeed compatible. It's currently in the market and actually in U.S. NOP certified dietary supplements using Lonza's plant capsules based on pullulan and they're made with clay. But that's carrageenan. It's at the heart of considerable debate over recent years and hangs potentially on the negative consumer perception.

So therefore, Lonza is in favor of the admission of the low acyl form to the National List

as can be seen on the last slide where indeed the low acyl form is the only alternative to carrageenan which fulfills all the requirements. So thank you kindly for your attention and consideration of this information.

MR. ELA: Thank you very much. Are there any questions?

(Audio interference) much for your presentation. We do appreciate it.

MS. BRACQUINE: You're very welcome. Thank you.

MR. ELA: We're going to -- have a good day. We're going to circle right back around to Bjarne. We couldn't quite get him on as we called his name. So Bjarne, please go ahead.

Do we have him on, Michelle?

MS. ARSENAULT: He's on. I just asked him to unmute his microphone. I see him in the list. Bjarne, if you're trying to unmute, you may have to hit *6. Oh, it looks like you're on your computer, not on your phone. Not yet. Sorry, Steve. Not yet. Maybe we'll go on to the next

speaker and come back.

Now Steve, if you're talking, we can't hear. You're on mute.

No, Steve. You're still on mute, *6 on your phone.

MR. ELA: There we go. Got it.

MS. ARSENAULT: There you are.

MR. ELA: Can you hear me now?

MS. ARSENAULT: We can hear you.

MR. ELA: Okay. My space bar was not working. Let's move on to Robin Hadlock Seeley and then we'll come back to Bjarne. So Robin, please go ahead.

DR. HADLOCK SEELEY: Thank you very much. I'm Dr. Robin Hadlock Seeley, marine ecologist and recently retired senior research associated at Cornell University. I have four points to make today on the marine macroalgae proposal.

I'm speaking about rockweed, ascophyllum because it's a seaweed species most used in crop inputs worldwide and because in Maine,

95 percent of all harvested seaweed is rockweed. Point one, 44 percent of consumers choose organic apparently because it's, quote, better for the environment, unquote. Point two, the precautionary approach to harvesting rockweed or protecting rockweed dependent species by NOSB is appropriate, even if complete knowledge about harm is missing because of risk to dependent species.

A precautionary approach to rockweed harvesting has already been taken by several federal agencies and state agencies in Maine. And in addition, Maine has listed seaweed harvest as a risk to shore birds. There's no doubt in Maine that cutting the rockweed forest posted both harm and risk.

Point three, OFPA requires for synthetics that not harm to the environment occur in production. So for rockweed, what is harm? This slide shows a terrestrial forest on the left of the slide. And when you cut a mature maple or oak down to a 28-foot stump, you remove the tree canopy. Just as when you cut a rockweed tree to

a 16 inches shown on the right, you remove the rockweed canopy. Next slide, please. We can actually skip that one, please.

The harm is that the height of the seaweed decreases about 72 percent from my data and grows back very slowly, two inches a year where I live. Biomass decreases. Bycatch is removed, including other seaweeds and small animals. And when the seaweed grows back, it grows back bushy like a shrub, not like a tall tree. And one longer term study showed that biodiversity takes more than three years to recover. Slide, please.

And just as a reminder, just as bird forage for insects in the woodland canopy, eider ducklings and black ducks and shore birds forage for small prey in the underwater rockweed canopy.

Point four, others have correctly pointed out that the proposed annotation is not detailed enough to cover crop inputs harvested from different locations. But the correct arena, I believe, for working out the details is in a task force developing guidance, not further postponement of

forward progress on this issue.

Please support the proposed annotation so that seaweed-based inputs meet NOP standards for both risk and harm and consumer expectations. The annotation could've been a lot more protective and I kind of wish it had been. But I do support this middle way forward.

MR. ELA: Thank you, Robin. Are there questions? Dave has a question.

MR. MORTENSEN: Yeah, thank you for the presentation and for the time you've committed to this process and expertise. Some public commenters are -- have suggested that third-party certification is a good substitute for the subcommittee's annotation and accompanying guidance. Do you agree and why?

DR. HADLOCK SEELEY: I don't agree that state agencies should be a substitution for this simply because their standards are not anywhere near what NOP's standards are as written in the regulations. Others have suggested MSC standards could be substituted as a third-party standard.

But there again, the standard is much weaker than what the regulations for organic actually require. They have a minimizing impact standard rather than a not harmful or a maintaining, improving natural resources standard. So in my opinion, it's a weaker standard and not one that lines up with the NOP regulations.

MR. MORTENSEN: Thank you, Dr. Seeley.

MR. ELA: Emily also has a question.

MS. OAKLEY: Yes, thank you. I have two questions. We did hear from commenters regarding harvesting and conservation areas. So I wanted to ask if you think prohibition of harvesting and conservation areas is needed and if so, why, is the first question. And then the second question is, is relying on state regulation sufficient to govern the harvest, because we have also heard from some harvesters stating that state regulations are already adequate. Thank you.

DR. HADLOCK SEELEY: So the first question was about whether the prohibition on harvesting and conservation areas is needed, and

my answer to that is a very strong yes. I've been monitoring the harvest off and on over the last few years. And just in the last two years, there have been Maine Coast Heritage Trust, the biggest marine land trust in Maine, habitats on their islands harvested.

A National Audubon bird sanctuary has been harvested twice. Inland fisheries and wildlife, wildlife management areas which are maintained for the wildlife and particular shore birds have been harvested, the Nature Conservancy preserves. I could go on. But the regulations in Maine are -- they're not there to protect those areas. And so I would think that the national organic program regulations would need to do that in some way.

And the second question was whether state regulations are enough. In Maine, they're clearly not. I can only speak in Maine because I know those best. But there's such inadequate regulations on any seaweed harvesting in Maine right now.

The harvest regulations only require for one species, rockweed, a 16-inch cut above the holdfast and that's it. No limit on take. No limit about timing, seasonal timing. No limit on area. And so the state regulations are really not adequate and would not achieve the goals of the National Organic Program.

MS. OAKLEY: Thank you.

MR. ELA: Wood, you have a question?

MR. TURNER: Thanks, Dr. Seeley. Can you share a few more thoughts on where you feel like the annotation could be stronger? You made a comment about that.

DR. HADLOCK SEELEY: I talked a lot in my comment just now about architecture. And one of the annotations talks about after a cut, the three dimensional architecture should begin to approach what it had been before. The problem with repeated cutting is that the rockweed plant never gets a chance to achieve what it was in its original wild native formation, the tall tree form.

So as what is apparently happening in

Nova Scotia based on Dr. Heike Lotze's observations, there's so much harvesting that the plant or the rockweed, the seaweed plant -- it's not a plant, but think of it as a plant. The tree begins to grow back. It gets cut, and then it grows back in this bushy form.

And then eventually, if left alone after a number of years, 12 to 18 years in some cases, that original forest form would come back. But the problem is the harvesters are interested in biomass. And so when the plant produces enough biomass, no matter what the three dimensional architecture is, it comes into another harvest so that instead of being a wild forest, it's more like a managed woodlot. And so I would've preferred in particular for that annotation to say, resumes its original three dimensional architecture, but instead it reads, starts to approach three dimensional architecture. That's just one example.

MR. TURNER: Thank you. That's helpful.

MR. ELA: One more quick question and then we need to move on.

MR. BRADMAN: Some of the comments emphasize that a relatively small proportion of the total biomass is harvested each year. But I'm wondering if you had some comments on the total area that's impacted. And is there an acceptable proportion of biomass, and related, an acceptable proportion of area that might be harvested without long-term impacts?

DR. HADLOCK SEELEY: Yeah, so I call this the biomass argument, the one percent of biomass argument. The problem is that as one percent of biomass keeps being taken every year and then those harvested areas are left behind, more and more area is impacted. More and more shore bird habitat is impacted. So the area that's caught and recovering keeps expanding.

And I'm actually working on a GIS model that would direct harvesting into low conservation value areas and try to keep it away from high conservation value areas. So there is some room

for area -- for spatial management. But we're nowhere near there yet.

MR. ELA: All right. Thank you very much. We do appreciate your comments. Next up we have Albert Straus, then followed by Steve Etka and Abby Youngblood. Albert, please go ahead.

MR. STRAUS: Hi, I just want to thank you all for your service and through this pandemic. It's been challenging. What it's showing, this pandemic is showing that local organic farming and food systems are essential to our survival and that we're showing that livestock or organic dairy farming can be a solution to climate change, produce a high quality food, and be a solution -- I mean, and think that organic -- excuse me, the grazing standard is really essential to uphold for carbon sequestration, building soil, and creating value. Excuse me.

Also, we're seeing that livestock are helping -- having a crucial role in wildfire mitigation. And we're seeing in California that we've been out of balance that way. And also,

we're seeing that farmer's markets and direct to consumers or CSAs is really becoming really a viable way for farmers to get more of the dollars as well as during this pandemic for consumers to get their food more directly from farmers at a high quality. So I'm really encouraging you to uphold the organic standard, strengthen them, and we can really be a solution to climate change as well as the local farming and food systems. So thank you.

MR. ELA: As always, we're always paying attention to what we do. Are there questions for Albert?

Not seeing any, thank you again, Albert.

MR. STRAUS: Thank you.

MR. ELA: We're going to move on. Bob McGee has cancelled, so we're going to move on to Steve Etka followed by Abby Youngblood and then Christie Badger. So Steve, please go ahead.

MR. ETKA: Good afternoon. I'm Steve Etka with the National Organic Coalition. Organic operations are facing many challenges due to the

pandemic and climate-related disruptions. On top of this, in August, USDA's Farm Service Agency announced a reduction in reimbursement rates for the Organic Certification Cost Share Program.

This is unacceptable because the 2018 Farm Bill provided new funding for the program but also directed USDA to use the program's carryover balances from previous years to fund the program for fiscal years 2019 through '23. However, through misrepresentation of the carryover balances, FSA is now claiming to be short of funds and unable to fulfill the funding directives of the 2018 Farm Bill. We urge the NOSB to call the Secretary of Agriculture to fix this problem which was created by FSA's own accounting discrepancies.

Organic operations and retailers are facing many disruptions during the pandemic. They are adapting, but many face large expenses to keep employees safe and to provide food to communities. While some organic operations have benefitted from USDA's Coronavirus Food Assistance Program, CFAP, for many, the first round of CFAP payments

did not work well.

The CFAP 2 makes some improvements, but many of the payment rates are still too low. NOP put forward policy recommendations to respond to the pandemic-related needs of the organic sector, including certification cost share reforms, direct payments tailored to organic farmers, assistance to cover COVID-related expenses, bonus pay for food system workers, expanded funding for the Paycheck Protection Program, and expanded nutrition program funding including more online food access options.

NOP strongly supports the strengthening of organic enforcement proposed rule. We made many very detailed comments on the proposed rule noting several areas for improvement. And we urge USDA to finalize the rule as soon as possible.

NOP encourages the NOSB to not only express support for the proposed rule but also to work with NOP to identify gaps for further action. OFPA requires USDA to consult with the NOSB about organic standards. In our comments, NOC has asked

that the NOP provide an analysis of the provisions of the rule and how they compare to past NOSB recommendations on these topics.

NOC is deeply disappointed that the NOP has failed to finalize the origin of livestock regulations by the June 17th deadline. There's an urgent need to improve how conventional livestock are transitioned into organic herds. A proposed rule was issued in 2015 to close the loophole that allowed for the continuous transition of conventional animals and organic herds.

Congress mandated that USDA finalize that rule, and that's not happened. So NOC has called on the NOP to provide a full explanation regarding the lack of movement. We urge the NOSB to do the same.

MR. ELA: Thank you, Steve. Are there questions for Steve?

I am not seeing any, so we appreciate your comments, Steve.

MR. ETKA: Thanks.

MR. ELA: We're going to move on to Abby Youngblood and then followed by Christie Badger and Mark Keating after Christie. Abby, go ahead.

MS. YOUNGBLOOD: Good afternoon. I'm Abby Youngblood, Executive Director at the National Organic Coalition. And I want to start by thanking you NOSB members for all of the hours that you have dedicated in service to the organic community. And I especially want to thank A-dae, Dan, Emily, Jesse, and Scott for your five years of service on the Board. NOC has valued working with each of you, and I hope that you will stay in touch even after you leave the Board as we continue to work to transform our food and agriculture system for the better.

One of NOC's top priorities for 2020 is advancing organic as a climate change solution. The organic regulations are strong. They require proper tillage and soil building practices that sequester carbon. But the regulations also need to be improved.

One area for improvement is better

enforcement of soil building, cover cropping, crop rotation, and biodiversity practices. We've heard from multiple certifiers that it's not easy to determine when they should issue noncompliances for operations that fail to adhere to these requirements. More guidance is needed, and the NOSB should work on this issue.

The NOSB should also recommend a restriction on the use of highly soluble sources of nitrogen in organic agriculture because overreliance on these sources of fertility is inconsistent with organic principles, and it can short circuit soil building practices that sequester carbon. NOC supports the petition to prohibit the use of ammonia extract in organic.

I want to talk now about the three-year transition requirement. This fall, NOC worked with the Accredited Certifiers Association and the Organic Farmers Association to conduct a survey with certifiers about when they require a three-year transition after spraying a prohibited substance. The survey results demonstrate the

high level of inconsistency across certifiers.

Out of the 20 different scenarios that we presented to certifiers, there was only one for which certifiers were in agreement. We provided the NOSB with the full survey results in aggregate form. And we look forward to working with you and with the Accredited Certifiers Association and the USDA National Organic Program to find a path forward for greater consistency.

In my last few seconds, I want to highlight three issues. I want to encourage the NOSB to take an active role in building a more diverse and inclusive organic movement. Second, I want to urge the NOSB to continue its work on excluded methods. The organic community and the NOSB has been clear in their opposition to genetic engineering in organic and have also expressed the need for more certainty about what is excluded, what is allowed, and why.

And finally, I want to reiterate our concern about the continued certification of hydroponic and container operations. This is

another area of inconsistency, and we believe that we should immediately halt continued certification of these operations in the absence of clear standards. Thank you.

MR. ELA: Thank you, Abby. It looks like Emily has a question for you.

MS. OAKLEY: Thank you very much for you work, Abby, on the three-year transition survey and for providing those results to the Board and to the program. And I was wondering if you had any suggestions for particular next steps the NOSB could take in trying to encourage the NOP to move forward on this topic.

MS. YOUNGBLOOD: Thanks, Emily. I think that the survey results are instructive because they point to some of the -- they point to a lot of different areas of inconsistencies and they also pinpoint a few of the questions that just remain unresolved. And so from my perspective, it makes sense for the NOSB and the Accredited Certifiers Association to take a closer look on some of those unresolved issues.

I'll just point to a couple of them. Like, if there's a concrete floor in a greenhouse operation, does that mean you don't need a three-year transition? If you put containers or transplants up on a bench, does that mean you don't need a three-year transition? For a poultry operation, if you have an outdoor access area and you cover that over with concrete or gravel, does that mean you don't need a three-year transition?

These are some of the scenarios that our survey showed there was confusion or a lot of different practices out there across certifiers. So I think there needs to be work done at the NOSB level to solicit input on how we handle these different situations. And I think it would also be -- I think ACA could also provide some different options for how we could treat these different scenarios based on current practices or best practices that they develop.

MR. ELA: Great. Thank you very much, Abby. I don't see any further questions, but we appreciate your comments. Next up is Christie

Badger followed by Mark Keating. Mark, if you're out there, you might let Michelle know since she isn't seeing you right now. Then Harriet Behar and Johanna Mirenda. So go ahead, Christie.

MS. BADGER: Okay. Can you hear me?

MR. ELA: We can.

MS. BADGER: Thanks. Hi, my name is Christie Badger and I'm a consultant with the National Organic Coalition. In our NOSB comments, Mark had a comment regarding continuous improvement as a core value. I'm going to be holding this core value as the overarching theme of my comments.

Paper pots. We're requesting that the Board acknowledges the listing has known deficiencies that need to be considered by future boards, the need for continued research and the need for NOP guidance to ensure certifier consistency. Biodegradable bio-based mulch film, gene technology, microplastic, nanoplastics affect the secondary metabolites, affects the overall soil health, soil biology, soil nutrient

balance, soil tilth, effects on livestock that graze these areas in subsequent years, the list goes on. We maintain that this product is not ready for prime time.

Aquatic plant extracts other than hydrolyzed. Interpreting the parenthetical clause, other than hydrolyzed, is confusing, making it unclear as to what is allowed and what is not. We request that the NOP and National List manager clarify what is meant by this clause to clarify the issue. Inerts. A memorandum of understanding is an important part of the framework and process. The MOU is essential to transparency.

Low acyl gellan gum. When considering adding materials to the National List, there should be a higher standard for synthetics, especially when we already have a nonsynthetic to do the job. In addition, listing materials for the potential or not future gains is a slippery slope and sets a dangerous precedent. Where will we draw the line?

Ion exchange filtration. Only resins and their associated recharge materials approved for this use should be allowed in organic food processing and only when approved for listing on 205.605(b). Chemicals added during the ion exchange process must be listed on the label. Petition process for synthetic materials, what is the barrier?

Without a more robust petition and sunset review process, how do we evaluate materials petitioned to or sunsetting from 606? Kelp. What is the barrier for producing these ingredients in organic form? Based on the fact that there are 102 suppliers of organic kelp listed in the OIG, it would appear that the greatest barrier is the allowance for nonorganic use by the listing in 606.

Colors, limited scope TR. Fenbendazole must go back to subcommittee. Marine materials, thank you. What a tremendous effort.

MR. ELA: Wow, Christie. You timed that exactly. You're in the running for the exact timing award. Emily has a question for you.

MS. OAKLEY: That was a pretty amazing use of your time. Very well planned out. I just wanted to ask regarding marine materials and your support for the proposal. If you could tell us whether or not you think now is the time to vote for this or it needs to go back to subcommittee, what your thoughts on that are.

MS. BADGER: Within NOC, I would say that we greatly agree with Dr. Seeley. And we want to see forward movement on this. You and many members on the Board and those before you have put tremendous effort into this. We do support the middle line approach that you all have come up with. And yes, we would like to see this voted on.

MS. OAKLEY: Thank you.

MR. ELA: Any other questions for Christie?

Thank you, Christie. And good job on the time.

MS. BADGER: Thanks.

MR. ELA: Next we have Mark Keating followed by Harriet Behar and then Johanna Mirenda.

It looks like we do have Mark. So Mark, please go ahead.

MR. KEATING: Good afternoon, everyone. How's everyone doing?

MR. ELA: We're good. Go ahead.

MR. KEATING: Good, yes. This is remarkable. My name is Mark Keating. I operate Wheel of Life Consulting. I want to give thanks to God for allowing us all to come together in this wonderful organic community that we serve.

Many on this call will remember Room 3501 in the USDA South Building, the old AMS meeting room, now named for Dr. Ken Clayton. And that's when I got started in the NOSB process, 1998. And we used to be able to fit everybody into that room who wanted to have a say. And now it takes the worldwide web. So just tremendous growth.

And I want to recommend that the marine material program go back to committee and back to the drawing board. I think it would be really ill advised to pursue this type of annotation. You're going to hear and already have heard from many

experts who know about this subject than I do.

I'm going to stick to kind of a more general argument regarding organic certification. I was the lead crop, livestock, and National List specialist who contributed to writing the final rule with USDA. I've also done over 1,000 organic inspections over the last ten years. I've been a professional at writing standards. I've been a profession at verifying compliance.

And I have seen this trend for a long time to essentially micromanage materials through two -- well micromanage materials through the annotation process and then deny farmers and processors materials that would otherwise, in my opinion, be very valuable additions to their toolbox as we like to say. Trying to write an annotation like this is really trying to reverse engineer a perfect organic system.

It's kind of the assumption that if we only allow these perfect materials and if we then get out to the farm and we isolate all the allowed perfect materials from the prohibited bad

materials, then we've got a wonderful organic operation on our hands. The world just doesn't work that way. It's certainly not the world that I see on the farms.

I'm going to wrap up real quickly. I have other things to say, but you may all know that Mennonites families, they love to write scripture and inspirational sayi8ngs on the walls in their home. And I saw one just perfect for the organic community the other day. It said, we may not have it all together, but together we do have it all.

MR. ELA: All right. Thank you very much, Mark. Emily has a question for you.

MS. OAKLEY: This is just a clarification. I don't think that the subcommittee expects that the annotation on marine materials is at all perfect or would lead to perfect materials. I don't think that was our objective in trying to do it. It is to establish the continuous improvement goal and core value that Christie actually just talked about. So thank you.

MR. KEATING: Valid point. I appreciate you pointing that out. We are approaching but never achieving perfection. Organic certification is a process of continuous improvement. Thank you for correcting me.

MR. ELA: All right. Thank you very much, Mark. And Michelle and the NOP staff so gently corrected me that I was looking on a list from a few days ago. So actually, Harriet will be next followed by Gwendolyn Wyard and Laura Batcha. And Johanna Mirenda will be after them. So Harriet, please go ahead.

MS. BEHAR: Hello, NOSB members. My name is Harriet Behar, and I am a longtime organic farmer, inspector, educator, and advocate and an alumni of the NOSB. Fenbendazole. Please consider the precedent you are setting if you approve this material for poultry since the organic livestock and poultry practices regulation was not implemented three years ago.

There are no clear rules for the type of systems and living conditions for poultry that

would lessen the need for this parasiticide. Organic ruminants must be on vegetated ground and receive nutrition from their pasture which usually leads producers to rotate their animals. Poultry have no such requirement, and many of the large poultry houses have one bare ground area used continuously by each flock and subsequent flocks.

There's no definition of what emergency is. So if the birds continually reinfect themselves in these small outside areas, the proposed listing will allow for repeated and continual use throughout the use. The definition of organic refers to a system. And the allowance of this material discourages any type of systems approach to parasite control and instead encourages poor practices since they can rely on this material as a crutch.

The precedent you vote to allow this material is that it is okay to have a residue of a synthetic parasiticide in organic food. It is essential you not go down this road to keep the integrity of the organic label at a place where

consumers can continue to trust the producers do all they can on their farms to not have synthetic residues in the food that is sold as organic. As an organic inspector, I have spoken with organic egg producers who have told me they will not use this material and are considering the option to label their eggs in a way that clarifies their nonuse of synthetic parasiticides and that their eggs have no residues.

Paper pots. I was disappointed to see the removal of the requirement that if the higher bio-based content was commercially available, that would be required. As we have heard from John Hendrickson, the manufacturer of the paper pots he sells, has stepped up to provide organic producers with a paper pot without synthetic fibers due to the NOSB's previous discussion showing your preference for this. It is very difficult to modify listings.

So when placing something on the National List, consider its long-term impact. The more we learn about synthetics and plastics in our

environment, the more we see their numerous negative consequences. I recommend sending this back to subcommittee since we now see that paper pots can be made without synthetic fibers. As a beekeeper, I support the relisting of formic acid and encourage the NOP to work on the agriculture standards.

MR. ELA: Thank you very much, Harriet. So close to the exact time, but not quite. Very well done. Nate has a question for you.

MR. POWELL-PALM: Thank you for your comments, Harriet. I was hoping to see if you had experienced or contacted any producers who have expressed that they feel like they need fenbendazole to control parasites in their flocks.

MS. BEHAR: No, I have not. I have probably inspected 30 or 40 hen houses in the past two years, and I have asked every single producer. And none of them told me they needed this material and were actually somewhat outraged that was even being considered.

MR. POWELL-PALM: Thank you.

MR. ELA: Dan has a question.

DR. SEITZ: Hi, Harriet. Thank you for your remarks. I also have a question on fenbendazole. So you mentioned that certain cultural methods really go a long way to addressing the problem of parasites. And I've certainly talked to a number of local egg producers in our area who don't use it and hadn't even heard of that as a possibility, the organic egg producers. And what I'm wondering is, can you describe more fully for us the types of operations that seem to have these types of problems and what would be the cultural approach to their solving that?

MS. BEHAR: Well, I think just as in ruminants and mammals, if you rotate the pasture -- and I have seen even very large hen house have numerous pastures, large pastures with shade structures so that encourages the chickens to move away from the buildings -- and then left those areas rest, even come in and plant oats after the area has been denuded to encourage vegetation and soil biology to then work with -- kind of help have a

more diverse biological activity in the soil and right there at the soil line with the plants. If the birds only have bare ground to be on and it's the same bare ground they use every day and from flock to flock and year to year, you are not going to lesson the presence of parasitic eggs in the soil where the chickens would then pick it up.

And that would mean that there would be an emergency with these flocks continuously throughout their life cycle as well as the life cycle of subsequent flocks. So you're not really dealing with it at all culturally if you are not looking to rotate those areas which would mean you would need more land base, just as the ruminants do, for having a healthy flock.

MR. ELA: Sue has a question.

Sue, guess what. You may be on mute.

MS. BAIRD: Of course I am. Okay. Hi, Harriet. It's good to hear from you.

MS. BEHAR: Hi.

MS. BAIRD: I appreciate your perspective on the fenbendazole. And everyone

shares the concerns of a residual of any type. Your assessment of needing larger pastures, though, seems to be negated by the testimony or the public comment from CROPP as we know who is one of the leading pastures for poultry and although not in the written comments this time but were in the spring comments. So they're seeing increasing numbers of worms in their poultry due to climate change, too many wet springs, those types of things.

I found concerning that -- this really was concerning to me. Dr. Donna Kelly from Pennsylvania, she's a professor of microbiology in the avian pathology service. And she says that in their diagnostic laboratories for birds that are having problems that the worms have increased 900 percent since 2017. She goes ahead and although not petitioned, she says they're really concerned about the fact that it's in meat birds, escaping -- bacteria escaping through the leaky gut caused by the worm populations and even getting into the meat.

Man, we're all conflicted on this. There is precedent that we have allowed residuals. We allow aspirins because for the health of the livestock. We allow aspirins to be given to the animals, and there's a residual of aspirins. But no one seems to care. How do you respond to that, Harriet?

MS. BEHAR: Well, I think that again we are not encouraging the use of a systems-based approach of having enough land so you can rotate. And just as in a ruminant system, you can actually have less land available to the animals if you manage them correctly and move them regularly. So if you understand your parasite issues and rotate the birds out of an area long enough so the cycle of egg to parasite is past its time.

We're not working on that at all, and the allowance of this material would not allow it. Now I know there was some discussion at some point about maybe allowing it one time or that kind of thing. But just allowing it carte blanche with no restriction whatsoever I think just will lead

to a huge amount of abuse.

And there will be certain flocks where they use this, pre-putting the birds out on pasture, then they're out on pasture for many a month or two, and then they use it again. And it could be three, four, even five times during the life of one flock of chickens where they could be given this fenbendazole because there's no definition on how many birds would've had to have it during your postmortems, if you're testing. I mean, it's just a huge open hole to walk through that just allows for less and less land area for poultry houses because they know they can deal with parasites by using this parasiticide.

MS. BAIRD: Would you support this going back to the subcommittee and working on some of those issues you just outlined, perhaps defining how often it could be used, how the criteria -- whether it's posting the birds and doing some types of quantitative analysis of how many worms are in there so that we could perhaps get this thing right? Would you support it going back and us having time

to work on this rather than voting on it?

MS. BEHAR: Absolutely I would support that and especially if the subcommittee looks at the use of natural materials such as higher amounts of grit in the chickens' ration as well as various systems-based approaches because there are producers who don't need it. So what are they doing that's right --

MS. BAIRD: I think --

MS. BEHAR: -- that others can learn from?

MS. BAIRD: Right. From what I'm understanding from comments we're reading, it is probably a location and climate issue on why some are having it and others are not.

MS. BEHAR: I agree.

MR. ELA: And Sue, I'm going to --

MS. BEHAR: I mean, I think it could go back to subcommittee and to look at both of very limited use and/or during review of the organic system, what have they done on the farm for prevention.

MS. BAIRD: Right. We have actually submitted that for a research topic, Harriet.

MS. BEHAR: Thank you.

MR. ELA: Sue, I'm going to move on to Dave. He has a question.

MS. BAIRD: Thank you. I'm sorry.

MR. ELA: Then we'll move on to the next speaker.

MS. BAIRD: Right.

MR. ELA: You don't have to apologize. But go ahead, Dave.

MS. BEHAR: Hello, Dave.

(Simultaneous speaking.)

MS. BEHAR: I will answer your email one of these days.

MR. MORTENSEN: Nice to hear from you again. Harriet, I have -- this practice you've just been discussing with Sue and the logic that underpins the request seems to me to set up a worrying slippery slope. I personally have a hard time seeing why we wouldn't entertain a request for glyphosate or Roundup use for a weed outbreak

or chlorpyrifos for an insect outbreak. Could you speak to whether or not we would be setting up kind of a slippery slope where it'd be hard to walk back the logic that was used to move forward with this?

MS. BEHAR: Well, yes. And so that is true. But again, the organic definition talks about a systems-based approach. And the use of fenbendazole -- the need for fenbendazole is really a failure in the system. And we have learned amongst ruminant producers that you can control parasites when you are knowledgeable of the life cycle of the parasite you're dealing with and the rotating the pastures so the animals are not continually reinfecting themselves.

I don't think there's been quite enough research on parasites in poultry. And as a matter of fact, the FDA has only recently approved this for poultry. It has not been allowed, I think, prior to about 18 months ago.

So again, this is a very new material that is brought forward, and I don't think that we have really dug into the systems that we need.

And I agree that it is somewhat of a slippery slope to say just a little bit now and then we save ourselves for later. We'll work on it later to fix the system, but we need this little bit now. I think that can be very problematic.

MR. MORTENSEN: Thanks, Harriet.

MR. ELA: Thank you very much for your thoughts, Harriet. We do appreciate it and hope you do well up in Wisconsin. Next we're going to move on to Gwendolyn Wyard, then Laura Batcha, and then come around to Johanna Mirenda. So Gwendolyn, go ahead.

MS. WYARD: Okay. Can everybody hear me?

MR. ELA: We can.

MS. WYARD: Excellent. All right. Well, good morning to everybody from the West Coast. My name is Gwendolyn Wyard, and I'm the vice president of regulatory for the Organic Trade Association.

And first, I would like to address the outgoing NOSB members, Scott, Jesse, Dan, Emily,

and A-dae. Thank you for your five years of service and for your commitment to organic agriculture and time and contributions are sincerely appreciated. Moving into the agenda topics, I'll be highlighting our written comments on ion exchange filtration and commercial availability as it applies to 205.606 of the National List.

Starting with ion exchange, we believe that success is underway because NOSB is finally reviewing the use of ion exchange filtration. The uncertainty around this allowance has carried on too long, in fact, almost 20 years, and has undoubtedly led to inconsistency between certifiers. We strongly support NOSB moving forward with the subcommittee recommendations so that it can be taken up by NOP and formalized in the NOP handbook. Clarification in the handbook is critical to bring about transparency and uniform regulatory decision.

We also want to make sure that everyone understands that the use of ion exchange must be

included in the certified operator organic system plan and approved by the certifier. This includes all of the resins, membranes, and recharge materials that may be used. It all gets looked at by the certifier. The certifier must conduct a thorough review and ensure that all materials and practices are in compliance with the organic regulations. This is current practice, and it's important that the NOP guidance reflects this information as well.

Moving on to commercial availability in 205.606, I'd like to draw your attention to the one-page comment we included with the results of our sunset survey. We've included some insights and suggestions on the evaluation of commercial availability which is undoubtedly a provision in the regulation that is challenging both to 606 and to organic feed usage as well. OTA will be the first to applaud the sound removal of an ingredient from 606, and we have a track record for supporting these efforts.

That being said, please do not vote to

remove an ingredient from 606 unless you feel confident based on good data that an organic alternative is commercially available. Ask yourselves, is the supply stable or is it fragile? Voting material off the National List to make a point or drive incentive is not consistent with OFPA criteria and it creates a messy outcome any way you slice it. I think there are better ways to address the issue and drive incentive.

And second, please keep in mind that the review does not end with NOSB. An ingredient on 606 must be used in organic form when it's commercially available, and certifiers are carrying out this review directly with each certified operation on at least an annual basis. Organic form of several 606 ingredients can be found in many of the organic products we know and love.

So there's proof that the process is working. It's critical that we recognize and support the certifier and the review process. The efforts that are, in fact, being made by the organic

industry and the power of consumer demand and market-driven outcomes. Thank you so much for your time.

MR. ELA: Well done, Gwen. Other questions --

MS. WYARD: In the running.

MR. ELA: -- for Gwen? Yeah, in the running, although you kind of stretched out there at the end a little bit.

MS. WYARD: I did. I did. I know. I did that trick.

MR. ELA: So any questions for Gwen? Gwen, I'm not seeing any right now, so we are going to move on to Laura Batcha followed by Johanna Mirenda and then to Kate Mendenhall. So go ahead, Laura.

MS. BATCHA: Great. Laura Batcha here with the Organic Trade Association. Can you hear me, Steve?

MR. ELA: We sure can. Go ahead.

MS. BATCHA: Perfect. I want to take a few minutes to speak about inerts with the Board.

I think first the Organic Trade Association certainly agrees that the current listing for inerts is problematic and the reference to List 4 is obsolete in support of the good work that the Board did, culminating the in the 2015 recommendation to modernize the review system for inert ingredients under use in organic agriculture.

And we absolutely share the frustration that I think the Board carries and that you're hearing from many stakeholders about, what are we left to do when the recommendations that are passed by the Board remain unimplemented by USDA? And I think this is one of the prime examples of that. We're working hard in some policy updates to try to put more of an affirmative obligation back onto USDA to advance these recommendations when they go forward.

But just to underscore, it's so frustrating for stakeholders. It truly, truly is. That being said, I think we have some real cautions against vote to remove the listing for inerts and

its sunset review for a number of reasons that I'll walk through.

I think, first and foremost, it sets a terrible precedent to vote to delist in a manner that's inconsistent with the criteria established and particularly in this case of an available alternative. I think we're concerned with some of the sort of underlying discussions in the thinking on this proposal that perhaps the Board would be voting to delist when they don't really mean for inerts to be delisted but instead mean to send a message to USDA and that there'd be some communication from USDA that that strategy as a political tactic is sort of an okay road to go down. I think it sets up a dynamic that really does by into the idea that the general recommendations that the Board passes do not matter.

I think it diminishes the reputation of the Board when you take an action that's inconsistent with the criteria established in OFPA. And I think it's very important to remember that there are thousands of stakeholders that are

not in the room or on the Zoom. And what they see coming out of this is the Board voting to delist inerts which are an essential tool for production in organic agriculture. So I'd urge you to consider an alternative pathway with the resolution, sending a clear signal to USDA, you must pick up 2015 an move forward. Thank you.

MR. ELA: Thank you, Laura. Are there questions for Laura? Asa has one.

MR. BRADMAN: Laura, I have a few questions.

MS. BATCHA: Sure.

MR. BRADMAN: One, just a general statement. We really shouldn't be using the word, inerts. These substances are not inert, and that really dates back to EPA. And I think it's kind of tragic that this term is used for biologically and toxicologically -- potentially biologically and toxicologically active substances. So I encourage all of us to not use the word, inert.

MS. BATCHA: I agree with you on that, Asa. So thank you for that.

MR. BRADMAN: We also have on the current list for list substances that are, in my view, antithetical to organic standards. So when we talk about OFPA and we talk about the organic movement, we have materials there. Particularly, I'm talking about the NPE.

But there's others that really haven't been evaluated that are just, in my mind, totally unacceptable in an organic format. And we're referring to a list that I think it was 14 years ago was essentially made obsolete by EPA. So I mean, you could argue that voting to delist it is throwing out the bath with the bathwater.

But we have a list here that's currently -- it's really not part of the bath. And from EPA's point of view, it doesn't exist. So it's not just to send -- voting to delist it would not be just to send a political message. It's an affirmation that the current system is broken.

So I guess my question is, how would you deal with that? And then also would you also support with a system that makes these adjuvant

materials not proprietary? I know I feel that these -- we have this process where besides the active ingredient, other materials are hidden. And right now, there's no way for a consumer to know what's being used on their food except with respect to these lists which include materials that in some cases are probably unacceptable. So I guess I'd like your thoughts on that.

MS. BATCHA: Sure. Thanks, Asa. And I just want to acknowledge your -- we're lucky to have you on the Board with this discussion because you're a true scientific thought leader on these questions. A couple things that I would say.

Agreeing with the scenario that you'd laid out and it's hard, I understand, for me to sit here and argue for process when clearly the system is broken because it was a good recommendation in 2015. And it provided a pathway for USDA to begin working with EPA through a memorandum of understanding, but out an ANPR and start tackling these questions. And we sit and we look, and we're close to six years of pass and

things haven't happened. And it's so darn frustrating. So I completely get that.

As it relates to specific substances and their extreme sort of incompatibility with organic that are bundled into this listing, Asa, I think to remember that petitions could effectively and quickly be used to prohibit specific substances. And that's a path that this Board could go down and move through. And I think you'd find that the community truly did support you there.

I think everybody sort of stuck with this the way it is listed currently. So there is a pathway through the petition process to go after those specific substances because while the system is broken, it is a vote to delist. And there are stakeholders out there that will just see that.

And one of my concerns is that it undermined the reputation of the Board in terms of following the criteria for the decision making and also that it sets up a system where this kind of action has to happen in order to get USDA to

say they're paying attention. I think whether or not those actions then would happen would have to come to pass. But I think we're really concerned about the idea of going off the criteria, voting to do something with the understanding that it won't happen in its sort of absolute form that it was passed.

Like, what happens when that's a completely different set of players involved in those discussions. And that sort of, quote-unquote, agreement or pathway isn't something that is generally supported by organic stakeholders. So I think that there's risk there. But I think the biggest point is consider the petition to move very quickly to prohibit the specific substances that are of the highest concern, Asa.

MR. ELA: So Laura, before we move on, I have one quick question related to that. And this is a very unusual listing in that it covers many, many -- hundreds of materials where most of our other listings cover a single material. And

given -- I mean, given what we just talked about, it is arguable that a number of these materials might not fit off the criteria.

So we would have a responsible to vote them off because they don't fit off the criteria. It seems to me this is a rather unusual situation that doesn't necessarily set precedent. And I'm curious about your quick thoughts on that.

MS. BATCHA: Well, I think maybe if you're as close to it as you are, Steve, and you understand all those nuances, you could say it doesn't set precedent. But again, think about the people who are -- all the circles out that are watching this and a farmer that relies on tools. And then what they see is the Board being willing to make a vote like that to delist.

And so I think that's the bigger issue. I personally and as an organization, we really support the recommendation process from NOSB to USDA about how to handle these issues within organic agriculture. And that 2015 recommendation was really good. It provides a

pathway where you could have the ANPR.

You can get the work going with EPA and find something that is much more compatible with organic systems and safer for the public, right? So that work is done. And I think really full pressure on getting USDA to pick up that recommendation and move like the Board has done in prior circumstances with a resolution might be considered.

MR. ELA: Well, thank you very much. We appreciate --

MS. BATCHA: Thank you.

MR. ELA: -- your thoughts. We are going to move on to Johanna Mirenda and then followed by Kate Mendenhall and Brenda DeShields. So Johanna, please go ahead.

MS. MIRENDA: Great. Hi, can you hear me?

MR. ELA: We can hear you.

MS. MIRENDA: Hi, I'm Johanna Mirenda of the Organic Trade Association, and I'll be commenting today on marine macroalgae. OTA has

been engaged on this topic for over four years of NOSB meetings. This time, unfortunately, our attention was dominated by the overlapping comment period of the massive strengthening organic enforcement proposed rule.

Finally seeing rulemaking action on years old NOSB recommendations like grower groups is an important reminder of how much patience this process requires and the benefits of having quality recommendations that can stand the test of time. The dedication of the Materials Subcommittee demonstrates this exact type of patience. And were so appreciative of the hard work that's gone into this issue over the years.

We last left off with this topic one year ago with conflicting opinions from Board members and stakeholders on a discussion document and no clear path forward. We now see the subcommittee has been working very diligently since then, reaching a new milestone at this meeting by debuting its proposed solution. The proposal presents for the first time a

comprehensive set of harvest parameters for seaweed used in crop fertility inputs.

We incorporated on the National List through one new annotation on 601 and one new listing and annotation on 602. These amendments are unmatched anywhere else on the National List. They are the longest annotations ever presented. They would be the first to include a full practice standard of production and harvest of an agricultural input. And the new listing at 602 would be the first of its kind to prohibit an agricultural input unless harvest parameters are met.

Rarely, if ever, is a new annotation or new listing accepted on the first try, especially ones of this magnitude. Scientists working with the subcommittee on the annotation got at least three rounds of revisions. And now organic stakeholders deserve their chance to inform the annotation.

Commenters admit to not having time to fully take in the proposal. But initial reactions

are encouraging that we are on our way to consensus. But we're not there yet. Hopefully, the Board will give stakeholders the opportunity to find consensus on language that meets sustainability goals, is practical for seaweed harvesters to implement, and maintains farmer access to critically important fertility tools. OTA remains committed to this work and we hope NOSB is too. We recommend sending the proposal back to subcommittee to work on three things.

Start addressing commenters' specific concerns with the annotation language. Make sure gaps and technical information are addressed appropriately with particular attention to globally representative data and impacts on supply and availability of seaweed fertilizers and get direct confirmation from NOP on the legal options for rulemaking on these recommendations, specifically regarding the appropriateness of adding a new listing without a petition as this authority is not addressed in the NOSB policy and procedures manual. These actions will give the

time needed for building consensus and the assurance that we're working towards and actionable and effective proposal. Thank you for considering these comments and your continued dedication to the issue.

MR. ELA: Thank you, Johanna. It looks like Emily has a question for you?

MS. OAKLEY: Thank you for your comments, Jo, and for the tenor of your comments. Really appreciated. And I also appreciate your questions regarding the NOP and legal options for rulemaking and did just want to say that we did discuss as a subcommittee with the NOP the proposal in detail.

And we construct it in a way that would make it most eligible for the rulemaking process. But one question I have is you suggest we send this back to subcommittee and think that we are getting close to consensus. And I actually genuinely thought that that was the case over the course of the summer as well but was surprised towards the end of the summer to find that there

was a tremendous amount of resistance among harvesters and processors in particular.

And I'm not clear, I guess, why the OTA Marine Materials Task Force didn't engage earlier in the process with the annotation because I did send it out as a first draft around in early February to all the stakeholders that had been engaged in this process, including you, and did ask for feedback later in that same month in February from the Marine Material Task Force for that initial round of the annotation. So my question is, why didn't we hear from them then? And if we send it back, are truly, genuinely likely to reach consensus?

MS. MIRENDA: Thanks for the question, Emily. The annotation that was emailed in February was outside of the formal NOSB process. And honestly, I didn't even know that that was going to be the opportunity you were looking for to get public feedback on the annotation.

I think the real risk of passing this proposal as it's written today is that it's not

allowing for any substantive changes to the proposal. So the stakeholders, including seaweed harvesters and organic farmers that are directly impacted by the proposal and maybe weren't included in the internal email exchanges outside of the public process wouldn't get any of their substantive feedback incorporated since the language that the Board would be voting on was developed before receiving our comments through the public process. So I would respectfully disagree that there was an opportunity for broader stakeholders to participate and engage in giving feedback on the annotation because the annotation itself was not published formally for public input until last month.

MS. OAKLEY: Is it --

MR. ELA: Thank you, Johanna.

MS. OAKLEY: -- okay if I follow up with a quick question?

MR. ELA: Sure. Go ahead, Emily.

MS. OAKLEY: Thank you. Yeah, so we did end up meeting with the OTA Marine Materials

Task Force via the phone. And I do respectfully disagree. I think I did try to specifically say I would really like to hear what the Marine Materials Task Force feels about this proposed wording on the annotation language.

But I think the challenge that the Board has to take into consideration with something like this is that we have a diversity of comments. We have comments that come in support of something like this. We have comments that come with either opposition or specific criticisms or suggestions for improvement. And as we listen to all the different stakeholders, how, I guess, would you determine that we should consider the comments from scientists, both those that participated in the annotation writing process and those that have submitted written comments? How do we weight that against the harvesters' and processors' concerns?

MS. MIRENDA: To answer the question on our meeting with you, it was very generous of you and we are so appreciative that you took time to accept our task force's invitation to discuss

the issue. During that meeting, we asked about an update on the annotation language, and you were unable to share the language with us. That was another indicator that we were sort of waiting to see what would happen during the upcoming meeting.

And so really this fall 2020 meeting is the first time that stakeholders are seeing the formal proposal on the annotation language. Again, the content and the scope is unmatched from any other listing on the National List, and we care deeply about getting this issue right. We care deeply about taking our time and avoiding unintended consequences without clearly understanding the impact.

The comments I'm seeing coming in through the docket from harvesters, there doesn't appear to be any that are confirming that they can confidently understand and comply with the regulations as written. So that's concerning, and I think honoring this public process, the NOSB process, warrants the subcommittee to accept comments during this first-time meeting of

presenting the annotation and integrating that feedback into the annotation.

MS. OAKLEY: Final comment --

MR. ELA: We have --

MS. OAKLEY: -- we will definitely be integrating comments into sessions and are noting them well. So thank you.

MR. ELA: Yeah, we have one more question from Dave. Can you make it fairly quick and Johanna as well? We need to move on.

MS. MIRENDA: Yes.

MR. ELA: Go ahead, Dave.

MR. MORTENSEN: Sure. I guess maybe it's a statement more than it is a question. But we've been working on this for the four years I've been on the Board. We had a scientific panel. We had harvesters. We had scientists. We had ecologists.

So I think the tenor of suggesting or the notion that you're suggesting that we haven't vetted these ideas with folks, I don't agree with that. I mean, I can't even imagine. I mean, if

I went back and counted, we've had hundreds of public comments about this, this year and last -- each go round. So I don't agree that this is something that hasn't been shared with folks in open discussion, probably more than any other thing we've covered in the four years I've been on the Board.

MS. MIRENDA: I respect that so much, Dave. And I have been there with you on all of those meetings, reviewing the proposals. Even in my previous position as technical director of OMRI, I was in these meetings reviewing the proposals and providing comments.

The key difference, though, is that at this meeting, the first time we're seeing the annotation. This is where the rubber hits the road. And there's a lot to consider. I mean, just ask the NOSB members that have been wrestling with the paper pots annotations. The words really matter. And I think it would be a disservice to the public organic stakeholders to pass this proposal that was written prior to receiving any

of their direct comments on the annotation language.

MR. ELA: Thank you, Johanna. We do appreciate your thoughts. We are going to move on to Kate Mendenhall followed by Brenda DeShields and Ender Iniguez.

It's my understanding that a couple of those people may not be on the call. We are getting close to a break time. So we may take a quick break after Kate if those other two people are not on the line. So Kate, please go ahead.

MS. MENDENHALL: Thank you, members of the NOSB, for the opportunity to speak before you today. My name is Kate Mendenhall, and I'm the Director of the Organic Farmers Association. And I'm also an Iowa organic farmer. OFA was created to be a strong voice and advocate for certified organic farmers. We are led and controlled by domestic certified organic farmers, and only certified organic farmers vote for our policies.

Organic integrity continues to be the top priority of U.S. certified organic farmers.

The NOSB in partnership with the NOP plays a crucial role ensuring that our national standards uphold high organic integrity. My comments today focus on four areas of your agenda.

Paper pots. OFA has testified numerous times on the importance of this resource to small organic growers. We support the NOSB process and agree with the subcommittee's assessment in support for paper pots as an allowable synthetic and defined planting aid. The pandemic has made clear that communities need more small to mid-sized organic farmers. Paper pots help organic farmers that are in line with already approved inputs. Thank you to the subcommittee for your work on this and to the NOP for allowing the necessary continued discussion.

Biodegradable mulch. OFA received a proposal in our 2020 annual policy development process last winter to take a position on biodegradable mulch. But the proposal did not receive any farmer support to take it forward to a vote. With that knowledge, to answer your

question, is the availability of biodegradable mulch a make or break situation for the viability of farmers' organic systems? We would answer no as it was not a farmer priority. We recommend continuing with the current annotation with no change and adding it as a research priority, focusing NOSB time on more pressing organic policy priorities. Biodegradable mulch seems like an urgent issue for a few large growers, but this priority is not shared by the nation's 19,000 organic farmers.

Whey Protein. We support the subcommittee's vote to remove whey protein concentrate from 205.606 of the National List. It's always exciting when the organic community can fulfill our own organic demand. Go dairy.

Fenbendazole. OFA opposes the subcommittee motion to amend the listing for fenbendazole. We are concerned this amendment would allow prophylactic use of a parasiticide that is a synthetic band-aid on an animal management problem. There is not a national need for

fenbendazole. Rather, the requests are coming from a handful of large chicken houses.

The problem should be addressed organically with the health of the birds and eggs as the focus. This amendment would allow a synthetic residue in an organic food product which would reduce the integrity of the organic label and consumer trust. Why would we put more burden on that already fragile organic problem? Fenbendazole should be left alone.

I appreciate all of your dedication to working for the full organic community, for hearing public comment this week and for the farmers on the Board especially. We've carved out time during a busy harvest to represent organic farmers' interest and a strong organic label. Thank you to the outgoing NOSB farmer members, Emily and Jesse, especially for your five years of service.

MR. ELA: Thank you very much, Kate. Are there questions for Kate?

I am not seeing any. We appreciate your comments, Kate. Quickly, is Brenda DeShields

or Ender Iniguez -- are either of those present, Michelle?

MS. ARSENAULT: I don't see Brenda on the line with us by name or phone number nor do I see Ender.

MR. ELA: Okay.

MS. ARSENAULT: If you (audio interference) here and I'm not seeing you, you want to yell or talk at a normal level.

MR. ELA: Well, if you are on the line, either of you, please let Michelle know. But given that we can't see you, I think we'll take a ten-minute break. We will come back at 11:00 -- well, it's my time -- 20 minutes to the hour and resume.

When we come back, we'll have Nate Lewis followed by Jackie DeMinter and then Jeremy Sutherfield -- or Sutherland. Excuse me. So if you all would be ready when we come back, that would be great. So we will see you at 20 minutes to the hour. Thank you much.

(Whereupon, the above-entitled matter

went off the record at 1:33 p.m. and resumed at 1:40 p.m.)

MR. ELA: All right. It looks like it's 20 minutes to the hour, so I'm going to call everybody back.

Michelle, are you ready?

MS. ARSENAULT: I'm already.

MR. ELA: Okay. We don't give you much of a break. Thank you to all the Staff for what you do.

We are going to start with Nate Lewis, followed by Jackie DeMinter and then Jeremy Sutherland. Nate, looks like you're there so go ahead.

MR. LEWIS: Hey, thanks folks. Nate Lewis, Oyster Bay Farm.

My wife and I farm organic poultry, livestock and crops in Olympia, Washington. And we are the stewards, the current stewards, of sacred lands of Squaxin Island Tribe nearby.

I think first and foremost, I'd like to make sure that the NOSB here is, my suggestion

that all meetings go to a virtual format in the future. This would reduce the carbon footprint of the FACA Board by thousands of metric tons of C02.

It would allow more inclusivity for those without the resources for travel. And it would prevent the privileged from having undo impact on NOSB decisions through late night politicking.

So please consider that as an option, I think it's working really well. And there is no reason for us to all fly around the country.

Inerts should be renewed and NOSB should nudge NOP with productive solutions. Like using all the saved money from going to a virtual format to evaluate all List 4 inerts not yet on SCIL to the SCIL criteria so that at the next sunset there is actually a working or replacement for List 4.

Ammonia extracts are incompatible with organic because they act like conventional fertilizer. These products are the only soluble

nutrients available to organic producers, with the exception of sodium nitrate, and enabled producers to bypass the soil biology process. Please add to 602 with haste.

The marine algae proposal is troublesome. The annotation reads like a Dickens novel. And I question whether the addition of a new substance to the national list without a petition is even legal.

Lastly, the one topic that directly effects my operation on this agenda is fenbendazole. I strongly encourage you to pass this proposal at this meeting.

We raise organic chickens on pasture, rotate and stock appropriately. And we actually, fortunately, haven't had problems with parasites to date.

However, if we did, we would want to have a tool. And I'm confident our customers would want us to have one as well. Thank you.

MR. ELA: Thank you very much, Nate. It looks like, thank you, Nate. And Nate has a

question. Go ahead, Nate.

(Laughter.)

MR. POWELL-PALM: Thanks, Nate, for your comment. Was just hoping to see what your thoughts are on, if emergency treatment status of fenbendazole is actually enforceable on the certifier level?

MR. LEWIS: I actually, I think it is. I think that's an area that could use some more guidance from NOSB.

I've commented before on this particular issue, and I'll reiterate that again that we already have the tools in the regulation to prevent the hypothetical fraud that's going on, that's sort of entered into the conversation about whether this tool should be allowed.

There is a lot of talk about misuse and using it as a crutch and that kind of thing.

The regulations, just to remind folks, already prohibit the routine use of parasiticides. And the term routine use of parasiticides is defined in 205.2.

So, that's where I would focus energy in the livestock subcommittee in the future on putting some more contours around the existing regulations that certifiers are out there enforcing. And not to use sort of a hypothetical as a reason to not approve this tool.

I am a small producer. I do all the right things, I do all the preventative practices that have been brought up. Those tends to work.

But climate change is here. We don't have hard freezers in the northwest anymore. There might be times when we can't rotate the way we want to, and parasites can build up.

Having a tool in a emergency situation like that is imperative so that the welfare of the animals can be maintained. So, thanks for that.

MR. POWELL-PALM: Thank you.

MR. ELA: Asa has a question.

MR. BRADMAN: Just with respect to fenbendazole. Would you support some sort of waiting period after use, which I guess would mean losing sales, eggs and other product?

MR. LEWIS: I think in the theory of that is reasonable. Sort of a precautionary approach.

I think my only hesitation would be consistency among the other uses of parasiticides where there are wait times for cattle and we doubled them. And that's sort of been the general practice. It's hard to double zero.

So, if there was good information about sort of a rationale behind that wait time, then I would be in support of it. At this point I don't, I think if we're going to be consistent doubling zero is still zero. So, the proposal, as written, is being consistent.

MR. BRADMAN: Thank you.

MR. ELA: Sue has a question. On mute again.

MS. BAIRD: I'm sorry. I don't know why I do it every time.

Nate, as a certified organic poultry operation, would you have, would your customers have a problem with you selling your products as

non-organic?

Because if they have no leeway to do a withdrawal of eight days, which is what they're saying to get a complete zero residual, what would you do with those eggs for eight days?

MR. LEWIS: I would probably give them, well, it would sort of depend. I think, I would assume they would still be legal to sell or at least give away, so they'd probably go to the food bank, where a lot of our pullet eggs go because there is no market for that. Or I might get some pigs.

I think we could probably work through that. I don't see that as an insurmountable issue. I just, again, don't know if it's necessary.

MS. BAIRD: Well, how many chickens do you have?

MR. LEWIS: We do, we have flocks of 500 that we rotate out annually. So we'll have, we just sold our, well, I don't like calling them spent hens because they're not spent, but the ones, the older hens that were going into molt we just sold them.

The new ones are coming on right now. And we get our replacement flocks at the beginning of summer so that our largest production is during the winter months when egg consumption is highest.

But we rotate flocks of 500 in three set, let's see, eight and a half by 20 to 25 foot mobile coops designed around OLPP stocking densities for pasture housing.

MS. BAIRD: Okay. Okay. What if you have 5,000 birds?

MR. LEWIS: I would be washing a lot more eggs.

(Laughter.)

MR. LEWIS: I don't see that ever being a reality for us. I suspect that would simply make the rotations need to be larger.

And I think that that practice can still, I think the rotation practice and preventive practices can still be effective at minimizing impacts from parasites, but once parasites do show up there needs to be a tool available to effectively eliminate those from the flocks.

MS. BAIRD: And if you had 15,000 birds?

(Laughter.)

MR. LEWIS: I think it would just be the same thing, but farther on. I have personally seen flocks of 15,000 birds very well managed in pasture systems. And I don't know specifically whether they had parasite issues that need a control but I suspect they do since they're living creatures and farmers can't be 100 percent perfect all the time.

MS. BAIRD: Thanks.

MR. ELA: Thank you, Nate, we do appreciate your thoughts.

We're going to move on to Jackie DeMinter followed by Jeremy Sutherland and then Jerry Hatfield. Jackie, please go ahead.

MS. DEMINTER: Hello. My name is Jackie DeMinter. I am the certification policy manager at MOSA.

We certify almost 2,200 organic operations throughout the United States, including

over 1,900 with crops, more than 500 grow vegetables.

I'll be summarizing our written comments on paper, mulch film, liquid fish, marine macroalgae and sunset materials. First, thank you all for your work.

This meeting is our second virtual opportunity where the entire organic community can be involved, which shows that it is possible to have this wider engagement available on a permanent basis. We hope this action will continue.

Paper pots. We continue to support listing of paper for use as a plant production aid, with suggested clarifications detailed in our written comments.

We recommend that the NOSB exclude biodegradable, bio-based mulch film, and limit the other 40 percent of ingredients to non-synthetic materials, other permitted substances at 205.601(j), which is nutrients, and synthetic strengthening fibers, adhesives or resins.

By adding this clarification to the

term defined, we can be sure that we will not be inadvertently allowing unintended ingredients.

ASTM D6866 testing should be the only verification permitted. Also, cellulose-based may need further definition.

We have considered the rayon fibers, which comes from cellulose in the paper pots as synthetic reinforcing fibers that we'd think of as being in the 40 percent.

Finally, we encourage all manufacturers to plan to list their products with an MRO, and with the USDA's BioPreferred Program.

Mulch film. Almost 500 MOSA certified operations report using a mulch product. We know our clients would appreciate an alternative to plastic mulch.

We do not support any of the four operations presented, which do not include verification of an amount of bio-based content. Which seems like the logical step forward. Again, the USDA's BioPreferred Program could be used.

Liquid fish. This is the first time we are seeing the proposed language, and we recommend that the document carry over to spring to allow for more important.

Liquid fish is a common input in the significance of the definition of fish waste, needs further vetting.

Aquatic plants. We support re-listing of aquatic plant extracts and do not support the proposal for marine macroalgae.

Our written comments outline how significant these products are to MOSA farmers. And since this is the first time we are seeing the proposed annotation, we encourage this topic to carry over until spring to gather input on the proposed annotation.

List 4 inerts. We support the direction outlined by the livestock committee and do not support the direction of the crop's subcommittee. And we strongly encourage a unified approach forward.

Finally, I want to echo the comments

already made on cornstarch. We have the same concern regarding baking soda.

Thank you for the opportunity to comment.

MR. ELA: Thank you very much, Jackie. Are there questions from the Board for Jackie? I am not seeing any, so we do appreciate your thoughts.

MR. BRADMAN: I have a question.

MR. ELA: Oh. Go ahead, Asa.

MR. BRADMAN: On the bio-based content for the films, what would you recommend?

MS. DEMINTER: Just going off of your proposal for the paper pots, it seems like there are two materials that are relatively, or could be relatively similar, considered similarly. I mean, if you're going with an 80 percent content on the paper pots for bio-based content, then that seems like a logical step forward with the mulch film as well.

MR. BRADMAN: Okay. Currently none of the mulches are even close to 80 percent. So that

would be, I guess that's one of the challenges with these materials. That would essentially not permit them.

But I agree, we need to consider that as an option.

MS. DEMINTER: So, I would encourage you to look at the films that are listed on the USDA's BioPreferred Program cite under products. We noted a couple in our comments.

And maybe I could just point you to our written comments.

MR. BRADMAN: Thank you.

MR. ELA: Thank you, Jackie.

MS. DEMINTER: Thank you.

MR. ELA: We are going to one to Jeremy Sutherland followed by Jerry Hatfield and then Lee Frankel.

It's my understanding that Jeremy may not be present. We'll give one call out. Jeremy, if you're out there, could you let Michelle know. Okay.

I think we will move on to Jerry

Hatfield, followed by Lee Frankel and then Ken Ross. Jerry, please go ahead.

MR. HATFIELD: All right, thank you. I am Jerry Hatfield. I'm a retired USDA ARS Laboratory Director and scientist. I have a 45 year research career and I spent 30 years as director of the National Lab for Ag and the Environment in Ames, Iowa.

For the past 15 years I've been working on soil health as the foundation of climate resilient agriculture and crop production efficiency, as well as the path towards improving soil health.

I think there is a lot of confusion about the word ammonia and ammonia extractions and everything. And if we go back, ammonia is mostly associated with this idea of the Haber-Bosch process where we take nitrogen out of the air under intense heat and pressure and we create anhydrous ammonia.

However, the oldest form of ammonia formation is actually biological activity.

Microbiological degradation of organic material produces ammonia. This incurs not only within the soil, also within manure and a number of different things.

And so, in reality, this process of ammonia formation is biologically driven. And if we think about the ammonia extracts that are being talked about today, they're not really an ammonia extract, they're really a concentration as well as a capture technology.

But in reality, what I want to spend most of my time on today is how ammonia materials, ammonia nitrate, ammonium, really begins to influence soil health.

Whether it will change soil health, we need two ingredients. We need energy coming from carbon, we need nutrients coming from nitrogen.

And so, in addition, soil health really requires a energy food supply. It needs water, it needs air and it needs shelter, and all of that.

But in aspect, when we think about ammoniacal nitrogen, which is really ammonium that

is formed within the soil, the added material has a C to N ratio of about three to one. If we really want to increase soil health we have to increase the available energy.

We have to increase the carbon piece, along with the nitrogen piece, and make it available in there to allow that. And what we've seen over time is as we begin to increase that carbon content we have that continued fostering of biological activity that leads to soil health.

That is the pathway forward in all of this. We see all these positive things happening. And so, we really have got to think about these materials as having carbon and nitrogen components.

And I realize soil health is very complex, and so if you have additional questions I'd be glad to answer those for you, either here or offline some time.

MR. ELA: Thank you, Jerry. Are there questions from the Board? I don't see any but I do have a question myself.

So, you were saying if the three to one ratio, if we really want to feed the soil, we need to increase that carbon content. We heard last Tuesday a number of people about the ammonia extracts as being in that three to one, five to one ratio.

How do we, if we allow these straight ammonia extracts, how do we increase that carbon ratio?

MR. HATFIELD: Well, they have, those have a carbon ratio in there, I think the other pieces, if you look at this, soils actually begin to develop a very interesting balance in themselves.

If you think about adding sugars in there, which are pure carbon sources, you see a flush in that, that the system begins to balance. The material, like SuperSix, has got a three to one ratio already in there.

I don't consider those, I don't consider anything that's biologically derived. And ammonia extract, it basically is releasing the

nitrogen and ammonia form. And you see that in the soil all the time.

And so, I think we have to be very careful of the definitions that we're using on a lot of these different processes.

MR. ELA: Looks like Dave has a follow-up question. Dave, go ahead.

MR. MORTENSEN: Hello, Jerry. Dave Mortensen here.

I was trying to sort out in my mind the distinction between conventional application of ammonia to a crop. And this method, as an organic method of adding ammonia to a crop, I recognize the source of the ammonia is different.

But could you talk about how this, this form of fertilization where you're spiking or pulsing ammonia into the system is similar and different to that use by a conventional farmer fertilizing their crop?

MR. HATFIELD: Yes. If you think about it, anhydrous ammonia, one of the first things that it does is, in order to react within

the soil these, any synthetic source is going to be devoid of carbon.

So, it's going to be freely, it's going to be available. But it's also going to pull water out of that.

If you think about building soil health, one of the things you need is water. And so, this conversion of anhydrous into a form that's available to that plant is going to pull a lot of water out. And we see that different dynamic in all of this.

I think the other piece, when we think about improving soil health, when we're improving carbon within that soil, I think that becomes the foundation. Because if we want to improve this in adding a carbon-rich fertilizer back to that soil, then we get close to the balance that allows that microbial activity to achieve its purpose.

And what we often see is that when we look at changes in soil health properties, aggregates, excavates coming out of the system and everything else, we see a very positive benefit.

We see a spike in CO2 release, which is indicative of respiration, that we don't see when we add the synthetic materials like anhydrous into the soil.

So that's, it really is a very complex system when we start putting into the soil. The nitrogen cycle is a very complex system in a lot of this.

And so, we can achieve that release in there but it's not the path to improving soil health and fostering some of this activity that we want to achieve at the end.

MR. MORTENSEN: Just a quick follow-up.

MR. HATFIELD: Yes.

MR. MORTENSEN: If we wanted to, if an organic farmer wants to increase the carbon content of the soils, they would almost certainly not turn to this sort of application but rather cover crops where the carbon and nitrogen ratio is really more in the ballpark of 30 or 40 to one.

So, I guess I just am trying to sort out the difference between cultural practices that

build soil health in pulsing with a specific nutrient like this.

MR. HATFIELD: Well, I mean, if you go back and you look at this, the 30 to one is a little high in terms of carbon. Nitrogen is actually going to start decomposing and that microbial system will get it down closer to probably an eight to one, in terms of all of this.

And part of that coming out from, why cover crops do what they do, is the excavates coming out of that root system.

And when we look at this, there is a very rapid decomposition of those roots going on when we begin to apply materials that are closer than that three to one, five to one ratio. Because we have a lot more energy available to them.

And so, that's the process that's going on within that soil. And so, if you look at that path of soil health change, what you are seeing is that, yes, you can add that material.

But the other piece that goes with that, like I said, is the root excavates. There's a lot

of things that are given off by the biological material in that, that didn't decompose as well, that are still closer in that, say that three to ten to one ratio, in all of this.

And so, that's, when you start adding those fertilizers, you're speeding that process along.

MR. MORTENSEN: Thanks.

MR. ELA: Thank you very much, Jerry, we do appreciate your expertise on that.

MR. HATFIELD: You're welcome.

MR. ELA: We are going to move on to Lee Frankel, followed by Ken Ross and then Adam Seitz. Lee, please go ahead.

MR. FRANKEL: Thanks. Good afternoon and good morning. My name is Lee Frankel. I'm speaking today as the executive director of the Coalition for Sustainable Organics.

We believe that everyone deserves organics. We support the USDA policy that continues to certify container production systems, including hydroponic and aeroponic systems.

We also support the USDA's definition of organic production as it states the following. Organic production. A production system that is managed in accordance with the act and regulations in this part to respond to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity.

We believe that the organic program should remain open and inclusive of a variety of approaches, for growth to respond to their site-specific conditions.

Regardless of your position on containers, I did want to make sure that you're aware of the latest efforts to diminish the role of the NOSB that formulates organic policy. The recent lawsuit filed in the Ninth Circuit against the USDA and the National Organic Program seeks to have a single judge with no organic experience decides the 2017 recommendation of the NOSB in the longstanding USDA National Organic Program Policy

on containers overruled and declared as invalid.

If the lawsuit is successful, nearly all fruit trees, amongst vegetables, will be decertified under Section 6508 as they use seedlings, nursery trees that use containers at some point in their production cycle.

Let's keep the NOSB and NOP comments and input process as the place for policy issues that are decided. These forums allow us to come up with the best solutions to meet the needs of the organic community.

I also wanted to take this opportunity to directly state my appreciation for Jesse, Emily, Dan, A-Dae and Scott for their service and their patience to help me personally spread my understanding of the various perspectives of the organic community. I hope I have helped you as well to make inform decisions and acting in the community.

I want to give thanks to all the NOSB members and the NOP Staff present for their time and your service. And I'm open to answer any

questions you may have.

MR. ELA: Thank you, Lee. It looks like Asa has a question.

MR. BRADMAN: Yes, I have a question. As you know, these issues around container production have been very controversial and difficult to grapple with.

But I have a question about the transition period. And when we pass a recommendation on native habitats we recommended that native habitats that have not been disturbed, there should be like a ten year period between converting them to agricultural and their acceptability as a certified organic system.

I would be interested in your organization's position on a similar idea for open farmland in a situation where people are building buildings, putting concrete over soil. Would that, would a ten year wait for organic be acceptable in that setting?

I think one of the issues with container systems is that if we look, say, in an urban setting

where there is contaminated soil, asphalt, a roof building, those are all potential environments where containers might make a special sense.

But I'm curious about what your organization would say about a ten year transition if farmland was converted to a covered hydroponic system, a container system?

MR. FRANKEL: That's not something that I've directly discussed with them to have any type of special positions. So, Tim kind of shared some of my observations.

But the first one is that a number of these facilities are located on traditional farms where there is kind of fuel production. And these container facilities are part of that whole farm management where the green waste from the containers, the substrate, potting soil mix itself, are incorporated into the crops in the fields outside of the greenhouses.

So I think making it maybe kind of more difficult to have those integrated type operations would kind of damage what I think are some of the

maybe best practices that are out there.

Yes, so the other general item is that the containers are often used to kind of keep organic production in areas that are often conventional. Production going around and it's difficult to kind of achieve that sort of balance of beneficial insects and different pests and the organic systems just get overwhelmed if they don't have like screens or shading up around to protect those plants.

So, again, I guess those are kind of some of the issues that would kind of argue against that ten year transition period. But also understand that once you do have great organic soil, you've been building for years and years, you don't want to take that out of production.

So, it's something that the coalition doesn't have a formal opinion on, but I think it's in general, it's talking about responding to the site-specific conditions. I'd prefer leaving items up to kind of the judgment of the grower and their certifier to figure out what makes the most

sense to kind of fulfill those kind of principles of ecological balance concerning biodiversity and cycling of resources.

MR. BRADMAN: Okay, thank you.

MR. ELA: Thanks, Lee, we appreciate your thoughts. We are going to move on to Ken Ross, followed by Adam Seitz and then Peter French. Ken, please go ahead.

MR. ROSS: My name is Ken Ross. A retired political scientist with training in environmental studies. And I'm a board member of the Rockweed Coalition in Maine.

I was a plaintiff in Ross versus Acadian Seaplants in which the Maine Supreme Court rules unanimously against the company in 2019 that landowners, not the public, own the rockweed.

My remarks today pertain to rockweed, or Ascophyllum nodosum, a seaweed species mostly commonly used in seaweed crop inputs.

The OFPA requires that substances approved for organic production not be harmful to the environment. Rockweed harvesters claim that

they are not over harvesting rockweed biomass and therefore there is no harm to the environment.

But marine scientists recognize that the tall rockweed fronds create an underwater forest of high ecological value.

Birds of high conservation value, you see some in this slide, feed there. And dozens of marine species feed and shelter in it. Including at least 23, which are commercially important. Including cod and herring.

When the rockweed forest canopy is removed, that is about 70 percent on the average of the height of the rockweed trees, it significant reduces the values of these trees on the forest. And for wildlife and for fisheries.

The loss of the canopy takes years to grow back. And is usually cut again before reaching its original height. And it never gets to regain its ecological functions.

So the Maine Coast has gradually turned into a rockweed farm at the expense of fisheries and wildlife. That is a substantial harm to the

marine environment.

This is why the proposed annotations for rockweed crop input, seaweeds, are essential. They could have been a lot stronger, but as written, the annotations are a good compromise.

The rockweed coalition asks as you vote for the proposed annotations in the marine mackerel algae proposal.

Organic consumers, I think, expect that when they buy a crop fertility input or a product growing from these inputs, has been produced in a way that does not harm wildlife, wild seaweed forests or risk to species that depend on these forests. Thank you.

MR. ELA: No, no thank you. It looks like Emily has a question for you.

MS. OAKLEY: Thank you for your comments. And I was wondering if you could tell us in what ways the annotation could have been stronger as we see this as a compromised position, so I think it would be helpful for folks to hear ways that it could have been stronger?

MR. ROSS: Sure. I have read it of course and thought a little bit about it, but I don't, other than a ban, other than a rule that just declares that they're not environmentally benign, then these, which is stronger, which it would be a stronger position, that these, I classify, are in regard as a somewhat less robust. And therefore I call them compromises.

MS. OAKLEY: Thank you.

MR. ROSS: I may not be meeting your question exactly. I'm not in a position, at the moment, to reform the writing of it in a way that might answer your question.

MS. OAKLEY: No. I mean, I think that does answer our question because I think we've tried to explain that there are some stakeholders who would prefer to see some species, rockweed in particular, has been mentioned as not harvested for this purpose. Which is kind of one end of the spectrum.

And the other being that there is no regulation needed. So, I think we were trying to

find this as a middle ground between those two different ends of the spectrum. So thank you.

MR. ELA: Thank you, Ken, we appreciate your thoughts. We are going to move on to Adam Seitz, followed by Peter French and then Eli Chandler. So, Adam, please go ahead.

MR. SEITZ: Good afternoon. My name is Adam Seitz and I serve as a senior reviewer and policy specialist for Quality Assurance International. An international certifier based in San Diego.

Check your local grocery and you'll definitely find the QAI mark well represented on its shelves.

Ion exchange. QAI supports the NOSB handling subcommittee's recommendation, and we encourage the NOSB to adopt it as written.

Cornstarch. I need to amend figures provided in our written comments. I failed to consider the number of QAI certified operations using baking powder, and other leavening products formulated with cornstarch as a labeled declared

ingredient.

I noted in our written comments that 16 of our operations have demonstrated that the cornstarch they use is not commercially available in organic form. Additionally, the majority of baking powders we've approved contain cornstarch, and approximately 18 of our operations use non-organic baking powder.

Add that to the original 16 for a total of about 34 operations using non-organic cornstarch. This is still likely an underrepresentation.

While not advocating for or against removal of cornstarch, we do not share concerns that its removal would totally prevent the use of baking powder in similar leavening formulations for organic operations.

QAI certifies products as ingredient panel only. These are the types of products exempt from certification requirements per 205.101(a)(3) and (4).

Operations that handle products with

less than 70 percent organic content or that only identify organic ingredients in the information panel, while exempt from requiring certification, can still seek certification so that their products can be used in further process of organic goods.

Accordingly, we actually have eight operations using a certified baking powder formulated with organic cornstarch.

Glycerin. We urge the Board to approach changes to the status of glycerine with caution. Its recent classification and annotation change resulted in a solid disruption to both certified operations and certifiers like QAI.

We've spent a disproportionate amount of time reviewing and deliberating glycerin compliance. And ultimately we take a deep dive in our review because we found simple attestations of compliance from glycerin manufacturers to sometimes being false. Not typically intentionally, I'll add.

Keep this in mind when contemplating

new annotations for any material, including marine macroalgae and fish-based fertilizers. Which certifiers likely do not have the resources to take such a deep dive on.

Finally, I'd like to encourage the NOP to recommend that the NOSB take up the work topic of how we ensure organic integrity, the safety of inspectors and meet our societal obligation to limit the spread of COVID-19 via the required onsite inspections.

This pandemic isn't going anywhere soon, and hard to say whether this experience will be an isolated blip or a repeating occurrence due to our proliferation and largely wholesale discount science.

This topic needs to come to the forefront of NOSB deliberations and NOP efforts. Resource should be devoted to developing modern inspection tools and requirements to address continuing certification during global crises.

Finally, I'd love to share a minute and 40 second story about certification of virtual

inspection pandemic hardships for certified applications, but my time is up, so only if someone asks.

(Laughter.)

MR. ELA: Are there questions for Adam? I'm not seeing any, Adam. Thank you very much for your comments, we do appreciate them.

MR. SEITZ: Thank you.

MR. ELA: Next up is Peter French, followed Eli Chandler and then George Seaver. So, Peter, please go ahead.

MR. FRENCH: I'm Peter French, quality control supervisor for Thorvin, Incorporated. I've worked with Thorvin since 1983.

Following me you will hear the comments from five others who share concerns and questions about the marine macroalgae proposal. Each of us works with and for the marine community's ecosystems from which seaweed is harvested representing several parts of the supply chain over several regions of the country.

Eli Chandler, operations manager of

Thorvin, Incorporated, George Seaver, vice-president of Ocean Organics, Dave Hiltz, head of regulatory compliance for Acadian Seaplants, Shep Erhart, founder of Maine Coast Sea Vegetables, and Bill Wolf, founder of Wolf & Associates in Thorvin.

Next slide please. We agree with the many public comments in support of restoring healthy, sustainable harvest practices for marine macroalgae.

Yet the public comments you have received also show that there's many questions on this recommendation. We're here to discuss those concerns.

You will hear that many questions raised by public comments need time for consideration by the NOSB. The language in the annotation is not clear.

Harvesters are committed to protecting this resource. Third party oversight is working.

As written, annotation cannot be implemented. These listings would have a big

impact on organic farmers but little impact on harvest.

This recommendation will not protect seaweed populations or ecosystems. And there are other solutions the Board should consider.

Next slide please. In particular, please note the letter from 20 former NOSB Members. Including the drafter of the Organic Food Production Act asking that you not vote on this recommendation and follow the process for listing new materials in making annotation recommendations.

This is the first time the public is seeing this recommendation. To quote their letter, the most complicated annotation to be added to the national list is not the time to deviate from NOSB practice of giving time for transparent public comment and subcommittee and NOSB review and reaction to those comments.

We are committed to forging a path forward with you, taking thoughtful steps to assure we reach the desired outcome. I'd be happy to

answer any questions, if there are any.

MR. ELA: Thank you, Peter. Are there any questions? I am not seeing any at this point, so we appreciate your presentation.

We are going to move on to Eli Chandler, followed by George Seaver and then Dave Hiltz. Eli, please go ahead.

MR. CHANDLER: Okay. Can you hear me?

MR. ELA: We can hear you.

MR. CHANDLER: Okay. I think I need Slide Number 4 up please. Nope, back a couple. One more. There you go. Thank you.

Good afternoon. My name is Eli Chandler. I've worked for Thorvin for 20 years. I appreciate the Board's time and effort invested in this topic.

I'm fully committed to environmental protection and sustainable management practices. A college education is in environmental studies. Specifically aquatic ecology and ethics.

The proposal, as written, while carefully thought out, is ambiguous and leaves much

to interpretation. The accredited certifiers association and several organic certifiers express concerns about the impact of this on organic producers and the lack of clarity about how these proposed regulatory changes would be implemented or enforced.

The ACA noted that this would have a large impact on organic producers stating that kelp is an extremely common input. ECL echoed these concerns.

Mostly expressed similar concerns and more. Stating that consistency must be maintained in dealing with the same inputs put to different uses.

In relation to the fact that this would require different standards for verification for kelp for feed uses versus crop input uses.

MOSA goes on to comment that this verification of this proposal would possibly be by harvester affidavit. QAI said much the same, by seeking attestation from the supplier and manufacturer that a product complies.

Several of these same certifiers request that the proposal be delayed, allowing for more public comment time and clarification. Twenty past NOSB Members submitted a similar request.

While the proposal is well constructed and attempts to address possible concerns in areas where commercial harvests of Ascophyllum nodosum routinely occur, presents serious challenges for other species, as well as their areas where there is currently no harvest and therefore no local oversight.

Using these annotations, as written, is the sole guidance for establishing a commercial harvest as the potential to allow for marine macroalgae harvest that no one in the industry said are sustainable, ecologically sound or best management processes. I doubt very much this was the intent of the proposal and request that the proposal be returned to subcommittee for additional clarification.

I'd be happy to answer any questions

you may have.

MR. ELA: It looks like Emily has a question.

MS. OAKLEY: Hi, Eli, thank you for your comments. Yes, you're right, it is not the subcommittee's intention to come up with something that is not feasible.

I know that you harvest with your company, either largely or entirely certified organic, I believe to the wild crop standard which states that a wild crop must be harvested in a manner that ensures that such harvesting or gathering will not be destructive to the environment. And will also sustain the growth and production of the wild crop.

And you note that you feel the annotation that's been proposed as ambiguous, but I also think that this wild crop standard is pretty ambiguous. And we addressed no recognition of why that might be due to the number of species and environments under which it's being applied.

How does your harvester, or certifier,

sorry, take this ambiguous term in the wild crop standard and apply or it interpret it to your harvest of seaweeds and Ascophyllum nodosum in Iceland? Thank you.

MR. CHANDLER: Okay. So, they defer to the Marine and Freshwater Research Institute in Iceland for some of that where harvest is regulated by the recommendations of that institute.

And currently, the harvest equates to less than two percent of the total biomass of the harvest site. And the rotational four year rotation of harvest ensures regrowth. Also only harvesting such a small percentage of the material in the area.

It's been documented that, well, is assumed to have little to no impact on the rest of the flora and farm. And that's from the researchers there in Iceland.

MS. OAKLEY: Thank you.

MR. ELA: All right, Eli, I see no other questions. Thank you for your testimony.

MR. CHANDLER: Thank you.

MR. ELA: We are going to move on to George Seaver and David Hiltz and then Shep Erhart. George, go ahead please.

MR. SEAVER: Yes. My name is George Seaver. I'm vice-president of Ocean Organics Corporation in the Coast of Maine.

I've been making rockweed based fertilizers here for 43 years. I moved up in 1977.

The slide that's on the screen right now is the one right after mine, but either way. Please go to the next slide where it shows Andrew harvesting. Nope, backup. Backup, backup. Backup. There.

This is our seaweed being harvested in this picture. It's a fellow named Andrew who we've worked with for about ten years. This is one of the beds that he repeatedly goes to. But it does sort of illustrate that there is a real abundant growth of rockweed.

I can only speak to how this annotation could impact commercial harvesting in Maine.

There is no group of people more committed to the future of Maine's coastal ecosystem then those of us who have invested our lives in the development of products that rely exclusively on that ecosystem.

As a member of that group, and as a reliable supplier of seaweed products to organic food producers, I believe that as written, the proposed annotation would be impossible to comply with. Our businesses would certainly survive, but supplying inputs to organic growers would likely come to an end.

The commercial seaweed processing companies in Maine have long been proactive in protecting the resource and the ecosystem. The Maine Seaweed Council was formed about 20 years ago for that purpose.

For many decades, the Maine Department of Marine Resources has managed all the natural resources within the category of fisheries. And specifically, with collaboration from the industry, university researchers and several

conservation groups, developed a 60 page fisheries management plan to formalize and clarify the management of the seaweed fishery itself.

The time we invested in developing that plan was explicitly to ensure that the state regulators would have the information they would need to determine if the level of commercial harvesting ever began to negatively impact the ecosystem.

Go to the slide of the two letters please. These letters on the slide were provided by the Department of Marine Resources. I asked them to summarize what kind of history they've have with us, as a fishery.

They confirmed in detail their authority. And it was noteworthy that DMR collaborates with three additional committees to establish policy and regulations.

Their Marine Resources Committee, comprised of senators and representatives, the Marine Resources Advisory Committee, made up of appointed representatives from the different

commercial fisheries, and the Seaweed Fisheries Advisory Council, made up of commercial seaweed processors and associated researchers.

To paraphrase, the DMR has gotten only two complaints of incorrect harvesting. It's gotten 30 complaints where someone thought harvesting shouldn't be going on but nothing to do with harvesting.

Upon your investigation, one was not a violation of hype of cut regulation, and the other one was fixed the next day. I can stop right there and answer questions.

MR. ELA: Thank you. Emily has a question.

MS. OAKLEY: Thank you for your comments and testimony. Does Ocean Organics harvest Ascophyllum nodosum?

MR. SEAVER: Yes. That's what that picture was. That's us harvesting for our process. We make liquid extracts and have for 30 years.

MS. OAKLEY: So, does the company

engage in the harvest itself or does it hire from independent contracts from who --

MR. SEAVER: We buy seaweed from independent contractors. Workers comp for seaweed harvesters is something I don't want to be part of so we tell people what we want, instruct them where we want, how we want it harvested, meaning the rules, plus the Department of Maine Resources has rules too, and then we buy it from them.

MS. OAKLEY: Okay, sorry, I caught, or I didn't quite hear what you said. You do buy it from independent contractors?

MR. SEAVER: We buy it from subcontractors, or private contractors actually, who harvest it for us. And they may harvest it for other people too, but they harvest it for us.

MS. OAKLEY: Okay. And do you ever go out on boats to ensure that they're harvesting according to the standards that you've set out and how frequently do you do that?

MR. SEAVER: I personally haven't. I

have driven by the sites, as you can see in that slide. You can tell pretty quickly if somebody has been misharvesting.

There have been no complaints. We have relationships with the landowners and the, the letters from the Department of Marine Resources do a pretty good job of pointing out that, and they have every right and purpose to go around and look at harvesting areas.

There is just not a problem yet. There's never been any research or any scientifically based, or even scary stories, about harvesting anywhere around the areas where we harvest on the mid-Coast Maine. And as far as I know, the rest of the Coast of Maine. We only do the mid-Coast area.

I don't think there is a problem here. I think someday there could be, but I don't think there is one yet.

MS. OAKLEY: Do you know how frequently, last question, sorry, Steve, the DMR goes out to visually inspect harvests? How often

are those performed?

MR. SEAVER: I think it's on an as needed basis. They know based on the tonnage reports of what's harvested, they know how much seaweed is being harvested in different regions.

It's notable that there is a tremendous amount of the Coast of Maine, the Coast of Maine is 3,000 miles, there is a tremendous amount of the Coast of Maine that will never be a good place to harvest for reasons of logistics or currents or winds or density, or whatever it might be.

We take about two percent of the biomass from the Coast of Maine. Mother nature tears off about 40 percent every year.

MS. OAKLEY: This is more of a question of, how often the DMR is going out to do onsite inspections. Like, how many staff do they have?

How capable are they of in fact performing inspections and going out to make sure that harvesters are in compliance with the 16-inch cutting rule?

MR. SEAVER: I'm answering you as

directly as I can. A, I don't know how many people they have or how often they go out.

But what I'm trying to say is that they go out as needed. There's lots of fisheries.

And the interrelation between all of those fisheries is what you call the ecosystem, which you know better than I do probably.

But the point is, the Department of Human Resources is overseeing all of the fisheries and all the interrelations between the fisheries. And they know that at two percent tonnage, that they've got other, so to speak, fish to fry.

The lobster industry is far more impactful on the ecosystem, far more, than the seaweed industry.

So, if you're looking for me to say, I don't know how often they go out, it's true, I don't know how often they go out. I do know they go out often enough so that they are satisfied that the ecosystem is operating, if not optimally, fine.

I mean, the ecosystem is a extraordinarily dynamic thing. The word,

maintain the ecosystem, is kind of like an oxymoron because it's changing every day. We have climate change issues, we have water temperature issues, we have invasive seaplants that find their way in.

The ecosystem is about as dynamic as you can imagine. And they are monitoring the whole system. And to the number of times they go out in a boat and look where someone might have harvested, I don't think that there is enough harvesting for them to see it as an issue, frankly.

The moment someone complains they look into it. And they did. They had 32 complaints in over a period of like five years.

And those complaints, most of, 30 of them, literally, were people who wondered if that person is supposed to be harvesting down there because they bought some land on the shore, and yes, they can harvest there.

One of them was, well, no, there is nothing wrong with the way the harvesting was. They sent a boat out.

And the other one, and this is probably

the most important one, the other one was, there was damage being done because it was a mechanical harvester in fact, there was something that wasn't working right and so they zoomed in and fixed it.

I mean, I think that's probably the exception that proves the rule and should assure you that it's being covered.

MS. OAKLEY: Thank you.

MR. ELA: George, I'm going to jump in. We've got one more question from Dave Mortensen.

MR. MORTENSEN: Yes. Thank you, George. I, so we've heard from folks, we had a science panel present to the Board, and then we've done a lot of reading. And some of us have done a lot of touching base with folks harvesting, as well as the science community that studies these impacts.

And I guess I just wonder, how do we reconcile the statement on the one hand that there appear to be no effects, and then on the other hand there are significant effects of an ecological kind that we've heard from a number of marine

ecologists?

I guess I just ask you, how do you see that, those two are different perspectives? No effect, no adverse effect.

MR. SEAVER: Okay.

MR. MORTENSEN: And the adverse effects on the other hand.

MR. SEAVER: I think there is two different questions being asked and therefore both answers can be correct. Is there a potential that over harvesting could occur and there could be damage to the ecosystem that would be driven or caused by that, absolutely.

That's why I was on the committee that worked on this document so that the Department of Human Resources would have all the specifics about the seaweed ecosystem and the seaweed resource so they could monitor it.

The fact that this, and we tried to get Emily to give us the research papers that showed there was an actual problem that had been documented on any, well, the Coast of Maine is all

we can deal with, but the possibility of damage is absolutely real.

The timing of that damage, it just hasn't ever come yet. We're still at such a low impact that what we've been doing in advance of that problem is probably going to prevent that problem from ever happening.

But I don't believe you are going to find too many people who have studied and discovered where damage has occurred, certainly on the Coast of Maine. Because I don't think there has ever been any, and I've been doing it, well, 23 years.

MR. MORTENSEN: And I guess, and I'm just trying to work the logic through in my mind. If you really believe, and then a question that you believe.

You believe that there is no adverse impact, why would additional oversight be such a concern?

MR. SEAVER: Well, the way the annotation is written, it would be impossible.

For example, the architecture of the seaweed is tremendously variable, even if people had never moved to Maine. Depending on the current, the salinity, the water temperature, the wave action, the slope of the ground.

Because, if you do go out there in a boat or with your diving mask on, you'll find that the architecture is as variable as you can, you can't even imagine.

When you look at the overall variability of the architecture and the small percentage of the coast that ever gets harvested, and then it does come back denser, it does come back, if you go back every, about three years, you get more biomass and sometimes plants aren't as tall.

By the way, the tall plants are the ones that get broken off by nature and float around and get in your propeller.

But anyway, the point I'm working on here is that the scale of the harvesting is nowhere near the level where it would have a significant

impact on how the resource is living. I mean, nowhere near the impact that the natural variation has.

MR. MORTENSEN: Thanks.

MR. ELA: Thank you very much, George, we appreciate your thoughts and experience.

MR. SEAVER: Thank you.

MR. ELA: We are going to move on to David Hiltz, followed by Shep Erhart and then Bill Wolf. David, please go ahead.

MR. HILTZ: Hi everyone. Thank you very much. Emily, or Emily, sorry. Michelle, can you go ahead to the next slide.

So my name is David Hiltz. I am the director of regulatory affairs with Acadian Seaplants Limited. A global manufacturer of marine algal products from Nova Scotia, Canada.

We thank the materials committee for their time and effort investing into this topic. And we appreciate the opportunity to once again comment on it.

Next slide, again, please. Acadian's

director of resource science, Dr. Raul Ugarte, recently participated in the 2019 expert's panel on marine materials where he shared his 25 years of scientific expertise on (audio interference) resource management activities in various countries in the North Atlanta.

Despite the significant progress that has been made to date, we feel their remains to be more work to be done. Acadian is deeply concerned with the proposed annotations to aquatic plant products and the impact they will have on these products as viable crops from the MOP organic agricultural activities.

Next slide please. Firstly, marine macroalgae is collectively one of the largest biomasses on earth.

Trying to write one annotation that applies to so many different species, harvesting methods and ecosystem is a very complex task. We would suggest it would instead require a more specie specific expertise and science.

With respect to prohibited harvest

areas, we suggest that a blanket prohibition, as proposed, is overreached as the commercial activities permitted within these areas can often be quite specific.

For example, for the focus of protections offshore species, coastal seaweed harvesting could be permitted under local rules.

The statement suggesting re-harvest cannot occur until full biomass recovery has occurred, will be particularly challenging developing. What is the scope of this architecture description?

There is no mention of scale, so what exactly is prohibited from re-harvest?

A single plant that was previously kelp, a seaweed bed, a coastal sector. This ambiguity is open to various interpretations.

In addition, the wording of this annotation may not achieve the desired result to producing ecosystem impact. Under a proposed, this proposed wording, a harvester could completely clear cut a sector of mature seaweed

and the completely re-avoid harvesting the area for an extended period, until the plants can recover to pre-harvest architecture.

That approach would undoubtedly have a massive impact on the ecosystem and is not the approach we advocate.

Concerns with this part of the annotation were raised by a number of the scientists consulted for the process with many of them pointing out that this wording will basically disqualify us with our own based products from use in organic agriculture.

The suggestion bycatch must be monitored and prevented is also problematic. There is no way to completely prevent bycatch in a commercial harvest of a coastal marine algae, there should instead be an assessment of the radar bycatch as compared with the abundance and natural mortality of the species, and if warranted, a sublimated approach.

To conclude, a proposed annotation contains many ambiguous sections and Acadian

cannot support this. The potential for misguided use in the future may lead to problems with currently regulated harvesting activities that have proven to be scientifically sound for years.

As such, we recommend the recommendation to be rejected and sent back to the Committee for further study. Thank you very much.

MR. ELA: Thank you, David. Are there questions? It looks like Emily has one.

MS. OAKLEY: Sorry, thank you. And apologies to my fellow Board Members for having a lot of questions. This is just a group of folks I definitely would like to get more feedback from, so thanks for bearing with me.

In terms of the harvest timing wording, I think that I just want to underscore that the word that is in there that says approaches the biomass and architecture was intentional to not be too prescriptive because, you're right, this is certainly open to interpretation, which is why the proposal calls for a scientific taskforce to help do species specific guidance and rules.

But I just want to also say that I think that the issue of someone coming in and clear cutting in the area that you gave would be precluded by other measures within the harvest parameters. But I do really appreciate the time that Dr. Ugarte gave and really respect his feedback.

And definitely you tried to incorporate, and did incorporate, some of his specific wording. And thank you for your participation in this process.

MR. HILTZ: Thanks, Emily. And again, I agree somewhat with your first comment. It's the interpretation part of it that would leave this open to someone who has an alternative motive for using this exact annotation to say, you're harvesting system does not apply.

Acadian going in the way we harvest, we don't cut every plant. We cut only a few plants in a given area and then go back to that same area year-after-year.

But if someone said, oh, well, you harvested that area in the previous year, you can't

go back there, that would then prevent us from going in and harvesting the way we do. So, it does pose problems.

And depending on how the annotation would be interpreted by those times you use it, in whatever way.

MS. OAKLEY: But just to follow-up, I mean, the interpretation would be, certainly by the harvester, but then also, if someone were to choose to get certified organic and follow this process through the organic certification, it would be through the certifier.

So I think, this is very much internal to the organic production system annotation. Not something intended for other users to apply. If that makes sense.

MR. HILTZ: Thank you.

MR. ELA: All right, thank you very much, David. We are going to move on to Shep Erhart, followed by Bill Wolf and then Severine Fleming. Please go ahead, Shep.

Do we have Shep, Michelle?

MS. ARSENAULT: Shep is on the line. I just ask you to unmute.

MR. ERHART: Can you hear me now?

MR. ELA: We can hear you, Shep. Please go ahead.

MR. ERHART: Oh good. All right. I was muted.

Good afternoon. And thank you for taking the time to listen to our comments on this important topic.

My name is Shep Erhart. My wife and I founded Maine Coast Sea Vegetables in 1971 to feed ourselves and a few friends and some local seaweeds. Now this thriving company is run by our daughter and owned by its 22 employees.

Since helping to develop organic standards for wild crafted seaweeds in 1993, I've worked with dozens of harvesters along the Maine Coast and Bay of Fundy to introduce them to sustainable harvesting and handling through the organic certification process.

As you have seen, my written comments

highlight specific questions some of these harvesters have raised over implementing each of the annotations in this proposal. So I won't elaborate.

But please take into account that the harvesters I've talked to, as well as those submitting comments, are certain the annotations, as written, cannot be met.

Consequently, I believe many of them will divert their harvest to the non-organic market. And this will have an adverse impact on the supply of marine algae for many organic inputs. Which, in turn, will disrupt the organic farmers who use these inputs.

So while the harvest of seaweeds from the organic market is relatively small, the potential impact of these annotations on the harvest, and those downstream, is big.

Of course, my knowledge is based primarily on my experience in this bioregion, but I questioned whether you have enough information to fully understand what consequences these

annotations will have in other bioregions of the world.

I appreciate the NOSB's concern about the state of marine algae harvest worldwide. We, in the industry, are also concerned, and aware, of the increasing global demand, the inconsistencies and harvest protocols and local regulations, please the added stressors of climate change.

And yes, there is work to be done that these annotations point towards. Such as setting aside research areas, developing universal biomass assessment standards, broadening understanding of seaweeds ecological services and refined methods for minimizing bycatch.

But in my opinion, the current annotations will not further this work and are premature. I would ask the Committee, table this proposal and consider establishing a seaweed taskforce to more carefully assess the complex information needed to develop a guidance document that applies to multiple species in multiple

bioregions. Thank you for your time.

MR. ELA: Well done on your time, Shep.

(Laughter.)

MR. ELA: Emily has a question for you.

MS. OAKLEY: That was good timing. Thank you for your comments. I just wanted to answer the question regarding whether or not the NOSB is prepared to address other regions of the world and other species.

I think it's an excellent point, but just wanted to help you understand that some of the scientists, all of the scientists that were contacted and replied, come from a broad range of both geographic regions and species of studies.

So we understand that this is a very broad annotation that is trying to cover, you know, several dozen different species that are harvested globally for organic crop inputs, but try to craft it inasmuch as a general way as possible to be applicable to the different species and geographic regions, got input from scientists working on different species in different geographic regions,

and agree that what's needed next is a task force that would elucidate and specify species- and region- specific guidelines probably starting with maybe the most highly harvested and used macro algae species first and then kind of triaging and working the way down through time.

So I just wanted to provide that information. Thank you.

MR. ERHART: Thank you. And were there any harvesters consulted on, you know, a larger scale or worldwide scale or just scientists?

MS. OAKLEY: Yes. So the harvester who was part of the scientific panel in the fall 2019 was consulted and involved in the process up until the end.

I will say that, as I mentioned earlier when we were discussing with Joe that, you know, we did invite the OTA task force to provide comment earlier, but I also will acknowledge that I think that the first basis of this annotation is to make sure that it is scientifically sound and that is why we worked initially with the scientist and also

Dr. Ugarte who works with one of the largest harvesters of Ascophyllum Nodosum Acadian Seaplants and has obviously published many papers on this.

As to other international harvesters, you know, they have not been tremendously vocal in this process or made themselves known even though OMRI did actually put something a couple of years ago in their newsletter letting folks know about this process and inviting feedback, but it has been difficult to get international feedback on this topic to date but we certainly have tried.

MR. ERHART: Thank you. And if it does go forward in any form I really encourage you to include the harvesters in the conversation.

They often don't want to show up, but they are very important because they are the ones who actually and have to live with these annotations.

MS. OAKLEY: Absolutely. As an organic farmer myself I fully appreciate and understand that dynamic and I think the scientific

task force would absolutely have to include scientists from the industry.

MR. ELA: Thank you very much, Shep. We appreciate your insight. We are going to move on to Bill Wolf, then Severine Fleming, followed by Lucie Zillinger.

Bill I know is a consultant, but could you also introduce who you might be representing at this point. So go ahead, Bill. Bill, we are not hearing you. Can we have --

MR. WOLF: Can you hear me now?

MR. ELA: There we go.

MR. WOLF: Okay.

MR. ELA: We can, Bill. Go ahead.

MR. WOLF: Great. I am Bill Wolf, President of Wolf & Associates and founder of Thorvin. I would like you to please review the many written comments that we have already submitted on other topics.

Today I will discuss marine macroalgae. We are representing both my firm and the clients who are on this call.

I have dedicated my life to improving the health of our planet, next slide, please, and especially protecting seaweeds, which make up over 60 percent of the earth's biomass.

My organic farming career began, like Shep, with harvesting seaweed but as a fertilizer in 1971. This earthworm on your screen has been acting as an NOSB mascot as earthworms are biomonitors to measure best farming practices and they, too, love seaweed.

Next slide. I thank all of you for the time and thought put into the macroalgae recommendations, but this is not a middle ground that is ready for a vote.

Twenty former NOSB members asked that you not vote at this meeting. They have seen what happens when NOSB makes recommendations that need more work.

NOP has difficulty or just can't implement them and they go into regulatory purgatory. You have from certifiers who have questions about wording and are unsure about

verification.

They report that as a non-organic input they will only rely on affidavits. You have heard from scientists who have concerns about interpreting and implementing the annotations, problems with wordings, science, scopes, species, and regions.

Even supporters agree that there is a need for more work, calling for guidance and more input from scientists. Even some strong supporters think that this proposal will require onsite verification, which is not the case.

This is the first time that this complex proposal is being seen by the public and most stakeholders do not consider it to be a middle ground.

Proposals to add a substance to the National List need to provide the data required in NOP 3011, but this recommendation does not do so.

Perhaps most important, there has not been a public review of the bigger issues this

raises, establishing the procedure for oversight of the impacts of all inputs.

No public comment opposed sustainable harvests, but you have many comments that this proposal won't accomplish that objective.

Next slide, please. Please consider two better options to accomplish our mutual goal, either require third party oversight which public comments have suggested or develop guidance about harvesting.

For all of these reasons we ask that this proposal be returned for further review.

MR. ELA: Well done on time as well, Bill. Emily had a question.

MS. OAKLEY: Thank you, Bill, for your comments. I wanted to just ask if you -- You mentioned that you were here representing your firm and the clients on the call. I was wondering if you could tell us which clients on the call you are here representing.

MR. WOLF: Thorvin, Acadian, Ocean Organics. I also will comment that we have about

30 other clients listed on our website who are interested in this topic and are not seaweed harvesters but are very concerned about this approach to the regulatory process and would be harmed by inputs, losing inputs.

We work with several farming groups, farmers, and processors. And, again, you can go to our website for a list of some of the clients. I hope that helps answer your question.

MS. OAKLEY: Yes. Thank you.

MR. ELA: Sue has a question.

MS. BAIRD: Guess what, I did it the first time. I read your comments and I would like for you to elaborate a little bit on the concerns you have with the process itself, specifically you talked about listing the new substance our submission outlined.

It's expressed as the outline of parameters for the Board to follow and you are saying that this proposal does not meet those requirements. Could you comment on that, please?

MR. WOLF: Yes, I would be happy to.

Thank you, Sue, for asking about it. The challenge here is that new lists -- There are two areas of concern about the proposal regarding placing a listing on 602.

The first concern is that nowhere in the Organic Foods Production Act or the regulatory framework for outlining the National List is there an indication that 602 should be used to prohibit inputs except for the purpose of inputs that could do harm to the agricultural production system.

So that's a big concern, that we are opening a door to a process that has not been publicly vetted or discussed but instead was presented as part of a macroalgae proposal.

In the implication in the way the proposal was written it didn't call out specifically that it is a petition to add a new listing to the National List, but rather stating that seaweed in general will be prohibited on 602 as a prohibited substance similar to arsenic or nicotine or other poisons as though it itself is harmful to organic farming but could be allowed

if these specific annotations, which we do not believe are actually workable, could be complied with. So that's problem number one.

Problem number two is that there is a process for petitioning substances. My firm has worked with the NOSB to draft petitions to add and remove materials from the National List and there is guidance issued by NOP and normally a petition is submitted and carefully reviewed to determine if it contains all of the qualifying components for informing the Board and the public as to why the materials should be added or removed.

For example, one of those requirements is that if something is going to be prohibited the alternatives that would be available if something is prohibited needs to be disclosed and stated.

So this process in this proposal does not contain the information that the Board or the public can assess in the same way that they might review and are required to have information about adding something to the National List.

Finally, I reviewed the NOSB's policy

manual and procedures manual. I don't see where it states that the Board unilaterally can add something to the National List. It just isn't there. It doesn't say that they can modify.

They can respond to petitions, they can remove annotations, they can add substances that have been petitioned, but there is nothing in the policy manual that allows for this.

I think that the Board needs to take a look at the process. Now I do want to say that I do appreciate the thoroughness and the five years of discussion involving seaweeds.

I am a strong proponent for creating clear guidance. I was a strong proponent for the NOP issuing guidance around harvesting of seaweed, around clarification that seaweed is allowed to be harvested and certified, further clarification by NOP regarding whether that it is required to be certified organic for livestock.

I was also an active participant and supporter of the NOP guidance about 3 percent nitrogen because all of those became very effective

and manageable tools that could succeed, you know, at accomplishing the mission of continuous improvement in the organic standards.

MR. ELA: Hey, Bill, I'm going to jump in here --

(Simultaneous speaking.)

MR. WOLF: Sure. But I --

MR. ELA: -- because we're starting to run significantly behind time.

MR. WOLF: Just briefly, that's why I believe that guidance is the appropriate path and it's possible to use both of those suggestions together that were on the screen a moment ago. Thank you.

MR. ELA: Thank you, Bill, for your input. We always appreciate your thoughts. We are going to move on next to Severine Fleming, followed by Lucie Zillinger, and then Jason Ellsworth.

Michelle, I know you said that Severine had some issues going on that might it be a little bit later or --

(Simultaneous speaking.)

MS. FLEMING: I'm here.

MR. ELA: Okay, great. Go ahead.

MS. FLEMING: Hello. My name is Severine Fleming and I thank so many of the people here and especially the elders who created the seaweed sector.

I farm in Maine on Cobscook Bay in Washington County. I am a MOFGA certified operation producing wild blueberries and other products, including edible seaweeds.

I moved there for the seaweed, but I am coming because I am 15 years an organizer in the Younger Farmers Movement, passionate about recruiting more young people into this work.

I am a co-founder of the National Young Farmers Coalition, co-founder and board president of Agrarian Trust, and current director of the Greenhorns.

Organic agriculture as we all know is a reform movement about restoring balance, an ecological approach to farming, understanding that

agriculture occurs within a context, a carbon cycle, a water cycle, a nitrogen cycle.

As you may know the Passamaquoddy Tribe has banned the taking of rockweed from their shores. It is this ecological context that I refer to and in the holism that is attracting young people into organic agriculture.

As we consider this age of climate consequence we must understand that there will be an increase in demand for the organic inputs and the organic products that we are here to produce.

Maine is successful in recruiting a high number. It's the highest per capita new farmer entrance in the United States. We have a vital regional food economy and amazing prospects for succession in following the footsteps of our organic leaders and elders.

I have witnessed from my foreshore at the foot of my farm from the beach where I collect seaweed for fertilizer the mining of rockweed by irresponsible harvesters in blue Acadia boats.

I really affirm in my testimony now the

need for a task force and a greater level of oversight and stewardship for this wild resource which is of global marine significance.

We have whales, porpoises, herring, shorebirds, migratory birds. We have an incredible wild seaweed ecology and an incredible wild marine ecology in this area that we really need to protect.

I urge the committee to pursue this task force and also to recognize that we have waterways, harbors, and river mouths that are nitrogen laden as we have tremendous nitrogen pollution on land could farm seaweeds be used as a fertilizer as an alternative to mining our last wild places.

Because we care so passionately about this issue we created a 10-minute film and a website about seaweed. It's called www.seaweedcommons.org. I have a small amount of time left.

There was a recent blockbuster movie on Netflix released called "Kiss the Ground" which promotes the expansion of restoration agriculture

and, indeed, also promotes eco-fertilizers in the abstract.

As we look at the fair wild standards and other practices of countries that have a higher ecological standard we must be sure not to allow for speculation and expansion beyond conservation goals that we all hold in common. Thank you so much.

MR. ELA: Thank you. It looks like Dave has a question for you.

MR. MORTENSEN: Severine, on complex issues the Board and the NOP don't have the best track record for turnaround time.

What do you think the risks are of us resolving this in let's say ten or 15 years from now as opposed to taking some action, imperfect as it is, now or waiting for what realistically is probably another ten years of back and forth and that kind of thing?

Could you give us a sense for the urgency of need?

MS. FLEMING: Well, what I watch from

my farm is boats coming and taking millions of pounds of wild biomass and what I watch is disrespectful and aggressive guys in boats taking despite, you know, despite the lawsuit that was done and, you know, will we stop before it's too late or will we notice that we are going in a direction that is imperiling the rest of the marine ecosystem and we will take time to consider and prevent that harm.

I think I am a young person and I want to be using seaweed as a fertilizer on my farm for a long time and I recognize the value of seaweed as a food, but, you know, as a condiment it is valuable as a source of minerals to dairy cows, as a foliar spray for citrus.

Those are values that we also want to sustain into the future. We destroy and degrade we won't have that opportunity, so let's take care in advance.

You could say that the Canadians have gone too far too fast, and that's been well documented in the world of marine science.

MR. MORTENSEN: Thank you.

MR. ELA: Thank you, Severine. Emily, did you have a question?

MS. OAKLEY: I did lower my hand, but I was going to ask, Severine, with your work with young farmers do you have a sense of how young farmers feel in regard to the sources of inputs that they use?

I know that's a very general statement and you can't possibly give a pulse on all young farmers because it's a very diverse group, but you are speaking, as you said, on behalf or as someone who has worked with young farmers so I thought I would just see if you had any sense of that.

MR. ELA: And, Severine, can you keep your response fairly concise?

MS. FLEMING: Sure. Well, there is young farmers and there is young farmers of the sea and I think that there are increasing numbers of young people interested in farming seaweed and having that farm seaweed as a part of the organic market as well and you could make a very strong

argument that you won't be able to do remediation aquaculture and sell it competitively with wild mined seaweed.

As far as consumers, you know, and young farmers who are wanting to stand up and say, this product was grown ethically it doesn't look good if it's being grown from something being taken from the last habitat of the right whales, you know, from these very important fattening grounds.

And consumers do care. Consumers do care.

MR. ELA: Severine, thank you so much for your insights. It's great to hear from young farmers.

MS. FLEMING: Thank you kindly.

MR. ELA: We are going to move on. Yes, take care. We are going to move on to Lucie Zillinger and then Jason Ellsworth and then Angela Wartes. Go ahead, Lucie.

MS. ZILLINGER: Good afternoon, everyone.

MR. ELA: Go ahead.

MS. ARSENAULT: Steve, I'm sorry. I accidentally muted you while you were talking, Lucie. Sorry. You should be unmuted now.

MS. ZILLINGER: Okay. Can you hear me?

MS. ARSENAULT: I got you now. Thanks.

MS. ZILLINGER: Thank you. Yes, I am Lucie Zillinger, petition writer on behalf of Legnochem for the addition of sodium carbonate lignin, also known as sodium lignin, to the National List with lignin sulfonates as a dust suppressant. I am also a certified organic farmer.

Legnochem has been supplying lignin sulfonates and sodium lignin to conventional and organic markets in the U.S. and Canada for 30 years.

Both our petition and the NOSB technical report have established that sodium lignin met all the criteria for allowing a synthetic material and is fully compatible with a system of sustainable organic agriculture.

The technical report even went so far as to state that "Its use as petitioned is ecologically beneficial." I would like to address the crops subcommittee point of view that there is no need to add another lignin to the National List because there are already lignin alternatives available for use.

In our written comments we have detailed how the lack of supply and practical availability of allowed lignin are severely limiting manufacturers from providing soil amendment products for organic producers.

Organic demand for approved lignin binders has been increasing with the growth of the organic sector while overall supply has shrunk to 20 percent of what it once was.

Many mills have closed due to lack of demand for their fiber, others are burning it to produce electricity, or they have re-purposed it into higher value additive products for industry.

Supply is further exasperated because the conventional market competes directly with the

organic market for these lignin binders.

In 2019 the Canadian Organic Regime voted to add sodium lignin to their list of permitted substances along with lignin sulfonates based on a petition put forward by Ecocert due to the supply issues identified here and demand from organic producers.

We note that Canada saw the same criteria as the NOSB crop subcommittee and made the determination that it was necessary for organic agriculture.

This petition is wholly driven by the needs expressed by manufacturers and vendors responding to demand for organic product. Several letters have been submitted to the NOP in support of our petition.

We feel this is only a small sampling of what this could be as we generated these in a 3-week turnaround before the comment period closed.

The letters clearly state that their ability to supply organic product is currently

limited or totally prohibited by the lack of available lignin and they are not able to meet demand from their organic customers.

It's also interesting to note -- Sorry about that. It's also interesting to note that written support for re-listing lignin sulfonates is further evidence of the need for lignin binders in the organic sector.

We regret not focusing on the supply shortage in the original petition as it was the impetus for our case. But it is our hope that now the NOSB recognizes the very real necessity for adding sodium lignin to the National List.

Thank you for your time and consideration.

MR. ELA: We have a question from Rick. Go ahead, Rick.

MR. GREENWOOD: Question for you, why is there more sodium carbonate lignin available than lignin sulfonate?

If you talk about a supply issue, I saw probably 25 supporting comments for the lignin

sulfonate and only a handful for the carbonate.

So I was just wondering is it the process that is different that would allow you to make more of the carbonate lignin?

MS. ZILLINGER: No. At this stage sodium lignin is considered a semi-pulping process and there are just not as many available mills that fabricate this in North America or the world.

And so I think what is happening is we would just be adding two more mills to the inventory to make it available to organic farmers that are not available now in a very constrained market. Did that answer your question?

MR. ELA: Great. Yes, I think it does. All right. Thank you very much, Lucie.

MS. ZILLINGER: Thank you for your kindness.

MR. ELA: We are going to move on to -- Yes, thank you. We are going to move on to Jason Ellsworth, Angela Wartes, and Sam Welsch.

After Sam we will take a break. We are running a little bit behind here, so I apologize

for the late break, but hopefully we'll be able to catch up some of this time.

So, Jason, please go ahead.

MR. ELLSWORTH: Thank you. Good afternoon. I am Jason Ellsworth from the Wilbur-Ellis Company.

I believe one of the guiding principles of organic agriculture is the consideration of our actions with respect to the whole system, our farm, the community, and the world.

We can't look at one product under a microscope and not consider its origination and value to the whole system.

Ammonia from animal and livestock operations is lost to the environment through handling, transportation, and application thereby contributing to environmental challenges that are well documented.

Processes to capture this nutrient for use as a fertilizer enabled growers to better manage the soil health and vitality of their crops and limits nutrient loss to the environment.

For these brief comments I will give three examples of many that are out there of how these products are important for organic crop production.

One. These products enable growers to use high C to N ratio products that would be of benefit to the soil by increasing carbon but limit availability of nitrogen to the crop in the short term.

Two. Growers who are limited on rates for manure applications due to high soil test P levels now have an option to supplement the manure or compost they have previously applied with these nitrogen only products.

Three. In areas of the country where efforts are being made to limit nitrogen in the groundwater these products enable a grower to apply less nitrogen as compost or manure and, thus, minimize risk for excessive mineralization after harvest and supplement with a source of nitrogen that can be used immediately and more timely by the plant.

Please note these ammonia-based products complement, not replace, other sources of nutrients from manures, waste, compost, and green manure needed to build a healthy and productive soil. Building a sustainable and healthy soil is key to successful long-term production.

Finally, I do want to note these ammonia products will go through the organic listing process and all manufacturers will be audited from source material to finished product.

These processes are to eliminate fraud and verify the process to capture this ammonia. I believe that these are acting as they should be and as intended.

I hope the Board sees the value of these products and their fit in the larger organic system. I thank you for your time.

MR. ELA: Thank you very much, Jason. Are there questions?

I am not seeing any questions. We appreciate your comments. We are going to move

on to Angela Wartes and then Sam Welsch and then I think Tim Pitz is maybe not present but we'll check when we get there.

So, Angela, please go ahead.

MS. WARTES-KAHL: Thank you very much. Can you hear me?

MR. ELA: We can hear you.

MS. WARTES-KAHL: Great. Hello. My name is Angela Wartes-Kahl and I am a co-owner of Independent Organic Services based in Alsea, Oregon.

I have participated in most parts of the organic industry as a certified organic farmer, inspector, and I worked for a certifier for several years.

Now I am a consultant for a textile operation seeking the GOTS certification. I am still an inspector member of IOIA.

My oral comments are directed to the compliance accreditation and certification subcommittee regarding the human capital memo from Deputy Administrator Jenny Tucker.

Thank you NOSB members for your long volunteer hours for the betterment of our industry. I would like to highlight the written comments submitted by IOIA on this topic.

"The industry knows what makes a qualified inspector. We even know a lot about how to make a good inspector. What we don't know enough about is how to create an environment which facilitates that to happen at a pace and scale to meet the needs of the sector."

My recommendation for this includes the assistance of the U.S. Department of Labor in creating a structured apprenticeship program for organic inspectors and reviewers.

The Office of Apprenticeship would be my first call. The DOL recognized the first ever national apprenticeship program for management system auditors in the spring of 2019 created by the Independent Association of Accredited Registrars, the IAAR, in partnership with Workcred. A working example exists and we should investigate this option.

We need a predicable standardized process that begins with the training courses and moves through to apprenticeship, not only teaching the application of the NOP rule on site but also the business of inspection work, logistics, travel, efficient report writing, invoicing, managing, insurance, and continuing education are all important parts of this career.

We need to answer these questions to be competitive in the auditing industry. What can the new inspector anticipate in the number of assignments and the projected average annual income, which brings me to the individualized pay scales of certification bodies.

This practice contributes to poor retention in our job market. Inspectors are stepping into the unknown. We need to codify an industry-wide pay scale based on training, experience, and, dare I say, living wage.

There is no need to reinvent the wheel as IOIA outlined in their comments. Plenty of work has been done to identify the problem and offer

solutions for training and retention of inspectors.

Now we need to collaborate, build a framework for an apprenticeship program funded with contributions from organic brands and start accepting applicants all before the NOP lassos uncertified brokers and pulls them into the regulatory scope.

This subcommittee is uniquely positioned to gather all of the players and move us forward at a steady clip. I look forward to hearing the committee's discussion on this topic and encourage a multi-agency approach to address human capital as labor issues. Thank you.

MR. ELA: Thank you very much. Are there questions?

Not seeing any we are going to move on, but we appreciate your thoughts. Thank you so much.

We are going to move on to Sam Welsch and then Tim Pitz and Zea Sonnabend after the break. Sam, go ahead.

MR. WELSCH: Hello. I want to summarize my support or opposition to the following items.

I oppose adding fenbendazole to the use for with poultry to the National List. I oppose adding ammonia to the National List. This substance works against the requirement to obtain fertility primarily from the management of organic matter in the soil.

I support the removal of EPA List for inerts. I support the removal of so-called biodegradable mulch. Such a product does not exist and there is growing concern about environmental contamination from micro- and nanoplastics.

Although I support the development of tools such as paper pots for growers, I oppose the proposed listing. This is a formulated product with multiple synthetic and natural ingredients.

The NOSB policy manual states that formulated products are ineligible for petitions. This is a wise policy because it is much easier

to evaluate, that is for inspectors to evaluate the individual substances than a formulated product.

It is encouraging that the manufacture of paper pots has been successful in developing a product that uses hemp fiber instead of synthetic fibers.

When the standards are clear, appropriately strict, and consistently enforced manufacturers have a stable environment within which they can develop compliant products.

This product was petitioned because of the lack, previous lack, of clarity that resulted in some certifiers allowing paper pots and others not allowing them.

If no one would have approved these non-compliant products the incentive to develop a compliant product within the existing standards may have been successful much sooner.

Because this listing is for a formulated product rather than a substance it will be difficult, if not impossible, for certifiers

to enforce this consistently.

Since one of the purposes of the office is to assure consumers that organically produced products meet a consistent standard this recommendation could take us in the opposite direction.

As most of you know if you know me I am all about consistency. Big threats to consistency include using the standards to justify decisions that have been predetermined rather than looking at the facts and then applying the standards to those facts in a systematic and appropriate manner.

We've got too many decisions made based on what we want as an outcome rather than what is appropriate given the facts and the substance and the situation being reviewed.

MR. ELA: Thank you, Sam. Questions from the Board?

I am not seeing any. We always appreciate your perspective. You make us think, Sam. We are going to move on to Tim Pitz if he

is available.

Michelle, it sounded like before you weren't able to find him?

MS. ARSENAULT: Yes, I haven't been able to find Tim. I am not sure he is on the line with us.

MR. ELA: Okay. Well, then I think we'll go ahead and take a short break. If we could just do it for like five minutes since we are running somewhat behind. Let's return at 33 after the hour. Thank you, everybody.

(Whereupon, the above-entitled matter went off the record at 12:28 p.m. and resumed at 12:33 p.m.)

MR. ELA: We will go ahead and get started again so that we attempt to stay somewhat on time here. It would be nice to get through some of the people on the wait list as well.

So we are going to jump in with Zea Sonnabend, Bob Durst, and then David Moore.

Michelle, are you ready again?

MS. ARSENAULT: I'm all ready. I'm

going to ask Zea to unmute herself.

MR. ELA: Yes. All right. We're putting the pressure on you, Michelle. But thank you, to Jared and Devon as well.

So Zea, go ahead.

MS. SONNABEND: Okay. Well, I'm Zea Sonnabend. I am a former NOSB member from 2012 to 2017, former member of the Inerts Working Group, the lead author of the 2015 NOSB Recommendations for the EPA List for Inerts. I'm addressing the comments as a private citizen and an organic farmer with no group affiliation, but a career of experience on this subject.

I have grave concerns about allowing inerts to sunset without something in place to substitute for it. I understand more than anyone the frustration in how long it's taken to work through this, since I've been working pretty much my whole career on this. And since Laura didn't directly answer this question earlier, I will just say that the organic community as a whole has always believed that full disclosure of the inert

ingredients should be achieved. However, recognizing that that's not really as achievable for us organic farmers as a group, we're trying to do our whole set up for dealing with these substances is what we have been trying to do instead.

When we passed the language for inerts in 2015, we had been working with EPA Safer Choice for about a year. It is enough to get an agreement to work together, but very large percentages of the details were not worked out, how it would be paid for, how a decision making would work, who would do the actual work and things like that.

We anticipated it would take most of those five years of the sunset process to achieve the program and I think some commenters misunderstood because it wasn't just to using the SCIL list, it would be to create a new section of the list that would be specifically for these pesticide-use products that were reviewed.

I don't know why you think that something that couldn't be done in five years is

suddenly going to be done by 2022. And by taking off inerts without a plan in place, you're pulling the rug out of some organic farmers.

The 365 materials that OMRI indicated, there's no programs that even address the 153 that would be on the SCIL list and would therefore be okay. And then 2012 are not yet on the SCIL list, but the new program would be designed to review them and put some of them on a list and leave others off.

So it is very wrong to assume that 212 materials are not compatible with organic agriculture without taking a closer look at them. Some of them are. Some of them aren't. There has been no financial incentive for anyone to have the ones that are reviewed.

The sunset process is supposed to rely on new information to take anything off the list that is not necessary or has concerns about the criteria in OFPA, yet you're proposing to remove 2012 or maybe 365 materials without any evidence through sunset. I sympathize --

MR. ELA: Thank you.

MS. SONNABEND: What?

MR. ELA: I'm going to cut you off. Your time is up.

MS. SONNABEND: This is my last sentence.

MR. ELA: Asa has got a question for you.

MS. SONNABEND: Okay.

MR. ELA: Go ahead, Asa.

MR. BRADMAN: I have a couple of questions. One, I wanted to -- can you please say what you were going to say?

MS. SONNABEND: Well, just that I sympathize with you that something needs to be done about inerts, and I've put several suggestions in my written comments which I don't have time to necessarily say here. But it's the system that's broken and you should not be taking it out on farmers.

MR. BRADMAN: You said that taking things off the list is supposed to be based on new

information, but I mean the way these materials are on the list, not because they were evaluated, there's kind of a generic reference to a list by EPA by standards that would not really be upheld today.

And you know, we have a quandary where there's materials that are at least in my mind some that really just inappropriate. And it's been five years and nothing has happened. So we have a broken system.

I guess my question is here, do we throw it out or do we find some way to fix it? And it just seems strange to me that we're referencing a list that's explicitly not maintained by EPA. And therefore, the list itself isn't valid.

MS. SONNABEND: Nonetheless, the list is in the federal law for organics, the reference to the list. So those things are on the national list. So throwing them out, it puts the vast majority of organic farmers at a disadvantage or even out of business because almost anyone in perennial crops uses things that have things that

wouldn't automatically transfer over. That doesn't mean all those things are NPEs. Hundreds of them you probably have no idea because you don't know -- how they're characterized. It's all kept confidential. But they might be okay. They might not be okay. They all are on the list and so you'd be throwing them off the list.

You have to try something different. I mean I appreciate that the solution at hand is hard, too, but what you're doing sounds very much like what our government is doing with the Affordable Care Act to tell you the truth. No plan in place and just let's pause it so we can have something better.

MR. ELA: All right, well, thank you, Zea. We always appreciate your thoughts, especially the former board member.

We are going to move on to Bob Durst and then David Moore and them Ramzi Sulieman.

Bob, please go ahead.

MR. DURST: Thank you much. I'm Bob Durst with Simple Organic Solutions, a consulting

company, and I'm representing Ingredion and other clients. And I want to address three issues on today's comments.

First, don't sunset what may be cornstarch. Second, I'll comment on ion exchange, and third, don't remove references to EPA List 4.

On native cornstarch, it's up for sunset vote in the upcoming meeting. And contrary to what one might think, sunsetting this material will have an adverse effect on organic cornstarch production. One would normally expect removal of a non-organic material to incentivize the production of an equivalent organic product, but in this case it will have an adverse effect on the production of that organic product.

Currently, native cornstarch is used in the production of organic cornstarch as the intermediate material to flush the equipment when switching from conventional to organic product, thus preventing commingling of organic with conventional product.

Flushing between conventional and

organic production is a common practice in many dry organic production systems where a full wet cleaning in impractical. If this flushed material has to be switched to organic starch, the cost of production becomes prohibitive and counter intuitively, the production of organic cornstarch would be threatened.

There would also be concerns about the loss of different functional forms of native cornstarch because it's not just a single material which are not currently available in organic form.

Moving to ion exchange. The recent TR on the ion exchange process and materials has recommended that the ion exchange resins do not need to be petitioned continued use in organic production. We agree with this assessment. The TR also recommended that the recharged materials, specifically, strong acids and bases must be included on the national list. These materials are necessary for cleaning the resins and returning them to their original status. These recharged materials have been widely used and are currently

allowed with appropriate steps to prevent contamination of the organic products. Much is intermediate steps, water rinsing, for instance, are used after cleaning and sanitizing operations.

Currently, strong bases are listed under 605(b), but no strong acids are available for this cleaning step. We don't disagree with the possibility that strong acids be added to the national list with an appropriate annotation, but they are to be used only for recharge of ion exchange materials. But the issue is with the length of this petition process, who will submit this petition to the NOP, and what will happen while this proposed petition works its way through the system.

We would ask that no changes to the current practices be implemented until such time as this proposed petition has had time to be submitted, reviewed, TR generated, and NOSB has a change to rule on it.

Finally, EPA List 4. Much as I loathe the EPA List 4 regulations because of materials

which are still not allowed (audio interference) after being approved, just at the end of life of the list and thus never published in the Federal Register, please don't change the current EPA List 4 status until there is an alternative. Safer Chemical List is not a suitable substitute for pesticide inerts. Thank you.

MR. ELA: Are there questions for Bob? Bob, I have a question. My understanding was that the status quo on ion exchange was that the understanding was that all recharged materials do need to appear on the national list or be naturally derived, where the question was really about whether the resins need to be on the list.

So I'm curious about your comment that there are no strong acids on the list. What's being used to have those resins being recharged and still complying with guidance?

MR. DURST: Well, at the current time, they're often being recharged with strong acids, typically, HCL. And the methods that have been worked out by people that are using it are to follow

that with an approved material like citric acid which is not strong enough in and of itself to recharge the resins that have been deemed acceptable by the certifiers as an intermediate step. But it's really not -- it's really not as practical as it should be in the recharge of those resins.

MR. ELA: Thank you. I don't see any other questions, so we appreciate your comments.

MR. DURST: Thank you.

MR. ELA: We are going to move on to David Moore, followed by Ramzi Sulieman, and then Marie Burcham.

Please go ahead, David.

MR. MOORE: Thank you. Good afternoon. I'm David Moore. I'm a California licensed agricultural pest control advisor and qualified applicator and I work for Neudorff.

A vote to delist List 4 inert ingredients is not supported by any finding of fact. List 4 inert ingredients meet the criteria for the national list and no new information has

been presented to justify removal. Absent facts to show cause for removal, a vote to remove without an appropriate transition is arbitrary and capricious. A vote to delist is also extremely poor public policy. It will damage the livelihood of many organic farmers and producers and it will cause years of disruption to the organic industry. These harms are not imaginary. They are detailed exhaustively in written comments.

A vote to delist is directly contrary to the best interests of the organic community as a whole, which is your constituency. Form letter submissions by an advocacy group are not representative.

Organic farmers oppose this vote. Organic apple growers comprising 23 percent of U.S. organic applies, as well as their industry and research associations, oppose this vote.

Jacob's Farm Del Cabo opposes this vote. Del Cabo sources from 1100 organic farming families across northern Mexico.

Driscoll's opposes this vote. Berries

are the second largest category of fresh organic produce at $550 million in 2017.

Organic dairy opposes this vote. Western Organic Dairy Producers Alliance represents 285 organic dairy families including Straus Family Creamery, the OG of organize dairy.

Other organic businesses oppose this vote. Organic Produce Wholesalers Coalition, with $376 million of organic sales in 2019, opposes this vote.

CROPP Cooperative with 2,000 organic member growers and over $1 billion in organic sales in 2019 opposes this vote.

And OTA, representing almost 10,000 organic businesses, in a U.S. market of $55 billion opposes this vote.

Accredited Certifiers oppose this vote. CCOF, MOSA, and QCS representing 6,000 certified organic businesses oppose this vote. And the Association of ACAs, representing 64 ACAs globally opposes this vote.

OMRI opposes this vote as they are the

Who's Who of the organic establishment as many companies including Neudorff that are long-term suppliers to organic farmers oppose this vote.

A vote to delist for inert ingredients is directly contrary to the best interests of the whole of the organic community which is your constituency. Please vote accordingly. Thank you.

MR. ELA: Thank you very much, David. Are there questions? I have a question seeing no others. I get the long list of people opposing the vote. What is the -- has anybody proposed a viable alternative for removing List 4s?

MR. MOORE: Well, I think the petition process is appropriate for removing problematic materials until an appropriate solution is worked out. I have followed this personally for almost ten years now. I'm very familiar with the processes of working through government regulations. As Miles once said, it's a giant python. I would imagine it would have taken ten years or more to come up with a proper solution.

If there are problematic inerts in use today, the petition process is the appropriate process in the short term.

MR. ELA: But given that this started in 2000 -- well, we've had it much longer than that. This really came to the forefront in 2015, and the Board hasn't seen any petitions. What would be the next steps?

MR. MOORE: I think the status quo is fine.

MR. ELA: Even given that other groups have noted that many of the inerts on the list are not truly inert and some of them may actually violate OFPA rules?

MR. MOORE: They have the right to petition.

MR. ELA: Thank you very much, David. Any other questions from the Board? All right. We appreciate your thoughts.

Next up is Ramzi Sulieman, followed by Marie Burcham, and then Tim Stemwedel.

Please go ahead, Ramzi.

MR. SULIEMAN: Can you hear me?

MR. ELA: Yes, we can hear you, go ahead.

MR. SULIEMAN: My name is Ramzi Sulieman. I am the Chief Operating Officer at True Organic Products. Thank you for this opportunity to comment on the use of liquid fish as a fertilizer in organic cropping systems.

True Organic Products is deeply committed to the environmental stewardship and fully supports the objective of assuring marine ecosystems are well protected. My focus, actually, is on manufacturing operations and ingredient procurement. Too many factors of liquid fertilizer that utilizes fish solubles are waste products from production of fish meal and fish oil, the majority of which are sold for animal feed.

These solubles are a proven tool in organic fertility programs and have been allowed and successfully used for many years. This protein encourages soil health by permitting

microbial activity in the soil where the material is mineralized.

Use of our products of fish meal and fish oils is ideal and that has always been allowed for use in organic farming. It is an effective fertilizer. It utilizes a waste stream that otherwise would be disposed directly into the ocean and it contributes to a sustainable food production system.

Fertilizers that use the byproducts of fish meal and fish oil are widely accepted by farmers and comply with NOP and organic regulations worldwide.

As an industry, we have not been able to fully assess the impact of the proposed annotation for liquid fish fertilizer as this is the first time that we have had an opportunity to see or comment on the substantial change in regulations. However, initial review of it and the proposed new definition indicate that it (a) is not a viable enough definition of post-consumer waste is modified to include the use of waste

streams in the manufacturing of animal feeds; and (b) would not be easily or uniformly enforced.

Please reject this proposal as written or modify the proposal so that the annotation and definition include the use of byproducts from the manufacturers of animal feed. Thank you.

MR. ELA: Thank you for your thoughts. Are there questions? I am not seeing any questions, so we appreciate you testifying.

MR. SULIEMAN: Thank you.

MR. ELA: We are going to move on to Marie Burcham, then Tim Stemwedel, and then Helen Kees.

Please go ahead, Marie.

MS. BURCHAM: Can you hear me?

MR. ELA: We can hear you.

MS. BURCHAM: All right. My name is Marie Burcham, and I am an attorney and the policy director for The Cornucopia Institute. The stated purpose of OFPA is to establish uniform standards that will then be used to govern the marketing of organic products, assure consumers that organic

products meet a consistent standard, and to facilitate commerce in organic food. OFPA requires an organic plan which for crops must include provisions designed to foster soil fertility. The rule mentions that this should be done primarily through the management of organic content of the soil through proper tillage, crop rotation, and manure.

How are large-scale hydroponic operations meeting these requirements, especially when many build on top of bare soil effectively preventing the improvement of natural resources and cycling of nutrients?

In addition, it is entirely unclear how hydroponic operations can meet any of the other numerous baseline requirements of both OFPA and the regulations. If the requirements for soil written into law do not apply to these systems, then what does apply to these operations?

OFPA's purpose is not being fulfilled. Organic crops do not meet a consistent standard as long as hydroponic operations are allowed under

the label. The NOSB has never voted to allow hydroponic and aquaponic production.

To continue to allow certification before the NOSB has fully reviewed these systems and made recommendations to the NOP goes against OFPA's foundational principles.

Let's be clear, Cornucopia does not think that hydroponics is compatible with organic law. However, if the NOSB deems certain hydroponic systems appropriate for organic certification, those systems would still need -- should still not be permitted unless and until standards are established. Right now, its production and practice is completely untethered what is expected of organic produce. Clarity is needed not only for consumers but for certifiers who are being left to interpret and apply rules in a vacuum.

As already stated, OFPA dictates broad authority to agencies to enact regulations and establish uniform standards. However, in recent years, the USDA has denied that they have the power

to create regulations to this end. This is an incorrect interpretation of the law.

There are several examples of failures to enact rules that fulfill the purpose of OFPA. Foremost in my mind is the withdrawal of the organic livestock and poultry practices rule. Other rulemaking that would ensure that organic products meet consistent standards are the original livestock rulemaking and the badly needed rulemaking on the conservation of native ecosystems.

I ask that the NOP keep up the pressure on the NOP to make those regulations and comprehensive guidelines for protecting the integrity of consistent organic standards under organic labels.

Thank you so much for your time and attention.

MR. ELA: Thank you. Are there questions? I am not seeing any questions. We do appreciate your thoughts.

We are going to move on to Tim

Stemwedel, followed by Helen Kees, and then Melody Morrell.

Tim, please go ahead.

MR. STEMWEDEL: Thank you. Good afternoon. My name is Tim Stemwedel. I'm an agronomist and have been a manufacturer of organic fertilizers since 1990. My company, California Organic Fertilizers, is a stakeholder in the ammonia issue.

First, I'd like to dispel the implied idea that ammonia is bad. Ammonia ion NH3 occurs in nature and is an integral component of amino acids, proteins, enzymes, and chlorophyll. Ammonia is also microbial food and an essential element to the nitrogen cycle.

As a side bar, I'd like to point out that synthetic ammonia is approved by the NOP for the use of humic acid formulation.

Our natural ammonia products have been determined by CDFA to meet the laws and regulations if organic inputs through a two-year vetting process. Our natural ammonia is derived from a

biological process, not a chemical one.

MR. ELA: Tim, could I interrupt real quickly? Could you speak up a little more? You're a little faint on our end.

MR. STEMWEDEL: All right, can you hear me better?

MR. ELA: Much better. Thank you.

MR. STEMWEDEL: Okay. Better? All right, good.

Okay, our natural ammonia is derived from a biological process, not a chemical one. So we've got a -- it's a low nitrogen analysis of 5 percent compared to synthetic ammonia at 20 to 90 percent.

It's usually applied to irrigation and diluted to less than 200 parts per million to supply nitrogen to crops when the nitrogen demand is higher than the soil can supply. It's used because of the carbon and nitrogen ratio of about 3 to 1. This ratio provides over 80 percent plant-available nitrogen after mineralization. This is in contrast to manure that has a carbon

and nitrogen ratio of more over 25 to 1 and a plant-available nitrogen of less than 40 percent.

Organic matter building is essential to organic agriculture, but is conducted between crop-growing cycles because increased soil microbial activity consumes available nitrogen in competition with the crops. This is why in-season fertilizers with lower C-N ratios are more effective.

I believe that there is also a growing sustainability problem in organic agriculture. We need cleaner input products. We need products that don't negatively impact the farm and global environment, and don't incentivize social degradation by association with unfair labor and human trafficking.

Natural ammonia reduces the need for excessive application of nitrogen due to the ability to use precision applications as needed. This lowers the contamination caused by excess phosphorus and run off from manures and nitrate leaching in the ground water. Our technology can

use many different heat spots such as manures, food waste, and animal processing waste. The simplicity of the process and options for heat spots make this scalable in quantity and where it can be made. This lowers transportation costs and imports of raw materials.

Our technology allows for the capture of greenhouse gases such as methane and CO2 and the use of otherwise unusable material to produce clean, natural nitrogen inputs. There's an increasing shortage of nutrient inputs for organic agriculture. We need new products like natural ammonia if we desire to increase production and reduce cost to consumers.

Regarding fraud, there's no basis to support the assumption that natural ammonia is more susceptible to fraud than any other input. Thank you.

MS. ARSENAULT: Steve, if you're talking, you're on mute.

MR. ELA: Can you hear me now?

MS. ARSENAULT: Yes.

MR. ELA: Okay. Thank you, Tim. Looks like there's a question from Nate.

MR. POWELL-PALM: Hi, Tim. Thanks for your testimony. I was wondering -- right at the end there, you said that there's an increasing shortage of nutrients and nutrient options for organic farmers. I was hoping if you could expand on that a little bit.

MR. STEMWEDEL: Well, the need for in-season nutrients continues to expand as it increased the amount of protection that we have in agriculture, but the raw material sources are finite. So there's only -- if we just said okay, we're just going to use the majority of the nutrients now being applied are manure-based materials, well, what happens when we run out of manure? How is organic going to grow beyond that?

And it's the same thing I've seen in my career. I've seen the prices of things like feather meal and even with fish, I've seen it continue to escalate and it's escalating because

the demand that's being driven by organic production.

MR. POWELL-PALM: I'd like to follow up with that. Do you see -- I am in the Midwest and that's where I sort of occupy in the farming states. There's so much more manure than we could ever hope to utilize.

Do you for some reason see a disappearance of that manure source from feed lots, poultry houses, these operations?

MR. STEMWEDEL: Well, some of it's competitive, you know, towards other activities. I don't see it disappearing. I just see if there's -- that if it's going to be consumed, there's not going to be enough of it. I mean if we have a system that was a dependent upon manure, what happens when the manure -- when we run out of sources of manure?

MR. POWELL-PALM: I will dream for that day, but I personally don't see it coming.

MR. STEMWEDEL: I mean we have regulations that we can throw in also. We can take

a look at the pressures against manure, you know, the ground water issues, the run off issues, the high phosphate issues accumulating in the soil. We can't continue down that path.

MR. POWELL-PALM: Thank you.

MR. ELA: It looks like Dave has a question as well for you, Tim.

MR. MORTENSEN: Towards the end there you said we need to increase production and reduce costs. And I didn't hear you mentioning things like cover cropping which if we're thinking about end sources and between and even really cropping within the season, you know, what about the role that legumes play in end provisioning?

MR. STEMWEDEL: Well, that goes back to my statement about managing organic matter between cropping cycles. That's the cover cropping with the compost applications. It's all these things that we currently do now as our farm plans to improve the soil health.

MR. MORTENSEN: Yes, I guess I just was thinking about Nate's question and the role that

things like cover crops coupled with tactical-timed applications that manure play in the demand of the crop. I think the idea of pulsing with ammonia has just been a concern where we're bypassing the cultural practices that build soil health.

MR. STEMWEDEL: Yes. It's just really these products are designed to be used on a precision basis if the supply the amount of nitrogen that the croppings run short of because when you take the release rates that are coming from all the other activities that we do, they're not in sync, they're asynchronous with the demand of the crop.

MR. ELA: I have a question for you, Tim. In the process you used to capture the ammonia bacterial process, I assume, are those naturally occurring bacteria or where are those bacteria derived from?

MR. STEMWEDEL: Yes, they originally came from a local dairy, but once it started up in the digester, they've maintained their health

in the digester and keep reoccurring, so we don't have to re-seed anything. But they originally came from a dairy.

MR. ELA: Thank you. Thank you for your thoughts. We appreciate your testifying.

We are going to move on to Helen Kees, and then Melody Morrell, and then Robert Morse. So Helen, please go ahead.

MS. ARSENAULT: Steve --

MR. ELA: Do we have Helen?

MS. ARSENAULT: She's on the phone with us. I just asked her to unmute her line. Maybe having some difficulties.

Helen, if you are on your phone, you may have to unmute it and hit *6.

I don't think she's unmuted just yet.

MR. ELA: Okay, well, let's go on to Melody Morrell and we'll come to Helen next if we can get that figured out.

So Melody, why don't you go ahead and then we'll come back to Helen.

MS. MORRELL: Okay, can you hear me?

MR. ELA: We can year you.

MS. MORRELL: Excellent. My name is Melody Morrell. I'm a director at The Cornucopia Institute. A stated purpose of the Organic Foods Production Act of 1990 is to assure consumers that organically-produced products meet a consistent and uniform standard. Instead, and to the great frustration of organic consumers, we find industrial organic production and authentic organic production sharing the same field.

Organic dairy production is a case study in the pernicious influence of industrial agriculture combined with a failure of the USDA to protect the integrity of the organic label.

Factory organic dairy have inserted the loopholes into the regulations that allow for continuous transition of conventional animals. They can sell their own organic calves at a premium and buy cheaper conventional yearlings raised on antibiotics and milk replacements. We're all aware of the problem.

As the origin of livestock rule

languishes, the organic dairy market value has acquiesced to artificially low prices resulting in cynical industrial practices. Dairy farmers who work hard to maintain their organic integrity have come before the NOSB and the NOP again and again, asking for a level playing field.

In the absence of a meaningful rule change, industrial dairy itself has now provided an elegant, if repugnant, answer. Aurora Organic Dairy is poised to open an organic heifer factory that will house 7,000 animals on 1900 acres in arid High Plains, Colorado. The heifers will come from Aurora's milking operations at five months of age. They will then become replacement animals on Aurora's dairy operations and presumably some number of them will be sold at premium prices to other dairies. All of this organic livestock production is said to happen in the heart of Dust Bowl country, even as climate change make drought a future certainty.

OFPA reminds us that organic production is managed to respond to site-specific conditions

by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve bio-diversity. The cynical, organic production performed by Aurora and other industrial dairies relies on off-farm inputs, feedlots, and manure lagoons.

The water for this operation will come from the depleted Ogallala Aquifer. The water table has fallen so low in High Plains that rivers have dried up. But this operation is planning to irrigate organic pastures and water 7,000 heifers with the remains of the ancient reservoir.

The grasses in the pasture will likely be annuals that survive only because of this irrigation. There will be no conservation of bio-diversity. There will be no ecological benefit at all. This is not the consistent standard that consumers believe they are digesting when they chew their organic dairy. This is a perversely efficient end run around organics. Thank you.

MR. ELA: Yes, thank you, Melody. Dave has a question for you.

MR. MORTENSEN: Thank you for the comment. Could you briefly speak about the impact of such large dairies on the fate of small and middle-sized family farms that rely on dairy for their livelihood as we sort of wait on this ruling?

MS. MORRELL: Yes, I can say that I hear from small organic dairies with frequency, myself, and my colleagues at Cornucopia. They're being driven out of the industry. It's impossible to get the correct price for dairy in this market. The efficiencies that perhaps we all think are in order is something that we want in agriculture are, in fact, loopholes. That's the issue.

MR. MORTENSEN: Thank you.

MR. ELA: Looks like Nate has a question.

MR. POWELL-PALM: Just a quick comment -- quick question. Do you have any members on -- do you know of any studies that have been conducted showing how many animals the loophole to origin

of livestock represents? How many conventional animals would be prevented from being freshened, and entered into the milking line, as you currently state this problem exists?

MS. MORRELL: I don't in hand. I actually am not familiar with anything done that way, but I can check back and I can actually attempt to answer that question offline.

MR. POWELL-PALM: Thank you.

MS. MORRELL: Thank you.

MR. ELA: That would be great if you get those numbers and send them on to Michelle and she can distribute them to the Board.

We are going to move on and actually I'm going to step back one step to Helen Kees. I see her on the line now. After Helen, we're going to go to Robert Morse, and then Susan Brawley.

Helen, go ahead. We're not hearing you, Helen.

MS. ARSENAULT: Helen, your phone is unmuted, but we're not hearing you. Maybe hit *6 on your phone.

MR. ELA: Maybe we'll keep trying for Helen here and we'll go to Robert Morse and then come back to Helen.

Robert, if you're on, can you please go ahead.

MS. ARSENAULT: Robert is on the line with us. I just lost him I think.

MR. ELA: We'll come back to him as well. How about Susan Brawley?

DR. BRAWLEY: Can you hear me?

MR. ELA: We can hear you, Susan. Thank you. Thanks for being ready on the spot here. Please go ahead.

DR. BRAWLEY: I'm Susan Brawley from School of Marine Sciences at the University of Maine and I appreciate the opportunity to comment on marine macro algae and crop fertility guidelines.

So the part that I'm still concerned about is harvest timing which reads that repeat harvest is prohibited until biomass and architecture of a targeted species approaches the

biomass and architecture of undisturbed natural stands of the targeted species in that area.

And the reason this is a problem is that I have never seen an undisturbed natural stand, of any foundational habitat forming macro algae in either the intertidal zone or the shallow subtidal.

The organisms that exist there have adapted over very long periods of time, in some cases over 100,000 years to frequent disturbance and this both physical in terms of storms and ice scour and also biological. There are some small crustaceans called isopods that, for example, in the ascophyllum that's harvested in much of the North Atlantic, will poke holes in the air bladders and then that weakens the individual so that storms cause even more breakage.

So I believe very strongly in both the efficacy of sustainable harvesting and also the need for no-take areas, marine reserves. And in that case, not only of no-take areas for marine algae, but also no fishing of lobsters or fish or

urchins or anything else.

In other words, going forward, we need sustainable harvesting and we need marine reserves. I'm quite proud of the Maine industry because they established a trade association more than three decades ago in which conservation of the natural resource was one of their driving principles. And in general, I think they've done a good job of it.

So I want to appeal to you to make sure that your wording in these items including bycatch and the harvest areas has a meaning that cannot be interpreted differently by people who are for harvesting and against harvesting because I think that would be a disservice to really everybody and could prevent this very valuable source of material from marine algae from being supplied to terrestrial organic farms. And I'd be happy to answer questions.

MR. ELA: Thank you. It looks like Emily has a question.

MS. OAKLEY: Hi, thank you so much for

your time and effort and expertise and also for your written comments that help clarify this and you wrote in your written comments undisturbed natural stands must be clarified to mean undisturbed by harvesting.

Do you believe that we can make that clarification and satisfy that concern?

DR. BRAWLEY: Not unless you have assigned sectors because it would be too hard for you to know what has been a harvested area. So as I also commented in my comments online, I feel quite sad that the recommendations of our committee that was organized by the Maine Department of Marine Resources in 2014 has a fishery management plan for Rockweed was not instituted because it had both recommendations for post-life sector management and designation of no-harvest areas. If there were such areas, it would allow you to know what has been harvested.

There are some Maine companies, again, because of their conservation -- the driving force of their conservation that actually have records

of where they have harvested going back decades. But that's not universally true, so you know, from your third-party status I'm not sure in practicality that the change I suggest would be in the end achievable. Do you understand what I mean?

MS. OAKLEY: I do. And I also noted that you recommended that the Board read the Maine regulations and I think that's an excellent idea.

I was wondering if you think that the scientific task force that this proposal calls for could look to those recommendations that were made and adopt or adapt some of those specifically for the annotation's implementation.

DR. BRAWLEY: Well, I can only speak for myself. I mean I would be willing to help, but there are several other people who were involved and you would need to contact them. But I think most of them would be willing to do so.

In one case, Raul Ugarte is not so much in North America any more, but ascophyllum is one

of the most abundant macro algae in the North Atlantic. And so he would still have the same perspective in terms of where he's working.

There's a copy of the Fishery Management Plan on the Maine Department of Marine Resources' website. So it's still very available.

MS. OAKLEY: Thank you.

MR. ELA: Thank you, Susan. We appreciate your expertise and graphs.

We are going to circle back to Helen Kees and then Robert Morse.

Helen, can we try again, are you there?

MS. KEES: Good afternoon.

MR. ELA: You are there. Go ahead.

MS. KEES: Good afternoon. In tandem with my family, I own and operate a diversified, certified organic family farm in west central Wisconsin. We are certified in three scopes, livestock, crops, and processing and direct market the bulk of our meats, produce, and forage. We celebrated becoming a century farm in 2019.

Over the last 26 years, we have

diligently worked to meet and exceed the spirit and the letter of Title VII CFR Part 205.

Organic certification provided the gateway to us and thousands of others to use the USDA certified organic seal. AMS was charged with making sure that the seal not be used in a way that would negatively impact the value and integrity of the seal. The seal was reserved as a marketing tool for products that meet or exceed the national organic standards.

I am here today to insist that the integrity and value of the USDA certified organic seal be rehabilitated. And if that requires decertifying multi-million dollar industrial operations, then that's what it requires be it dairy, beef, poultry, eggs, grain or hydro.

Essayist Martin Shaw advised that we lose touch, when we lose touch with our wingspan, we hunch. It is time to stand ramrod straight, regain your wingspan and recommend that rehabilitation of the seal be taken directly by the NOP administrators or that the NOP order their

accredited certifying agents to do the job.

I have served on the Cornucopia Institute Board of Directors since its inception and remain on the Board determined to gain some resolution for farmers that still believe in what the seal legally represents.

Producers and processors who had the foresight to recognize that organic produce and fiber could not be produced simply through avoidance or prohibited inputs, but instead that it must be produced on a foundation of continual improvement of the soil and surrounding ecosystem. We producers have the moral authority to demand that the integrity and value of the seal be restored.

Those that have turned organic production into natural resource mining operations must be informed that they can either come into compliance or be decertified. Importing feed, fertilizers, set, semen, and even soil while failing to positively impact the surrounding ecosystem may produce food and fiber, but it does

not, not produce certified organize food or fiber per Title VII CFR Part 205 that qualifies for the use of USDA certified organic seal.

With hope in my heart and determination in hand, I thank you for your efforts.

MR. ELA: Thank you, Helen. Are there any questions for Helen from the Board?

We appreciate your thoughts. We are going to move on to -- were we able to get back to Robert Morse, Michelle?

MS. ARSENAULT: Yes. Robert is on the line with us.

MR. ELA: All right, we'll go to Robert.

MS. ARSENAULT: Robert, you may have to hit *6 on your phone. I've unmuted you from my side or asked you to unmute from my side. We lost him.

MR. ELA: Okay, maybe we'll go on to Kyle Mathison and then come back to Robert. After Kyle, we'll have Caleb Goossen, and then Leslie Touzeau.

So Kyle, if you are on the line, please go ahead.

MS. ARSENAULT: Steve, I'm not finding Kyle either.

MR. ELA: Okay. Any luck with Robert?

MS. ARSENAULT: Robert, unmute and *6 on your phone? Maybe. He just jumped up the list here. It doesn't look like it's Steve.

MR. ELA: I'll see how much I move along here. Let's go on to Caleb Goossen and then Leslie Touzeau and then Tollef Olson.

Caleb, are you there? Looks like it. Go ahead.

MR. GOOSSEN: Yes, I'm here. I'm Caleb Goossen, the crop specialist for MOFGA which has more than 6,000 members and certifies more than 500 operations.

Regarding paper crop aids, MOFGA and many farmers were very supportive of the original petition for paper chain pots which are largely bio-based and so similar to previous materials that many certifiers have allowed the use for over a

decade. They're valuable for small farmers to reduce labor and reliance on tractors and their associated costs.

However, I fear that this new generalized listing may unintentionally allow for new products with a relatively large percentage of non-bio based material, possibly not yet imagined by the organic community to be automatically allowed with no apparent mechanism to ensure the amount of non-bio based material allowed is reduced in the future.

I do feel that paper chain pots which are almost entirely bio based should be available for the many small organic farmers that have come to rely on them.

Regarding ammonia extracts, fertility substances of high solubility have always had restrictions placed upon their use in organic agriculture and ammonia extracts should be no different if allowed at all.

In addition to fraud potential, allowing the unrestricted use of non-synthetic

ammonia extract would remove a major differentiator of organic agriculture and would strike at the core of organic fertility philosophy.

Like Eric Sideman, MOFGA's crop specialist before me and former NOSB member, I feel that all highly soluble sources of nitrogen fertility should only make up a total of no more than 20 percent of a crop's nitrogen needs at the most for use in specific situations such as cold soils.

Regarding biodegradable mulches, no studies evaluated broader impacts on soil, terrestrial, and water food webs, let alone plant uptake of microplastics or their by-products, their decomposition products.

Allowing biodegradable plastic mulch would mean trading potential accidental release of microplastics from conventional plastic mulches for a larger guaranteed intentional release of micro and nanoplastics as biodegradable mulches decomposing.

In one study, just four years of

repeated biodegradable plastic mulch use resulted in up to 30 percent of mulch fragments to still be visible to the naked eye. While concerning enough on its own, I would also caution against visual confirmation of degradation which cannot tell us anything about the micro and nanoplastics or their overall fate and impacts. I suppose it's better than nothing.

No studies have evaluated long-term impacts of these biodegradable mulches on soil health and adoption of these materials will mean decades of repeated applications. And so I believe there probably will be short and long-term buildup of intermediate and (audio interference) decomposition products in the soil respectively.

MR. ELA: Are there questions? Looks like Dave has one.

MR. MORTENSEN: Caleb, thank you for your comments. Could you give us a bit of a sense for how farmers that you work with would be impacted if the paper chain pot products were not available?

MR. GOOSSEN: My apologies, I muted.

There are several farmers that have told me specifically that they would drop organic certification in favor of using the paper chain pot system that it's that much of a time savings for them in terms of labor needed as well as equipment and the capital investment that that equipment would mean.

Many farmers are trying their best to only use two-wheeled tractors for very light tillage or other small jobs and are trying to avoid larger tractors that would pull up a transplant. So the paper chain pot system helps them to both not use tractors for that, as well as not pay nearly as much in labor costs.

MR. MORTENSEN: Thank you.

MR. ELA: Caleb, I have a question before we move on. You mentioned that the percentage of bio-based material in terms of the paper production needs versus paper pots, we've had feedback from the current manufacturers that that 80 percent bio-based material is the realistic number at this point, that we would hope that it

would go up. But I mean 80 percent is fairly high in some of these other paper products that use as planting needs are fairly high.

Could you just go back to that and say kind of your concerns again?

MR. GOOSSEN: Sure. And I don't know the specifics of the make-up of the paper chain pot company, but I understand it's a larger bio-based content, but so that having been the initial petition that sort of kicked this entire discussion off, and it does seem to be a discussion that needed to happen as paper, as we understand it, is more complicated than it was previously understood or it just changed over the years when it was initially listed in other categories. But then that opening up of that conversation has allowed other manufacturers to start wanting their products and I'm not -- I can't say without a doubt that none of the farmers I work with want those other products, but not many that I've spoken to have ever brought up them. Well, I can't say anyone has ever brought them up to me.

So it seems like it opened up the barn door and suddenly there's a lot of different manufacturers and without knowing the specifics of these other manufacturers and their products, my fear would be that they might be primarily seeking to be able to label something for a home consumer as organic and that's why they're looking for something that will allow their product as well. Again, I don't know that entirely, but that's just my fear.

(Simultaneous speaking.)

MR. GOOSSEN: As opposed to --

(Simultaneous speaking.)

MR. GOOSSEN: -- our small farmers.

MR. ELA: Yes. We did talk to the paper pot folks and I mean it sounds like that could be changing, but they were in that 85 percent range bio-base, even the products that had been used in the past. So we're trying to make sure they were acceptable as well as not just limit our listening to one company.

We appreciate your comments. Thank

you so much. It's always good hear other perspectives.

We are going to go back to -- Michelle, are we having any luck with Robert Morse?

MS. ARSENAULT: Sorry, now I can't unmute myself. He's still on the call with us, but his phone is still muted and I cannot unmute it from my side.

Robert, if you're there, unmute and *6 or *6 and unmute. Not working.

MR. ELA: We'll keep trying. Okay, so let's go on to Leslie Touzeau, Tollef Olson, and then Garth Kahl.

Leslie, please go ahead.

MS. TOUZEAU: Great. Good afternoon. My name is Leslie Touzeau, and I am the Material Review Specialist for Quality Certification Services. QCS currently certifies over 1200 operations globally. Thank you for this opportunity to provide comments and thanks to all for making sure that virtual public comments run smoothly.

I would like to use my time today to discuss the sunset of list for inerts and paper-based crop planting aids. QCS encourages consistency across subcommittees on the decision surrounding EPA's list for inert ingredients. Based on the public comments and subcommittee discussion, clearly stakeholders are in agreement that the current system of evaluating inert ingredients and pesticide products is broken.

To continue approving ingredients for organic production based on the system that has long been obsolete is detrimental to the integrity of our organic program.

The question that remains is how to most effectively proceed. QCS continues to support the 2015 NOSB recommendation which calls for collaboration with the EPA, utilize the Safer Choice Program, and we strongly encourage the NOP to take up the recommendation without delay.

We echo the sentiments of the Livestock Subcommittee who noted that there are several well-defined paths forward, but the process is

likely to take considerable time and is unlikely to be completed before the sunset date of 2022.

We understand that the impetus to remove EPA List 4 inerts is to provoke the NOP into action. However, given the stagnation on this issue, there is no guarantee that this intended outcome will be realized. And so QCS supports the renewal of EPA List 4 inert ingredients at 205601 and 205603 because there is no alternative at this time.

Of all of the 2015 recommendations was to make the transition to a new inert ingredient system as seamless as possible for organic producers. We believe that part of the seamless transition is passing from one system to another without interruption. Without a viable alternative in place, we feel it is risky to remove these materials from the national list and doing so may prohibit the use of hundreds of critical pest control products that are vital to the success of organic farming.

As for both of those crop planting aids,

QCS commends the NOSB for careful consideration and examination of these materials. Paper raised crop planting aids are valuable tools for organic farmers, and we have submitted comments previously in favor of their continued allowance.

QCS supports the proposal to allow paper based crop planting aids with a few suggested revisions to the language for clarification.

As mentioned in our written comments, while we support many of the revisions based on feedback from the spring NOSB meeting, we have some concerns with the language as written. We suggest removing the language from the annotation that allows for paper based planting aids with compliant-added pesticides simply because many products containing pesticides will likely need to be registered with the EPA and reviewed as a pesticide posing a challenge for material review as the product would be considered both a pesticide and crop production aid.

We also support revising the definition at 2052 to limit the types of additives allowed

to make up the remaining 40 percent of non-cellulose based fibers to strengthen reinforcement fibers adhesives and binders as noted in the 2019 technical report.

Please see our written comments for complete suggested language revisions. Thank you for your time and dedication to our organic community.

MR. ELA: Thank you, Leslie. Are there questions from the Board? I'm not seeing any, but I do have one myself.

In terms of the added language for the -- as you just noted about binders, strengtheners and such, what -- to me that seems like a pretty open list. What materials would you be afraid of that would not fit that criteria?

MS. TOUZEAU: So I think the concern is that the 40 percent of non -- you know, the 60 percent cellulose based fibers, that the remaining 40 percent could possibly be things that we haven't even considered yet.

It could be things like biodegradable

plastics, micro plastics. It could be some kind of novel synthetic ingredient that a manufacturer would add to a paper product for some reason.

And so kind of the idea behind being a bit more explicit in what that 40 percent looks like is to go off of some of the materials that are listed in the 2019 Technical Report that had been listed as the types of strengtheners, fibers, adhesives and binders that are in current products on the market.

I don't know what those products are off the top of my head. I don't have the Technical Report in front of me but that's one of the thinking for QCS

MR. ELA: Sure. And I am never -- I want to be clear. I'm not against specificity in trying to limit the number of things. I am just worried that that language, you know, let's say a microplastic or something else could easily be claimed that it was a strengthener for example or a binder.

So to me the additional specification

actually most people could get around it by a claim that it fell under that list. So do you have just quickly any thoughts on that?

MS. TOUZEAU: Yes. I mean, that's a valid point. Again, I would have to go back to look at the Technical Report to just remind myself of what some of the listed materials are there.

But I think the idea is that there are materials that are currently on the market for products that we are currently approving that we have deemed acceptable. And so being specific about what the remaining ingredients are would prevent some future ingredient that we haven't yet encountered that could slip in there.

MR. ELA: Sure. Do you think it should be sent back to subcommittee or would it be okay to pass the proposal? I mean, the program has to rework the wording anyhow to go to rulemaking. And could we suggest they include that kind of language or should we send it back so that it's explicitly in the proposal?

MS. TOUZEAU: So I think, you know, we

recognize that tremendous effort has already gone into evaluating these materials. And we very much appreciate the Board for the work.

We do believe that it is important to get this definition and its annotation right. And we currently have an allowance from the NOP that allows our clients to continue using some of these products. And we want to avoid any unintended consequences down the line.

So we just -- we would encourage the Board to take the time, as I know that you will, to weigh the breadth of the comments from us and from other stakeholders, both written and oral, and discuss these concerns and address these concerns about clarifying language.

I think that if that's something that can be done -- if that's something that can be done, if some of these revisions can be added without it having it to go back to subcommittee, we would support that. But we just want to emphasize that it's important to us and to our clients that we get this definition and annotation right.

MR. ELA: Good. You know, fair enough. All right. Well, thank you very much for your thoughts.

MS. TOUZEAU: Thank you.

MR. ELA: We are going to move on to Tollef Olson, Garth Kahl and Greg Tobey unless we happen to have found Robert on the line.

MS. ARSENAULT: Hey, Steve. I think we sorted out a solution to Robert. Darrin, is your line unmuted?

MR. MORSE: Can you hear us?

MS. ARSENAULT: Yes. We can hear you.

MR. MORSE: Yes. Good afternoon. Robert Morse. Thank you for inviting me to speak this afternoon.

I am the president and founder of North American Kelp located in Waldoboro, Maine. Next year we celebrate our 50th year of harvesting and processing rockweed here in the great State of Maine.

I have several beds that have been continuously harvested for that time period and

scientists are welcome to come and view them. I'll take them out, whatever they need to do to get to them. And you can maybe tell me that I've been doing something wrong.

They're more productive than they've ever been, part of that is to do with a slight warming of the water in the winter so that we haven't had ice now, major ice damage, for probably five years.

The last year for the last 12 months we've been doing an extensive study on the acreage where rockweed grows on the intertidal zone on the coast of Maine. And we've come up with a biomass figure that's substantially higher than what we had been using before. And the harvest now is well below -- the total harvest of rockweed on the coast of Maine is well below 1 percent of the total standing biomass.

So I'm not sure what this regulation is supposed to be doing and what we're supposedly doing wrong, but we don't see it on this end.

Also earlier today there was a marine

scientist on the claim that where rockweed harvesting is like harvesting an old growth forest. I'm also a wood lot owner. And when we harvest the tree, we harvest the whole tree from the bottom. If we take the top of the tree off, yes, it would stop total growth and the tree would be wasted.

In rockweed harvesting, we take the tips of the rockweed and the regrowth happens from the tips. So we never remove the whole plant. We don't disturb the holdfast.

I developed in 1995 a mechanical cutting system that we've been working with since. And it tips the rockweed and from there the rockweed will regenerate. Not all seaweeds will regenerate from their tips like that, but the rockweed plant does.

So the regrowth is phenomenal. And these crops right now it's a two year -- it varies from bed to bed but about a two year recovery after harvest to reharvest.

If anybody has any questions, I'd be glad to answer them.

MR. ELA: Sure. Does anybody have questions? I don't see any. Thank you very much for hanging with us, Robert. And I'm glad we finally were able to hear you.

MR. MORSE: Yes. My phone system, I apologize, it wouldn't take star 6. But we're on the computer now. Thanks for bearing with me.

MR. ELA: No worries. We're glad to hear from you. All right. We are going to move on to Tollef Olson. Tollef, thank you for being on and then letting Robert go in. We'll follow with Garth Kahl and then Greg Tobey. Tollef, go ahead, please.

MR. OLSON: Good afternoon. My name is Tollef Olson. I'm the President of the Maine Seaweed Council. I'm a rock harvester, and I'm also an aquaculturist. I actually put the first farm in in the United States for growing seaweed. And I'll circle back to that.

Seaweeds have been used for millennia. The indigenous coastal communities have used it as fertilizer and food for tens of thousands of

years.

To come into the more recent times, in the last few centuries, seaweed has also been used extensively by all of the indigenous coastal communities. And an example of what happens if you start to reach the maximum harvest potential could be used with Hawaiian royalty from several hundred years ago. They started to put some gardens in.

If we move on to more recent times with the European colonization of the United States, and we have the Europeans moving a lot from Normandy, Ireland, the Hebrides, all of these North Atlantic exposed coastal areas, they have been using the fucoids for centuries to augment and build soil, and they also used them for a lot of human food products.

When they immigrated to the United States, they continued to do this. An example would even be my wife's grandfather and his relatives had farms upstate. They hauled truckloads of rockweed up there to augment the

rocky and acidic soil there and build better soil.

In the last few decades, we've seen things modernize a little bit. We've seen China since the 1950s start farming seaweeds as they reached their potential wild harvests. They exceeded the potential wild harvest.

In the last decade here in the United States, we've seen a lot of growth in the industry overall, but we've also started to do the science. Dr. Nichole Price at Bigelow Labs has firmly established that when we harvest seaweed while they're firm that we're removing large amounts of sequestered CO2, nitrogen and phosphorous and then whether we're turning them into human food or we're using them for fertilizers, it's preferable to a lot of the alternatives. And it's actually improving the environment in which it grows.

After all these millennia of use, we still have -- in the environmental concerns, one of them was by-catch. Well, we've been harvesting seaweed for thousands if not tens of thousands of years. And the by-catch species are all

surviving. There's so much nutrient overload in the U.S. it's incredible. The entire eastern seaboard is considered to be nitrogen impaired.

Harvesting, farming and improving seaweeds from the ocean is a virtuous cycle. And to just all of a sudden to start putting on restrictive regulations that don't really accomplish anything is not a good way to move this industry forward.

I thank you very much for your time.

MR. ELA: Emily has one.

MS. OAKLEY: Hi. Thank you -- excuse me, sorry -- for your comments. I just wanted to say that I'm not sure that it's fair to compare indigenous use of seaweed to the commercial scale of harvest that's currently happening now.

And I just want to clarify that this proposal is not intended to stop the use of seaweed because you're right. Farmers use this for crop fertility inputs all over the world and certainly all over the U.S.

So just to make it clear, the intention

of this proposal is to simply ensure that the parameters are meeting scientifically sound measures for not just the biomass return but the ecosystem itself. Thank you.

MR. OLSON: And that is why I brought up the aquaculture facet of it. If we start to exceed the ecosystem availability, we do already voluntarily in our industry -- we are already building into alternatives that will allow us to not exceed those parameters.

MS. OAKLEY: Yes. And I think that aquaculture could be something for the future. And it was definitely pointed out in 2019 by the scientific panel as a potential for the future in a rapidly developing science. So thank you.

MR. OLSON: You're welcome.

MR. ELA: Thank you, Tollef. We are going to move on to Garth Kahl followed by Greg Tobey. Greg, if you're on the line, Michelle isn't seeing you so please let her know. And then we'll have Heather Spalding and Nicole Dehne. Garth, go ahead.

MR. KAHL: Hi. Can you hear me?

MR. ELA: Yes.

MR. KAHL: My name is Garth Kahl. I have been an organic grower for over 30 years and an organic inspector for going on 25 years and a consultant/owner with independent organic services for 10 years.

I'm also a hopeless organic policy wonk who is crazy enough to spend his birthday giving oral comments to the NOSB while fully realizing that this is nothing compared to the sacrifice all of you are making. Thank you all for your service, really.

You already have my written comments on a variety of issues. And I'm sitting here drinking my tea sweetened with organic agave syrup to remind you to support continuing to allow ion exchange technology in organic processing. But that's not what I want to talk about today.

I want to Deputy Director Tucker's human capital memo. I want to bring both the Board's and the NOP's attention to the IOIA's

excellent written comments on this subject and highlight a few of their points and add a few of my own.

Independent contractor inspectors. As the IOIA remarked, it is a benefit to the health of organic certification to have inspectors who work for multiple agencies. Independent inspectors are more likely to comment to the NOSB and the NOP. They are more likely to mentor new inspectors regardless of who the apprentice might go on to work for.

Having been both a staff and independent inspector, I would also like to add that independent inspectors are more likely to see issues across the supply chain, precisely because they may inspect many different operators in a region, even if these operators are certified by different ACAs.

Independent inspectors are by nature resourceful, motivated and passionate about organics. Any solutions to the human capital dilemma must include this option for current and

incoming inspectors.

Apprenticeship. The industry absolutely requires a robust, well-funded apprenticeship program that lays out a clear pathway for new entrants once they have passed a recognized inspector training.

As an IOIA trainer, I can tell you that graduates of even the best inspector training, IOIA's of course, are not ready to start working as inspectors. They need on-the-job training and an experienced inspector mentor.

Having mentored many new inspectors, both as a staff and an independent inspector, I believe this is the biggest barrier to bringing new people into the trade. It is not reasonable to expect a new inspector, regardless of their prior education or experience, to pay thousands of dollars for an inspection course only to then have to travel and work without pay for several additional months while they accrue the necessary number of shadow inspections.

Similarly, it is not reasonable for

mentor inspectors to have to take on the extra work of training a new colleague, again for free, only to risk having the new person take local work away from them.

Mentor inspectors must be compensated for their time, and mentee inspectors must receive enough of a stipend so that the apprenticeship period is not an undue hardship.

Thank you very much, and I welcome your comments or questions.

MR. ELA: Garth, it looks like Scott has a question.

MR. RICE: Hey, Garth. Happy Birthday.

MR. KAHL: Thank you.

MR. RICE: And thanks for joining us and thank you -- thanks to you and Angela for your thoughts on this. I appreciate both of your considered comments.

Thinking about how to get everybody on the same page on this, you know, you mentioned apprenticeship as a tool to onboarding so to speak.

And once we say that we have a system like that in place, you know, there's been also a discussion of credentialing or licensing. Do you see that as a next step in this process?

MR. KAHL: I do. Yes, I do, Scott. And thanks for your question. We do need to step it up a little bit. I mean, this is a career. This is a trade. We are an important part of the food system and absolutely. I think that credentialing is part and parcel of that. I think that a recognized apprenticeship program that leads to accreditation of inspectors at various levels.

So, again, as the IOIA has proposed, you know, I would foresee 100 and 200 and 300 level inspections. So, you know, a simple crop inspection might be 100, and someone would be accredited or credentialed to do that versus a complicated crop and livestock inspection or a complicated multi-ingredient handler might be a 300 level inspection.

I absolutely do think we need that.

You know, we need to make this a professional trade and it needs to be both compensated as such but also credentialed as such.

MR. RICE: Great. A follow-up on that. You know, I think also in some of the discussions we've had around inspector qualifications in the past on this board and in just broader conversations, there's been some concern that requirements for credentialing or licensing or accreditation as well as minimum requirements for training could further constrict an already constricted inspector environment or inspector pool.

What's to say those inspectors out there are going to jump on board with this? And sort of tied into that, you know, IOIA has a robust membership, but it certainly doesn't represent every inspector out there. So any thoughts on how to sort of close the ranks on that?

MR. KAHL: Well, I think it's kind of a two-edged sword. We do need credentialing and accreditation. We also need some kind of -- I

would say that the apprenticeship program needs to be funded and maybe we tap the brands for that to set up a foundation or some kind of a structure, either with IOIA or some other entity, to actually have a vibrant apprenticeship program so that provided people pass the initial test and take the class that they would have some kind of a subsidy to help them, you know, undertake those months of apprenticeship.

But I also think that, and Angela mentioned this in her comments, we need some kind of consistent national wage guidelines for inspectors so that, yes, inspectors would become more professional and become accredited but they would also across the boat be expected to be compensated as such.

I mean, currently we're in the situation where we not only make less than the food safety inspector, but we make less than the rabbi, many of us, less than the rabbi doing the kosher inspection.

And, honestly, it doesn't need to be

like that, and it shouldn't be like that. You know, I envision professionalization across the board, a professional career track but also professional accreditation and credentialing requirements.

MR. RICE: Great. And I appreciate you speaking to those points and sorry to have missed Angela earlier. You know, we all benefit from being online, but I also had an electrician boring a hole in the wall behind me.

MR. KAHL: Well, thank you.

MR. RICE: Thanks for your understanding and thanks to Angela.

MR. KAHL: Yes. Thanks to all of you, again.

MR. ELA: Thanks, Garth. Enjoy your tea and anything else later in the night. We appreciate you being on.

We are going to move on to Greg Tobey -- it looks like maybe he wasn't but in case he is -- Heather Spalding, Nicole Dehne and Julia Barton. We will try and circle back around.

I know we have at least one person that we had to skip over earlier and then we'll try and get a few people on the wait list even though it means we will go a little bit over time. We're trying to make sure we get all the comments we can.

So did we find Greg, Michelle?

MS. ARSENAULT: I don't see Greg, Steve.

MR. ELA: Okay. Let's go on to Heather Spalding, again, followed Nicole Dehne and then Julia Barton. Go ahead, Heather.

MS. SPALDING: Good afternoon. Can you hear me?

MR. ELA: We can hear you.

MS. SPALDING: Great. My name is Heather Spalding, and I'm the deputy director of the Maine Organic Farmers and Gardeners Association.

Now this is my first time participating in an NOSB meeting and over the two days I have learned a lot. So I really want to thank you for the tireless efforts that you've made to defend

the integrity of organic standards.

MOFGA is a broad-based community that educates about and advocates for organic agriculture, illuminating its interdependence with a healthy environment, local food production and thriving communities.

We started organic farm certification in 1972, certifying 27 farms following Rodale Organic Garden certification guidelines.

Today we certify more than 530 farms and processing facilities. MOFGA is a member of the National Organic Coalition, which has submitted detailed comments on our behalf.

Two big challenges for our farmers right now are financial impacts from the COVID-19 pandemic along with extreme weather events, particularly the ongoing drought which has prompted Secretary Perdue to designate all but one of Maine's 16 counties as disaster regions.

With these clear and present challenges in mind, MOFGA encourages the NOSB to advise USDA's Farm Service Agency to restore organic

certification cost share reimbursement rates, to strengthen enforcement of climate-friendly practices required by the organic regulations to ensure that organic is the gold standard for addressing climate change and call for immediate implementation of the origin of livestock rule.

MOFGA is committed to understanding and addressing barriers to participation in organic certification for farmers of color and encourages the NOSB to do the same.

Regarding specific items in the NOSB proposal, we are concerned about some shifts toward relative risk assessment in lieu of continuously improving and strengthening standards.

You heard from our organic crop specialist, Dr. Caleb Goossen, regarding concerns about synthetics and paper pots and petroleum-based substances in biodegradable, bio-based mulch films intentionally added to the soil.

We also are concerned about allowing pesticides in the films as this would be contrary

to integrated pest management.

Regarding inerts, we understand the complexity of the process and the timeline involved in making progress in this area. Please kickstart the rulemaking process by approving the Crop Subcommittee's motion to remove the listing of List 4 inerts.

And finally regarding marine macroalgae, MOFGA supports the Board moving forward with an annotation instead of requiring certification of crop input.

Organic certification can help protect marine ecosystems from agrochemical runoff and microplastics and overharvesting of ocean resources.

Last year, MOFGA certification services director Chris Grigsby served on the Marine Materials panel. We have not yet had the chance to vet the impact of the certifier approval verification of the proposed language or its effect on the seaweed industry. Thank you so much again for your time.

MR. ELA: Excuse me. We'll move on to Nicole.

MS. DEHNE: Can you hear me? Hello? Can you guys hear me okay?

(Simultaneous speaking.)

MS. ARSENAULT: Yes. We can hear you now.

MS. DEHNE: Thank you, sir. Okay. I'm Nicole Dehne. I'm the certification director for Vermont Organic Farmers. I represent over 700 organic producers in the State of Vermont. I want to thank the NOSB members for all of your hard work and for the opportunity to give comment today.

I've got a couple of things I want to talk about. The first is paper pots. We are grateful to the NOP and the NOSB for how the review of paper pots has been handled.

We continue to hear from our producers about how important this tool is for their farms. It's often regarded as one of the most important innovations for use on organic small scale farms that has occurred over the last few years.

We agree that the adhesives and synthetic fibers in the pots are also in recycled paper and mulches and should therefore be allowed in paper planting aids as well.

We also agree that adding the allowance for virgin paper is important to make sure that products currently on the market would be allowable and to ensure that products for future use can be developed. We feel that requiring 60 percent cellulose-based fibers and 80 percent bio-based content achieves a balance for allowing this material to be used but restricts the amount of material derived from petroleum.

Like the paper planting aids, we feel there is a path forward to allow a biodegradable, bio-based mulch that's not 100 percent bio-based but does restrict what's allowed in the manufacturing process to address concerns for soil health.

This compromise would mean that as an organic community, we're taking the important step forward to reduce plastic use on organic farms.

We agree that we need to be careful about the effect of these synthetic polymers and their potential to accumulate in small particles of plastic in the soil. We think research on this topic should continue.

But we struggle with the impact of organic eggs extensive dependence on plastic. And we don't feel that this should be taken lightly. We feel we have a responsibility to try to reduce our plastic use, and we feel that BBM is one way to do this.

The use of plastic on vegetable farms in the Northeast has really been increasing since the 1960s. These days, plastic mulch is used almost universally on tomatoes, peppers, egg plants, melons, sweet potatoes, winter squash, zucchini, cucumbers.

On many farms the list doesn't stop there. It's often used on any horticultural crop, including garlic, onions and lettuce. Because of this, if you take a walk on the majority of organic veggie farms and fruit farms, you'll find small

pieces of ripped plastic from years of plastic use.

We absolutely have a problem with residual plastics on organic farms. Dairy and livestock producers are also using plastic for wrapping and storing feed. The use of plastic in organic eggs is omnipresent.

The majority of farms do have residual plastic pieces in their fields or in their field edges. So we support a proposal that requires removal of the film when feasible. And we would recommend that the NOSB provide some examples of when it might not be feasible to remove the film, for example, when 50 percent has begun to biodegrade in the soil.

Our certified producers in Vermont feel it's time to reduce our dependence on plastic as an industry. And many of them feel that BBM would be an important step towards the net goal.

MR. ELA: Great. Thank you very much, Nicole. Are there questions? I'm not seeing any. We appreciate your thoughts.

MR. BRADMAN: Steve.

MR. ELA: We are going to move on to --

MS. DEHNE: Thanks.

MR. ELY: Yes? We're going to move on -- well, wait. Asa has a question, Nicole, if you're still there.

MR. BRADMAN: Yes. Sorry. So I just wanted to get your thoughts on this idea of comparative risk. We have comments that the idea of comparative risk is not written into the law and should not be a standard for evaluating materials.

And then it sounds like you're advocating that we do consider comparative risk. And I know for me personally I'm torn on these issues just because the plastic use in organic is so substantial and widespread.

Has your group followed that up in kind of the larger philosophical sense or you're just kind of zeroing in here on, you know, polyethylene films are bad and we need an alternative?

MS. DEHNE: Yes. I think, I mean, this

might be where we depart from our colleagues a little bit in that I think we do think it's important to compare the use of plastic in its relationship to the use of biodegradable, bio-based mulch.

So, yes. We think that, you know, like I said, we don't think we should ignore -- we need to continue to do the research to make sure that soil health isn't going to be negatively affected.

But at this point, the research is not clear. And we need to make sort of an impact on plastic use in organic farms and in the organic industry. And we have an annual producer meeting every year.

We had farmers come last year and that's what they wanted to talk about is that they were saying -- veggie producers that were saying when I go to workshops now, this is what I see is just more and more promotion of plastic as a tool. And it concerns me, and I feel like, as a farmer, I should be doing something about this.

So, you know, that's what we're hearing

from kind of our constituents. That's what we're passing on.

MR. BRADMAN: Thank you.

MR. ELA: Great. Thanks, Nicole. Okay. We are going to move on to Julia Barton and then we'll go to Bjarne Pedersen. And if anybody else that we skipped over on the list, Brenda DeShields, Ender Iniguez, Jerry Sutherland, Tim Pitz, Kyle Mathison or Greg Tobey are on the line, please let Michelle know. Otherwise, we'll spend a few extra minutes on our wait list. But go ahead, Julia.

MS. BARTON: Thank you. Good afternoon. My name is Julia Barton with the Ohio Ecological Food and Farm Association. I'd like to thank you all for your service and to share some comments on a few topics.

Fenbendazole for use in poultry. OEFFA does not support the addition fenbendazole for use in poultry as proposed. Poultry producers, many of whom produce (audio interference).

MR. ELA: Julia?

MS. BARTON: This material is not needed.

MR. ELA: Julia, we suddenly got kind of digitized where we're having a little hard time catching your words. You might try it again here, and we'll see how it is.

MS. BARTON: Okay. I apologize. I do not have broadband where I'm located. I might need to call back on the phone. I heard you all all day.

MR. ELA: You're fine now.

MS. BARTON: Is that okay? All right.

MR. ELA: Yes. You're fine now. Let's try it again.

MS. BARTON: Okay. I'll just begin with fenbendazole again. OEFFA does not support the addition of fenbendazole for use with poultry as proposed per (audio interference) is not needed. Producers reported back --

MR. ELA: We lost you. We lost you again, Julia. What if we go to our next speaker

and come back to you and maybe you could call in. It works great and then we lose part of it.

MS. BARTON: Okay. I'll try the phone. Thank you.

MR. ELA: Yes. We'll go to our next one and come right back to you. Let's go to Bjarne Pedersen. Bjarne?

MR. PEDERSEN: Yes, hello. Can you hear me across the Atlantic?

MR. ELA: We can hear you across the Atlantic. Go ahead.

MR. PEDERSEN: Okay. Thank you for your patience. Well, I had some personal issues to attend to earlier so I wasn't able to make it in the beginning.

My name is Bjarne Pedersen. I am a consultant for Ellepot in Denmark. And I will comment on the petition for the paper pots.

Let me say that we're happy to see the petition this time, which we believe will be the first step in using paper pots made of virgin paper.

We think the motion is easy to

understand considering actually the huge complexity of paper in general. Earlier I commented on the use of recycled or newspaper, and it's not really a solution for paper pots.

It is a very undefined material and also for newspaper I have shown that it's not really that easy to make a degradable product out of it.

We think the level of 60 percent cellulose-based fiber is a fine level as well as the 80 percent of bio-based. I'm working as a developer and the remaining 20 percent, which is not really defined gives me the opportunity to look into other solutions which could also actually include animal fibers just to mention something not being cellulose. I don't know if wool or silk is considered to be bio-based actually. Perhaps that is my lack of understanding the English language.

One thing I would like to repeat from a concern we have from the written comment on the third-party assessment. We really would recommend that only laboratory testing would be

the only option on this verification of the composition by a qualified personnel is really not sufficient. It's impossible for anyone to tell if there is more than 20 percent being non-bio-based or more than 40 percent non-cellulose in a paper.

So our recommendation is that the product assessment should be only done based on independent lab testing results.

We're really looking forward to this motion being accepted so that the growers will know which type of papers they can be allowed to use for organic crop.

So that's the comments, and I'll be happy to answer any questions.

MR. ELA: Thank you. Are there any questions from the Board? I don't see any, Bjarne. Thank you so much for staying up late to give us comments. We do appreciate that.

MR. PEDERSEN: You're welcome.

MR. ELA: Julia, are you back?

MS. BARTON: I'm unable to get through

on the phone for some reason.

MR. ELA: Well, let's try it, and we'll do our best. Go ahead. We got your fenbendazole or at least the start of it so you can start there.

MS. BARTON: Okay. I'll just summarize. Stop me if I become muddled. Essentially our producers, both barn producers and pastured poultry producers are telling us that fenbendazole is not needed.

What we do need instead of materials to enable management and system modeled after conventional production is actual poultry standards similar to what we were provided in OLPP. We need to fortify the systems approach of organic production, not input substitution, which is what is being requested here.

Human capital -- can you hear me okay?

MS. ARSENAULT: Yes.

MR. ELA: Keep going.

MS. BARTON: Okay. We have renamed this agenda item stewardship of expertise as we take issue with the term human capital. We

appreciate (audio interference) document. (Audio interference). Their agenda items must be petitioned and approved.

The NOSB, as an independent advisory board, must have autonomy in the development of its own work agenda. When a topic of this magnitude is added to the work agenda but other topics of large or difficult scope such as container production systems, for example, are denied or removed, the voices of stakeholders are silenced.

That said, we agree that this topic is important, and we appreciate Dr. Jenny Tucker's ongoing leadership in this arena. In particular, we appreciated the question regarding how candidate pipelines can be developed in a way that maximizes diversity and inclusion so that those working in the organic community can better represent the diversity of the public we serve.

OEFFA is pleased to be continuing a relationship with Central State University, a historically Black land grant university in Ohio,

which has prioritized organic agriculture in its extension work. It's growing its staff and will be serving currently underserved members of the organic and sustainable agriculture community.

Finally, the timing and format of meetings, OEFFA's Grain Growers Chapter has continually requested an alternative to the current meeting schedule. Shall I continue just briefly?

MR. ELA: Finish your -- yes, we'll give you just a touch more here.

MS. BARTON: Thank you. This part is important. On behalf of our growers, they have suggested moving the schedule back two weeks each meeting, which would mean the meeting would rotate throughout the year equally benefitting and inconveniencing various stakeholders over time.

And finally we just wanted to thank you for the digital format. We agree with other commenters that it increases access. And I'll just stop there. Thank you.

MR. ELA: Thank you so much for hanging

with us there, Julia. Are there any questions? All right. I don't see any. Thank you, again.

Let's see. We are going to go to our wait list at this point. I know we're over time. It's a long day for the Board and we actually -- it looks like most of our wait list is present which I think probably is longer than we want to go. But I'm kind of willing to go to 40 minutes after the hour. I know some Board members may have to step off for personal reasons. But we'll just get through as many as we can and kind of go from there.

We're going to stop with Tom Buman followed by John Foster and then Hamsa Shadaksharappa. Shadaksharappa, sorry about that. Go ahead, Tom.

MR. BUMAN: Yes. Can you hear me clearly?

MR. ELA: We can hear you.

MR. BUMAN: Okay. Thank you for the opportunity to provide oral comments regarding ammonia extracts. My name is Tom Buman, and I'm the CEO of Precision Conservation. For the past

30 years, I have worked in the environmental arena, beginning my career with USDA and then 24 years as CEO of my own company.

During that time, I've dedicated myself to enhance and protect soil and water quality with a focus on Iowa. As you probably know, Iowa leads the nation in producing many agricultural commodities. Along with that distinction, Iowa is also number one in the production of livestock manure.

Consequently, Iowa is beset with one of the worst records for nutrient losses into water. Organic farmers can play a growing part of this cleanup if they can maintain flexible and practical solutions while still maintaining high organic standards.

Organic farmers have limited choices when it comes to organic fertilizers, which often drives them to either overapply or underapply certain plant nutrients, a real dilemma for sure.

When farmers are forced to overapply phosphorous in order to achieve proper nitrogen

levels, the effect can be too much phosphorous for surface waters.

Conversely, when farmers reduce their nitrogen application as to not overapply phosphorous, the outcome produces crop inefficiencies and requires more acres to produce the same crop.

Flexible fertilizer blends can help organic farmers be a part of the water quality solution by helping them manage their nutrient inputs more appropriately.

Recently, new processes have been developed to isolate and remove nitrogen from animal manures. This novel approach of capturing ammonia from animal manure before it is otherwise released to the atmosphere is not only good for organic farmers, it is good for the environment.

In reviewing the comments submitted to the National Organic Standard Board, it is evident to me that these manure-derived nitrogen products have strong support from organic farmers. That being said, I do not know of any farmers who suggest

these products will become their sole source of fertilizer.

While manure will always play a critical part of Iowa's organic fertilizer program building soil carbon, with these novel products organic farmers can achieve a more perfect blend of nutrient and continue to maximize environmental sustainability and grower economics.

Iowa organic growers are uniquely positioned to positively impact Iowa's water quality. Organic growers need flexible options that still preserve organic standards and environmental safety. I ask you to reject any efforts to limit ammonia extracts captured from livestock manure. Thank you.

MR. ELA: It looks like Nate has a question.

MR. POWELL-PALM: I was just hoping to see if you had any inputs on sort of the whole system's result of incorporating true crop rotations on organic farms.

If you're using alfalfa or other

legumes, you don't have the issue of running to phosphorous overfertilization. And so I am worried that this would disincentivize the use of manure and organic farms are kind of fantastic because they are manure sponges and then you see manure kind of as brown gold rather than laced.

And so is there not a reason to focus more on how do we get a more robust crop rotation in rather than simply supplementing kind of in the more input oriented vein of conventional agriculture?

MR. BUMAN: Well, I think maybe I would approach it this way. If we could handle manure appropriately so we could not lose that ammonia, we would all be in favor of doing that in our management processes.

This is just a way of saying, okay, instead of, you know, changing the way we handle it or anything else, we're going to take it. And we're going to create a stream that allows us to capture that before it's released into the atmosphere.

And so I don't see it that we are not using manure. We still are continuing to use the manure. We get a valuable byproduct from the process that is still an organic material that we're putting on. It just allows us access to it, an option that has more flexibility.

And so I would never support the idea that this would eliminate the use of manure. I think what it does is create a stream that we would typically lose under a lot of conditions and allows us to kind of inject that into the manure stream.

MR. POWELL-PALM: Steve, if I may follow-up real quick. As an organic grain farmer, what would be my incentive to not just use liquid nitrogen derived from manure exclusively and skip the hassle and the headache of dealing with manure altogether?

MR. BUMAN: I would think that's because you still need your phosphorous and potassium and your micronutrients. And the number one source is still raw manure.

MR. POWELL-PALM: Thank you.

MR. ELA: All right. Thank you very much, Thomas. We are going to go on to John Foster and the Hamsa Shadaksharappa and then Brent Lytle. Let's go to John.

MR. FOSTER: All right. Sound check. All good?

MR. ELA: You're here.

MR. FOSTER: Great. Thanks, all, for your service on the Board and for those of you about to leave congratulations on that newfound freedom. It feels good, I can tell you, when you're done.

On the inert question, and Asa, I'm sorry to continue using that word, but it's the one that's in the book so there we have it. But on that, as I mentioned in the April meeting, I would still assert they're essential for organic production and urge you to recommend continuation of these materials.

I think I'll just speak as you've covered the details and the whys pretty well. So I won't do that again. I would also encourage implementation of that 2015 NOSB recommendation.

That really was a nice piece of work.

It was a long time in coming with a lot of stakeholder input, a lot of seriousness and it's been sitting there for a while. So as I did in April, I really would suggest trying to just push that forward.

There's a lot of parallels I will add with this situation and the old -- some of you veterans will recognize this, the old synthetic substances policy statement that was in the early 2000s. And that was as a function of FDA's eventual insistence that indirect food additives would be allowed, and this came up in the context of ion exchange resins for what it's worth. That was early 2000s.

And at the time that came up as a complaint or an objection, it was filed around organic high fructose corn syrup. There are some parallels with that indirect food additives list. The guidance is no longer on the web, but it was there for many years.

There are some precedents for other

agencies and their conglomerated lists that go back quite a bit to the very origins of NOP. So there may be some wisdom there.

Since I have a couple more seconds here, on this marine materials topic, I really do understand the desire to see a lot of hard work come to some sort of fruition. I totally get that.

In reading this, I really don't feel like it would be productive to move it forward at this time. I really suggest having a subcommittee look at that some more. I know it's painful.

I know that really, really well because 2010 to 2015 was a very contentious period of time on the board, and I certainly was in the thick of it then. We came up with some really good work and still that 2015 recommendation sits.

So I know how hard it is to see good work sit. But there is a time, and this is it, I think. Let it sit and get some more comments and work it until it's right. Thanks.

MR. ELA: All right. Emily has a quick question.

MS. OAKLEY: Hello. I just wanted to make a clarification, but thank you for your comment.

I don't think it's a matter of the pain of, you know, seeing hard work come to fruition or not. Although, of course, I definitely understand because I truly would be the first to recommend that it go back to subcommittee if I genuinely thought that that would lead to a proposal or an annotation that everyone could agree to. But it's just been a very complicated process. And I'm not sure that will ultimately be possible to satisfy everyone.

I had hopes for that absolutely. But I'm not sure that ultimately is an achievable goal.

MR. FOSTER: Got it.

MS. OAKLEY: So I just wanted to say if I'm pushing it forward, it wouldn't be because I don't want to see the work moving on. I'm happy for someone else to work on it if that will ultimately lead to positive results. Thank you.

MR. FOSTER: Fair enough. Fair

enough. Well said.

MR. ELA: Thanks, John. We appreciate your insights. A historical perspective is always good. We're going to move on to Hamsa and then Brent Lytle and then Alice Runde. Go ahead, Hamsa.

MR. SHADAKSHARAPPA: Okay. Thank you. A very nice job on a difficult name. So I appreciate that.

We have a company called Renewtrient. And we have two locations in Iowa and Colorado that recover animal manure and process that into fertilizers used by growers across the Midwest, the Plain states and the Western U.S.

Our main point relates to the ammonia extract petition. We strongly believe that ammonia captured from natural manure should be distinguished from general ammonia extracts.

It is important to note that the Organic Board received about 20 written comments from independent growers and grower groups. They clearly voiced their concern with the potential that it could potentially delist or ban manure

captured ammonia. From that, the Board can extrapolate how widely used and important manure products are.

Organic farmers all across the country, not just our customers, have been reliant on manure as part of their overall organic program for many years. These farmers are now seeking improved manure products to meet more specific needs. They desire fertilizers with targeted nutrients to avoid wasted costs and damage of overapplication mentioned by a previous caller.

They also want products that allow for the transport and access or animal manure based products in wider geographies. And they also seek more product options to manage the environment in their local watershed as part of an overall organic program.

Please remember ammonia from manures would be lost the air and waterways if not captured and used beneficially.

Also as other callers have mentioned, such products are not a replacement for the

excellent organic inputs currently being used. They are an important supplement that growers are asking for to meet specific needs.

Organic farmers know their soil health based on practical experience built over many years. They have the most to gain from sound organic and regenerative practices. It's precisely because they depend on long-term soil health that they use manure derived products.

In closing, we request the Board to seek more feedback from growers and objective organic experts as part of their evaluation of the extract petition.

We'd like to please ensure that manure-derived ammonia products are not delisted or banned on the NOP as an unintended consequence.

Thank you for the comment to participate and comment in your process.

MR. ELA: Nate has a question for you.

MR. POWELL-PALM: Thank you for your comments. Just a quick question on you were mentioning that ammonia not captured through this

process would be lost to the air and waterways. Do you have an idea sort of what number of animals your company represents as far as manure taken out of potentially reflowing into the greater watershed environment?

MR. SHADAKSHARAPPA: I don't have that, you know, those numbers, that calculation handy. But we can certainly follow-up and get you that information.

MR. POWELL-PALM: Thank you. And just one more follow-up question. How do you see if the greater sort of consensus is that we want to encourage whole systems thinking, do you see the use of this product as encouraging farmers to either introduce livestock onto their crop programs or cooperate with their feedlot or CAFO neighbors?

MR. SHADAKSHARAPPA: Well, yes. I mean, that's a complicated question. I think we are more focused on the grower needs and what they're asking for.

I think when you start talking about

CAFO and large farm operations, that becomes a more complicated question. I think what we're seeing is that the growers are asking for more tools in their toolbox.

They have specific issues they're trying to address as part of an overall program. And we believe that, you know, the recovery of ammonia and byproducts that would otherwise be wasted and make its way into, you know, unintended places can be better be captured through technologies and used more beneficially for those farmers.

MR. POWELL-PALM: Thank you.

MR. SHADAKSHARAPPA: Sure.

MR. ELA: Thank you, Hamsa. We are going to move on to Brent Lytle, followed Alice Runde and then David Epstein. Go ahead, Brent.

MR. LYTLE: All right. Can you hear me?

MR. ELA: We can hear you.

MR. LYTLE: All right. My name is Brent Lytle. I'm the agronomy manager for Farm

Nutrients in Rembrandt, Iowa. First off, we would like to thank the NOSB for the opportunity to speak in favor of manure-derived ammonia extract fertilizers continuing to be approved for organic production.

At Farm Nutrients, we understand organic fertilizers. Founded in 2003, we apply nearly 850,000 tons of chicken litter annually to over 400,000 acres. Nearly one-fourth of our customer base for raw litter is organic on either a small scale or a large scale.

It is with these organic growers in mind that we oppose the petition limiting ammonia extract fertilizers in organic agriculture.

Manure derived ammonia extract fertilizers provide a valuable tool to organic growers by being utilized as a nitrogen source with very low levels of phosphorous and potassium.

Many of our organic customers are looking for new ways to apply supplemental nitrogen to their crops. Many of them have tried top dressing raw manure while their corn crop is

growing, which requires them to purchase specialized application equipment and is costly and time consuming.

They also risk the overapplication of phosphorous and subsequent phosphorous loading of the soil, which contributes to runoff and water quality problems, an extremely important issue in our area of the country, in addition to nitrogen management practices.

The access to these products containing immediately available nitrogen and a high carbon to nitrogen ratio similar to the raw litter product from which they are derived adds another option to organic growers as a part of a whole farm nutrient management program.

We ask that the NOSB sees the merits of these products and continues to approve their use for organic production agriculture. Thank you.

MR. ELA: Thank you. Questions? Go ahead, Nate.

MR. POWELL-PALM: Sorry. If farmers

are shorting up on nitrogen that they're having to top dress their corn, should they not be considering a more robust crop rotation whereby through forages or other annual legumes they realize more nitrogen in their soil prior to planting that farm crop?

MR. LYTLE: The growers that, I guess, in particular that I've spoken to are utilizing crop rotation practices to try to make a more robust nitrogen management program. They're also utilizing raw manure as a whole farm program. And they're seeing some supplemental need and some more available nitrogen need when it comes to in season and a high yielding corn crop.

Many of our growers are going for obviously higher corn yields in this instance and are seeing some supplemental end being a good in season option for them to manage runoff, nitrogen runoff, phosphorous runoff in their watershed areas.

MR. POWELL-PALM: Thank you.

MR. ELA: Great. Thank you, Brent.

We're next going to go to Alice Runde, David Epstein and Caleb Adams. Go ahead, Alice.

MS. RUNDE: Thank you. Good afternoon. My name is Alice Runde. I'm the coalition manager for the National Organic Coalition.

My comments today pertain to continuous improvement, racial equity in the organic movement, consent calendar voting and minority opinions in NOSB subcommittee decisions and published materials.

Organic agriculture is not in archaic production mode, one based on an understanding of ecology and complex systems. Organic practitioners do not seek silver bullets but rather seek improved ways of working with nature.

As such, the organic community has always placed a high value on continuous improvements. Organic regulations need to be updated continuously in order to embrace continuous improvements. The regulatory process does not support the need for ongoing updates.

The USDA must support continuous improvement by educating OMB and others of the need to make frequent regulatory updates as organic grows and strives towards its goal of achieving agroecosystems that are ecologically, socially and economically sustainable.

The organic label has long focused on ecological and economic sustainability. Focusing on social sustainability is also paramount to its success. We recognize that access to the organic movement and organic certification has not been equal across racial groups.

NOC would like to see the NOSB prioritize research into, for example, one the barriers to participation and organic certification for farmers of color. Two, technical assistance needs for underserved and underrepresented communities and three, developing markets for ethnic specialty crops and culturally relevant fruits and vegetables.

We support the NOSB in exploring ways to encourage the NOP and organic stakeholders to

expand their work and resources to further address this issue.

NOC encourages the NOSB to work with the NOP to identify languages that the organic material should be translated into and then work to identify the appropriate means of acquiring and sharing those translated materials.

NOC opposes the use of a consent agenda in NOSB meetings, especially for the use proposing the discussion documents, grouping sunset items.

While it may appear that grouping sunset listings could save time, we believe that the opposite outcome is likely. Grouping listings would take more time to debate over the appropriateness of the grouping.

If, as the discussion documents suggest, these agenda items are non-controversial and the only time that would be saved would be running through the roll call group.

Finally, NOC urges NOSB subcommittees to include minority opinions in their publishing materials. The admission of minority opinions

does a disservice to the democratic process and all of the expertise that comes to this Board.

Providing minority views reflects of the federal process for documenting public input and can better serve the NOP in its work. Understanding the reason behind a requirement always helps with greater buy-in and support.

When the NOP publishes a rule for public comment, it must explain the reasoning leading up to it and the inclusion of all of the issues discussed in NOSB materials would (Audio interference). Thank you for squeezing me in at the end of a very long day.

MR. ELA: Thank you, Alice. I am not seeing any questions. We will go to David Epstein. Michelle has let me know that Caleb and Maddie aren't present that she can tell. So if you are, let her know.

But it's been a long day and I know we had given the people at the top of the wait list a chance on Tuesday. We would love to hear from you, but I'm going -- after David, if the other

two aren't present, I'm going to have to call it a day just for the sanity of the Board. So I just want to give you that heads-up. Dave, go ahead.

MR. EPSTEIN: Yes. Thank you, Steve. And I thank the Board wholeheartedly for staying late and being willing to hear our concerns.

I represent the Northwest Horticultural Council, which represents the Organic Trade Group producers of Washington, Oregon and Idaho. Our members produce over 90 percent of the fresh organic apple crop that's available in this country and a significant volume of organic pears and cherries as well.

My chief concern today is with delisting List 4 inerts. I know you've heard it from a number of people. And I understand that EPA is no longer maintaining the list and that you need to decide how to move forward. But delisting all of these inert ingredients without a well thought out path forward on how to address inclusion of these materials in existing products that are critical to organic production will create

many problems for producers.

Growers will lose tools that are necessary for their production while the NOSB considers next steps.

Pheromone mediated mating disruption is a cornerstone of organic home fruit production with organic agricultural research at WSU, that's Washington State University, stating organic programs should always use mating disruption as a basis for organic codling moth management.

List 4 inert ingredients are used in pheromone dispensers to stabilize pheromone, allowing the devices to remain effective throughout the growing season.

Dimethyl ether, one of the materials, is the propellant used in aerosol pheromone dispensers. Without the addition of these inerts both hand applied and aerosol dispensers will not remain viable for use by organic producers.

And with that pheromone disruption is a management tool for codling moths and other tortuous pests. Organic apple and pear production

will decrease significantly.

In addition to the importance of these products, the mating disruption, the Washington State Department of Agriculture Organic Program reports that the majority of all pesticide products used by organic producers are formulated with List 4 inerts.

Estimates by members of our Northwest Horticultural Council Organic Committee state that a decision to delist these inerts had results in loss of mating disruption could lead to the loss of 50 percent of organic home fruit production from our area within just a couple of years and even steeper declines in the following years.

We ask the Board to consider the immediate impacts that delisting List 4 will have on the availability of products critical to organic production.

Our growers need transparency and predictability to remain productive and delisting with that well-defined path forward will result in immediate, and I understand, unintended

impacts on the abilities of organic growers to remain viable.

Once again, thank you for staying late to hear my concerns.

MR. ELA: Thanks, Dave. Any last questions for Dave? All right. I think we're going to call it a day. My apologies to the speakers at the top of the wait list. Again, we did try and get to you on Tuesday, and I hope that you were able to submit written comments.

But we have to at some point cut this off. It's been a very long day. And I appreciate the Board members for sitting in all this and asking great questions. And I appreciate the stakeholders for all the great comments. It really does help to inform us on the board, and I know you caught our ear on many things.

And we will start again next week, next Wednesday, for the full public meeting where the Board will have to digest all these comments and come to our own conclusions as will, of course, be public deliberations. And I do want to remind

people about the sanitizer panel that will be in November as well.

So, once again, this concludes today's public comment webinar. We do appreciate all your thoughts and thank you and hope you have a great afternoon and evening.

Michelle, do you have anything else? I'm not hearing anything. So we'll see you all next Wednesday. Go ahead, Michelle.

MS. ARSENAULT: I was just going to say thank you, everyone. Thanks, Steve. And thanks to the entire Board and everyone who listened in today. And we'll see you guys on Wednesday at noon Eastern.

MR. ELA: Take care, everybody.

(Whereupon, the above-entitled matter went off the record at 5:39 p.m.)

UNITED STATES DEPARTMENT OF AGRICULTURE

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NATIONAL ORGANIC STANDARDS BOARD

+ + + + +

FALL 2020 MEETING

+ + + + +

WEDNESDAY
OCTOBER 28, 2020

+ + + + +

The Board met via videoconference at 12:00 p.m. Eastern Time, Steve Ela, Chair, presiding.

PRESENT
STEVE ELA, Chair
SCOTT RICE, Vice Chair
JESSE BUIE, Secretary
SUE BAIRD
ASA BRADMAN
JERRY D'Amore
RICK GREENWOOD
KIM HUSEMAN
MINDEE JEFFERY
DAVE MORTENSEN
EMILY OAKLEY
NATE POWELL-PALM
A-DAE ROMERO-BRIONES
DAN SEITZ
WOOD TURNER

ALSO PRESENT

DR. JENNIFER TUCKER, Deputy Administrator, National Organic Program; Designated Federal Official

DAVID GLASGOW, Associate Deputy Administrator, National Organic Program

MICHELLE ARSENAULT, Advisory Committee Specialist, Standards Division

LEA-ANN BIGELOW, Director, Interagency Collaboration, Customs and Border Protection Office of Trade

JARED CLARK, National List Manager, Standards Division

SHANNON NALLY YANESSA, Director, Standards Division

DEVON PATTILLO, Agricultural Marketing Specialist, Standards Division

BETSY RAKOLA, Director, Compliance and Enforcement Division

JONATHAN VELEY, Director, Agricultural Marketing Service Trade Systems Division

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

12:05

a.m.

MS. ARSENAULT: Welcome, everyone, the National Organic Standards Board, day one of the public meeting. If you're on line and you're having audio issues, there are phone numbers for -- on the screen. You can always call in on the phone instead of using your computer.

Attendees are going to be in listen-only mode. So you should not be using your microphone or camera. If you have technical issues you can use the chat button. So if you hover over your Zoom screen down in the -- in the middle at the bottom you should see a chat feature.

So feel free to chat in if you have questions or trouble hearing. That would be good for me to know. And I am going to turn it over to Jenny Tucker, the division -- the NOP deputy administrator, to officially start the NOSB meeting. Thank you.

DR. TUCKER: Thanks so much, Michelle.

Hello, everyone, and thank you so much

for joining us today. I am Jennifer Tucker, deputy administrator of the National Organic Program, part of USDA's Agricultural Marketing Service, or AMS.

This session continues our fall 2020 National Organic Standards Board meeting, which started last week with two online public comment sessions. Meeting access information for all meeting segments is posted on the NOSB meeting page on the USDA website.

We are recording and transcripts for all sessions will be posted once completed. I'm serving as USDA's designated federal officer for this meeting.

This meeting, like all other meetings of the National Organic Standards Board, will be run based on the Federal Advisory Committee Act and the board's policy and procedures manual.

Steve Ela, the board chair, will be introducing board members in a few minutes. Right now, I'd like to briefly introduce and thank key National Organic Program team members.

First, Michelle Arsenault, our

advisory board specialist. I've been incredibly lucky to work with Michelle for almost eight years now. She supports the board every day and in every way, and I know that many of you in the community have called upon her for help as well. So Michelle, thank you.

We're going to give a Zoom applause, so wave both hands up to the camera and that is how we applaud. So big applause for Michelle. Thank you for all that you do.

Next, I want to both introduce and thank Jared Clark. He is our new national list manager. So Jared, if you're not on camera, go on camera and wave.

He has been a tremendous addition to our team over the last several months.

Devon Pattillo, our agricultural marketing specialist, has been wearing several hats over the past few months, including helping Jared to get up to speed with us and supporting many projects.

So, Devon, you continue to be amazing. Thank you very, very much.

And then we should have Shannon Nally Yanessa on the line. She is our standards division director. I want to thank her very much. And then we also have online Betsy Rakola, our compliance and enforcement director, who'll be speaking with you later, and John Veley, who is our trade systems director.

So let's give a big applause for all of the NOP staff. They've worked very hard to bring us all together here today.

And so now let's take a quick look at our agenda. We're going to be meeting from 12:00 to 5:00 Eastern today, tomorrow, and Friday with an hour break in the middle of each day.

There will also be a sanitizers webinar in November. And so today's agenda will mirror our standard format that we would use if we were face to face. The board chair will get us started and then we'll have some time for an NOP update.

So as a preview from what you're going to hear from me, you're going to hear from Betsy Rakola, and then we have a special guest from

Customs and Border Protection who will give you an update today.

Then we'll take a break and then we will move into the subcommittee work after that break. Okay.

And now I want to thank the National Organic Standards Board. You are all amazing people, bringing diverse experiences and views to our world (audio interference) together to virtual meetings and we -- as we all respond to site-specific circumstances here, so to speak, and so I thank them very, very much.

I want to particularly acknowledge our five board members who are beginning their last meeting of the term. So, normally, we would give them a big hug.

But since we can't do that, we're going to applaud for Jesse Buie, Emily Oakey, Dan Seitz, A-dae Romero-Briones, and Scott Rice. So thank you so much for your service.

And now I want to give a particularly special thank you to Steve Ela, the chair of the board and of this meeting. Let's signal our round

of applause in advance for a great meeting and now, Steve, I turn it over to you.

MS. ARSENAULT: Steve lost his video momentarily. I've asked him to unmute. Steve, looks like your line is muted at the moment.

(Pause.)

MS. ARSENAULT: I think we may have -- oh, no, there he is.

CHAIRMAN ELA: Okay. Now can you hear me?

MS. ARSENAULT: Now we can hear you.

CHAIRMAN ELA: Okay. We'll just keep punching *6 until it comes up.

(Laughter.)

CHAIRMAN ELA: Well, welcome, everybody. My video dropped off but, obviously, I'm on the phone here and I'll soon get my video back. But I, first of all, really want to thank the NOP staff for everything they're doing, especially on these Zoom calls but always even in public meetings there's a tremendous amount of work that they do in the background that we don't see or you don't see.

But their support is hugely, hugely helpful to making all this happen. So thank you, Jenny and Devon and Jared, Michelle, Shannon, all the others that are making this happen.

I do want to introduce the board members, but before I introduce the sitting board members we will be welcoming five new board members come January and I'd like to recognize them, and I'm sure I'm going to -- I'm going to learn to pronounce names here later on.

But Amy Bruch, Logan Petrey, Dr. Carolyn Dimitri, Brian Caldwell, and Kyla Smith are going to be joining the board. So we look forward to having you on and your participation and we will certainly miss the five board members that are going off the board. But this is a wonderful experience for the board to recreate itself and for new perspectives to come in.

So now I'd like to introduce the sitting board, and if you all could -- as I say your name if you could say present because this also serves as the roll call.

Sue Baird?

Sue, are you there?

MS. BAIRD: Yes.

CHAIRMAN ELA: All right.

Asa Bradman?

MR. BRADMAN: Here.

CHAIRMAN ELA: Jesse Buie?

MR. BUIE: Present.

CHAIRMAN ELA: Jerry D'Amore?

MR. D'AMORE: Good morning. Here.

CHAIRMAN ELA: I am here, Steve Ela.

Rick Greenwood?

MR. GREENWOOD: Here.

CHAIRMAN ELA: Kim Houseman?

MS. HUSEMAN: Present.

CHAIRMAN ELA: Mindee Jeffery?

MS. JEFFERY: I'm here.

CHAIRMAN ELA: Dave Mortensen?

MR. MORTENSEN: Good morning from rainy Durham, New Hampshire.

(Laughter.)

CHAIRMAN ELA: Has Emily been able to get on? Emily Oakley?

MS. OAKLEY: Yes. Present, and I

apologize and good morning from rainy Oklahoma.

CHAIRMAN ELA: Well, you don't need to apologize because I'm in the middle of trying to get back on as well.

So Nate Powell-Palm?

MR. POWELL-PALM: Present.

CHAIRMAN ELA: Scott Rice?

MR. RICE: Present.

CHAIRMAN ELA: A-dae Romero-Briones?

MS. ROMERO-BRIONES: Present.

CHAIRMAN ELA: Dan Seitz?

MR. SEITZ: Here.

CHAIRMAN ELA: And Wood Turner?

MR. TURNER: Dreaming of rain in California. I'm here.

CHAIRMAN ELA: Excellent. Well, it looks like we have everybody present. So very, very glad to see that and, like I say, I will get on as soon as I can here.

With that, I am going to turn it over to Jesse Buie to give the secretary's report.

MR. BUIE: Okay. NOSB members, do you accept the meeting minutes from the April 2020 NOSB

meeting as written and are there any corrections?

CHAIRMAN ELA: And since I can't see people's hands right now, please jump in and say if there's any corrections.

(No response.)

CHAIRMAN ELA: All right. Hearing none --

MR. BUIE: Okay. The minutes are accepted.

CHAIRMAN ELA: That sounds great. Thank you very much, Jesse, and we appreciate your multiple times as secretary.

Next, I'd like to move into the chair report and NOSB update. Today, and I'm sorry, again, you can't see me and I won't be able to juggle my computer as we -- as I talk but I'll get on shortly.

I want to -- I do want to talk about three things from the NOSB chair perspective. I want to talk about our board culture, our leadership on larger topics and also making the most of public comments and resources.

So to jump in, again, I'd like to

welcome our five new board members and express my thanks to the five board members that are going off.

It's very hard to believe that you five are only a year ahead of us because the leadership and mentorship you provided to my class was stunning and exceedingly helpful in helping us come -- get to know the board and know the board procedures.

Also, it's -- you know, I heard one commenter on the public comments talk about how we should always keep the meetings virtual so that more people can participate and we can save the -- our carbon footprint from a number of flights.

And I understand that and agree with that on a certain extent, but I also -- I think this meeting especially we're really starting to feel some of the board culture deficits and mostly just I think it is so important for board members to get to know each other on a personal level as well as on a professional level, and I think we'd like to have some esprit de corps on the board and really kind of know where everybody is coming from

and I think that happens very much when we have in-person meetings.

And the same as well for interactions of stakeholders. We have recognized that not all stakeholders can attend the in-person meeting.

But I think it's very important as well for us to interact in person because it does give context to all the work we're doing and how we can move organic forward.

So I'm hoping that by spring we might be able to meet in person. We'll see how that plays out and I hope especially that we can have an in-person meeting to train our new board members that are coming on that there's a lot to learn in a short period of time and that in-person training, I think, is immensely helpful. So we'll keep our fingers crossed. But I do want to thank the community for the participation we have even on a virtual meeting.

The next thing, I think, that I really struggle with on a number of materials that are bigger concept materials -- I'll just point out marine materials specifically -- but our

stakeholders and our -- and part of our mandate for the NOSB is to look at the bigger issues in organic and to provide some guidance as to how the program and organic in general should deal with some of these larger issues.

Yet, it's also immensely difficult on the board to deal with these larger issues partly because we only have two hours of calls a month and partly because these bigger issues are inherently divisive to the community.

There's a wide range of opinions of how we should deal with certain topics and, as such, it's very hard to come to consensus and it's very hard to find a middle ground. And so I think we really need to look at, as an organic community, how we can ask the board to deal with these larger issues, find some kind of middle ground, and not -- and accept that middle ground even though both sides might be unhappy.

I think we need to talk more about this because I've seen a number of these thorny issues come up and they get derailed by one side or the other not being happy with the outcome and I think

that's, certainly, the prerogative of our stakeholders to not be happy with the outcome.

I think polite debate is essential to how we move organic forward. But I also think we need to consider how we can take those more thorny and contentious issues and actually come to a resolution that as an organic community we can -- we can move them forward.

I also recognize the dilemma, and this is something I've realized more as I've been on the board, that when we pass something off to the program, especially on these bigger topics, when the program has to go through guidance or rulemaking that's a very difficult process, and I had not -- prior to this I had not realized the level of scrutiny that those rules get from economic inputs to legal inputs to effects on other agencies, et cetera, et cetera, and I think when we get to more divisive or difficult topics that we may not all totally agree on, it makes that rulemaking even more difficult.

So when we look at the stack of things that have not been implemented by the National

Organic Program, some of them truly are frustrating and yet others I look at and think how is it possible to make a rule on that when it's very likely to get the sense as we go to public comments during that rulemaking.

So I think that's something else we, as an organic community need to think about of how we can make some of these decisions on these bigger topics that really do govern the shape and the form of organic in this country while having to follow certain guidelines of rulemaking and coherence within the government.

Finally, I'd just like to say -- talk a little bit about making the most of comments and resources. We did have a number of comments about the overlap of strengthening organic enforcement and the NOSB comments.

You know, I just want to say that, certainly, was not intentional. The SOE comments were somewhat at the mercy of publication in the Federal Register and when things pop up it was unfortunate.

But I do want to thank Jenny for at least

trying to, before that was published in the Federal Register, putting the document out there on a webinar so that people could start to think about it before it was published.

But I do understand the time constraints and the bandwidth of our stakeholders and trying to reply to both of those documents at once, and it was an unfortunate coincidence.

But we appreciate all of you really working to make comments on both things, and I have to say a number of the comments this time for the NOSB docket were very compelling and stunning, and thank you for all your hard work.

And, finally, I just want to finish up. We did have several comments on the sanitizer panel being outside of the main meeting.

I'm not sure where those comments come from because in the past we have also done, for example, a discussion call on hydroponics that was outside the main meeting, and I think part of our judgment in moving that sanitizer panel to its own date was really so we could give that panel its due diligence.

If we put it in as part of these next three days then we feel time constraints in order to get through the whole docket whereas putting it on its own day really gives us more time to utilize those panelists and allow the board to query and ask questions and debate and make the most of those three people's time.

So I hope everybody can attend that sanitizer panel. I'm really looking forward to it. We have had a number of people over time and many, many comments saying we need to take a cohesive look at sanitizes in general and that's a very difficult task that I hope the sanitizer panel will start us down that road.

One last thing. In terms of virtual meeting and in terms of how the board will vote, on our first vote we are going to go alphabetically just to keep things straight.

So on the first vote we will start will Sue Baird and go alphabetically through the board. On the second vote, we will start with Asa Bradman.

We'll move one alphabetical letter down

and continue moving one person down each time we vote so that a new person starts the vote each time.

And I will call the vote. I will call people's names off and they will have to give an oral vote yes, no, abstain, refuse.

Also, in terms of kind of the run of the meeting because I'm the one that can see people raise their hands, once we get to a discussion part of each topic, I will call on people in order that I see the raised hands to have the board discussion.

If I can't see somebody's hand I'd urge that board member to jump in, at least let me know that you are wanting to give a comment. So with that, are there any questions from the board? And you will have to say them orally because I can't see the raised hands function at this point.

(No response.)

CHAIRMAN ELA: All right. Well, thank you again for the board to make this time and, again, for all the time you have put in before this on phone calls and discussions.

This last -- the spring meeting we did have just one vote and that turned out to be -- send something back to the subcommittee. This is a much different meeting in terms of the number of votes. I think last we counted there were 50-some votes.

So it will keep us on our toes, it will keep us awake, and I hope we can have some fun at the same time while we go into some deep discussion.

With that, I would like to hand the mic back off to Deputy Administrator Jenny Tucker, who will give the NOP report and introduce some other people as well.

So, Jenny, please go ahead.

DR. TUCKER: Thank you, Steve, so, so much and thank you for that very, very thoughtful statement. I have genuinely appreciated our ability to talk instructively and candidly about these issues.

So thank you for your ongoing work to build that partnership and that collaborative relationship between the program and the board. So a sincere thank you.

My update here will be actually quite short. There is a recorded update in the Learning Center that is quite a bit longer and gives you the full range of what's happening with the program.

But I wanted to give a lot of time and space for other voices here today. So I'm going to kick us off with a few slides and updates, and then I'm going to turn it to Betsy Rakola for a compliance and enforcement update. And then we're going to pause for some questions from the board and then we will turn to our guests, and I'll come back and introduce our guests when we get there. So it's a little bit of a roadmap for the next half hour, hour or so. And so next slide, Devon.

And so teaser, if you have not been in the Organic Integrity Learning Center recently you can now self-enroll. So you can sign up for your own account in the Learning Center.

It is, indeed, free and there is also a mechanism that if you have lost your password you can recover your password. If you go to the course called NOP Presentations you will see the

NOP update, and as we did in the spring different NOP team members are presenting on each topic.

It's somewhere between 35 and 40 minutes or so. So if you haven't had a chance to look at that before the meeting, please go ahead and do, though that's a longer presentation here today.

So next. I wanted to say a word about, again, the unique circumstances that we find ourselves in and I wanted to emphasize again that organic control systems are remaining resilient and strong, clearly, shifting dynamics over time as the situation unfolds.

But I wanted to acknowledge all the work that is continuing to happen out there in the world. And so the upper right picture here is CCPB in Italy, and so they apparently are back in the office with masks on.

And I love the fact that the adverse action process map is on the wall behind them and so that helps make sure that we take adverse actions in a way that respects due process while also ensuring fair fast enforcement.

So thanks to them for sending us that picture with Exhibit A in the background. And we do have inspections that are continuing on the ground. Certifiers have found a number of ways to continue to ensure compliance throughout this period.

So I want to say a huge shout-out and thank you to all the certifiers and to all the certified organic operations out there who are continuing to protect organic integrity during these times.

Next slide. All right. I would like to now give an update on origin of livestock, and so here's where we are with origin of livestock. This has been a longstanding area of interest and of controversy for the organic industry, and I want to say this continues to be a program priority. Continues to be a program priority.

There is broad support for a final rule in the organic community and the topic involves a complex set of variables and legal questions. Public comments over the time have also shown that there are different perspectives and

interdependencies between specific rule provisions.

And so (audio interference) and the organic community had been expecting a final rule this summer, as had we, and we have felt very confident that we could meet those expectations. And so when we met in the spring, I told you that the rule was in legal review at that time.

So as we drafted the final rule and the final rule went into review, specific legal questions and complexities became clear and the review of the final rule raised some concerns that could jeopardize the agency's position. And so USDA needs to address those legal questions and concerns in a way that will truly address industry goals for the long term.

After many, many years of working on this rule, we all want the same thing: an enforceable rule that will stand up in court. Lawsuits are a reality that we must consider, and so any final rule must be developed in a way that is consistent with the law. So we have considered a number of options and have decided to develop

a second proposed rule for public comment. A second proposed rule for public comment.

This will allow us to propose specific provisions that we believe, based on agency experience, will make the rule more enforceable and that will provide the -- will allow the public to provide input on changes that have been thought of since the 2015 proposed rule.

And so here are three examples of issues that have arisen since the proposed rule comment period in 2015 and the reopening of the comment period in 2019.

One relates to the regulatory unit, and so the 2015 proposed rule proposed the regulatory entity or unit be at the person level. But this is really inconsistent with how the other NOP organic certification requirements work, which are at an operation level. And so that was going to make enforcement more complicated and not consistent with other scopes.

Another complex issue has to do with animal movement, so regulating the movement of transitioned cows, and then a final issue relates

to whether the regulation falls within the authority provided in the Organic Foods Production Act.

So those are the issues that have come up during this period. So based on these issues, we are writing a second proposed rule right now, okay, and USDA has strong support for that path.

Once written, the rule will, again, enter USDA clearance. Again, it begins with a review by the Office of General Counsel. I can't right now commit to a specific time frame. However, this, alongside strengthening organic enforcement, continues to be one of our highest priorities.

So, Devon, next slide.

I want to give a sneak preview of our FY 2021 goals. We go into more depth in our recorded presentation. We just started a new fiscal year here in the federal government and so we have just started fiscal year 2021, and so our goals remain consistent with past years.

We have reoriented them a bit. Previously, strong organic control systems and

supply chain traceability were two separate goals. We have made such progress in those areas that those goals are now pretty much indistinguishable.

And so our four goals are strong organic control systems, robust enforcement, developing the standards, and engaging partners and stakeholders.

So in the first, on strong organic control systems, accreditation oversight, import certificates or fee priorities, compliance and enforcement, Betsy's going to be talking about robust enforcement, the work we have been doing on berry imports.

I'm thinking a more tiered approach to complaint management. With respect to standards, strengthening organic enforcement, origin of livestock, and the ongoing conversation about list three and four are important elements of that goal.

And then finally, engaging partners and stakeholders, training and engagement continue to be key priorities for the program. And so with that, I'm going to now turn it over to Betsy Rakola

for a more in-depth look at compliance and enforcement topics and then we're going to open it to questions for the board.

MS. RAKOLA: Thanks. Let me start my presentation here. All right.

Good afternoon, everyone, and thank you to all of our board members on the NOSB for your time today. Just so that I know, can everyone see my slides and are you only seeing my slide? Yes. Okay. Great. Thank you.

So my name is Betsy Rakola and I direct the NOP's compliance and enforcement division. I am in my tenth year with the NOP and today I'll share some highlights from our recent work as well as a preview of our work plan for the upcoming year.

So I've highlighted three areas here that broadly define our compliance and enforcement work. We partner with other federal agencies. We surveille or monitor high-risk sectors and we investigate complaints, the more traditional activities that people may think of.

These high-level goals translated into four specific goals for fiscal year 2021 related

to partnership, import supply chains, livestock compliance, and complaints operations. I'll review each of these areas in turn and in more detail over the next few minutes.

Our first goal is to partner with other enforcement agencies. One of the NOP's most vital partners is the Office of the Inspector General, which is the criminal law enforcement arm of the USDA.

OIG agents work closely with federal prosecutors at the Department of Justice on high-profile cases. Our partnership with criminal agents is critical because bad actors will always find a way around the rules.

But thanks to our collaborative investigations, we have had a major impact in stopping fraud. As you may have read in the media articles shown here, domestic grain fraud has been a significant theme of criminal organic investigations during recent years.

In 2019, the U.S. Attorney publicized guilty pleas from five different individuals. The fraud charges involved over $140 million in grain

fraud and the penalties for these serious crimes included multi-million-dollar fines as well as prison time. This widely publicized investigation is still ongoing.

As you can see in the article shown here, in February 2020 a South Dakota man was also arrested on organic fraud charges, in this case totaling about $75 million. The NOP had revoked this business's organic certificate several years earlier.

Further information on these ongoing investigations is kept private until the defendants have exercised their right to fair treatment through the judicial system.

Confidentiality requirements are often stricter for criminal investigations than they are for civil proceedings, and these protections are necessary to protect everyone's constitutional right to due process.

The NOP and the OIG have sought ways to build each other's capacity for conducting specialized organic fraud investigations. The photos shown here is from one of several joint

training activities which deepened this partnership.

In 2019, the NOP delivered a multi-day training for many OIG agents and in 2020 the OIG agents then trained our certifiers. Each arrest that is made in these high-profile cases serve as an important deterrent to these bad actors.

The NOP also partners with numerous other federal agencies both within and beyond the Department of Agriculture. The slide here shows a short list of our key partners, each of whom collaborates with us on unique compliance issues. It's these many hands that make our enforcement work a success.

I want to shift now to our second goal on import surveillance. Thanks to the addition of Ph.D. economists to the NOP team, risk-based surveillance of organic imports is now a regular part of our core work.

We have committed to conducting at least three region-focused surveillance actions over the coming year where we (audio interference) to evaluate their organic integrity.

Import surveillance involves analyses of long and complex supply chains. This graphic shows a potential shipping path for a vessel of grain originating in the Black Sea region, passing through Turkey, and finally traveling all the way to the U.S. Pacific Northwest.

The NOP uses a number of different data tools and market experts to identify indicators of fraud. We use these indicators to identify key suppliers independent of the complaints process.

Our surveillance work is informed by trade data to ensure that NOP is analyzing suppliers who have a notable impact on the U.S. markets. When selecting complex supply chains for review, we must make sure that we are using our resources widely. Over the last few years, we have transformed data analysis from a new initiative to a standardized tool for evaluating organic production.

If we see sudden changes, such as the chart here showing steep increases of soybean imports from India, we use those indicators to open new surveillance activity.

Through close cooperation with our trading partners this summer, the NOP was able to identify and stop imports of nonorganic soybeans from India in just a matter of weeks. This is another example where many hands strengthened organic integrity and those investigations are ongoing.

Another critical data tool is yield analysis. The NOP is using crop yields and agronomic data to evaluate a key question: were there were enough organic acres to grow what a given farm sold as organic?

This is a seemingly simple question but it's a complex one to answer, and this type of evaluation is critical to validating organic harvest abroad as well as here at home.

Now I'd like to shift to our third goal on livestock compliance. NOP is expanding what was formerly known as our Pasture Surveillance Program to encompass more of the livestock supply chain.

This is another new initiative that has become part of our core operational work. We will

continue our boots-on-the-ground program over the coming year and we will also complement those onsite observations with new technology tools such as aerial imagery.

So what is our livestock organic compliance program? Since 2018, the NOP has conducted unannounced onsite visits to organic dairies and livestock operations. The main goal has been to evaluate compliance with the organic pasture and grazing standard.

In the coming year we expect to review more live cattle sales facilities to ensure organic integrity. This program uses highly trained federal livestock auditors and a range of risk-based selection criteria to give the NOP a snapshot of organic dairy compliance all across the country.

Our 2019 livestock compliance program covered the states highlighted in green on the map that you see here. We found most dairies to be in compliance and all dairies we visited were grazing at or above the 120-day minimum requirement for grazing on pasture.

Where we found evidence of noncompliance we took action. This resulted in noncompliance for certifiers, surrenders of certification by two dairies, a proposed suspension to another dairy, and a settlement agreement with one certifier.

Our surveillance activities did confirm some inconsistencies. So the NOP has launched a robust dairy compliance training in our online Learning Center. We expect that every certifier who oversees dairies will complete that training.

We are currently nearing the end of our 2020 surveillance season, which we kicked off with a multi-day training in the state of California just before the stay-at-home orders took effect.

The photo at the bottom of this slide shows our training procedures on site. We have been fortunate to be able to continue these on-the-ground visits.

As you can see from the photo on the top, our auditors are taking appropriate safety

precautions. As I mentioned before, livestock sales activity is an increasing concern and this is another area where NOP is partnering with other federal agencies.

Our main policy focus for surveillance this year was assessing temporary confinement of ruminant dairy cows to ensure compliance with the regulation.

This is an area where some certifies were allowing flexibility or management practices that were not practices allowed by the organic regulations. Certifiers are receiving noncompliances for these approvals because allowing noncompliant practices results in unfair competition. We are working to restore a level playing field for all organic dairies.

Finally, I want to share an update on our fourth goal regarding our complaints and inquiries work, which is the bread and butter of compliance and enforcement.

Our goals here relate to timely investigations where we have committed to closing 75 percent of new complaints and inquiries within

one year of receipt.

Complaints to the NOP continue to provide critical insights into market actors and we continue to review each complaint that is submitted to determine the best course of action.

The NOP has invested heavily in reducing our complaints backlog and I am proud of our progress on fast fair enforcement. Over the last two years we reduced our open case load by one-third and we also reduced our backlog of older complaints by two-thirds.

Again, thanks to funding from the most recent farm bill, we have been able to hire additional staff to close simple complaints quickly while still investing in those complex investigations that take more time.

This slide shows a snapshot of our complaints and our inquiries. As the market grows, so too does the volume of our incoming complaints.

So viewing these complaints through a risk-based lens is critical to our success. We are able to resolve 40 percent of our 750 incoming

complaints and inquiries just by providing educational information to our customers.

This is a big shift that has saved us from investigating businesses that show no evidence of noncompliant behavior. It also gives us the opportunity to educate consumers about organic labels as well as resources like the organic integrity database.

For the remaining 60 percent of complaints, we open a traditional investigation to find out whether someone broke the organic rules. I'm pleased to say that three out of four cases end with voluntary compliance or with a finding that no one did break the organic rule.

As you may have seen in this pie chart from our quarterly enforcement dashboard, most of our investigations end when farms and businesses comply with the organic rule. Compliance is our goal and when the NOP communicates with farms and businesses, most of them do the right thing.

Many investigations also conclude that while the initial allegations did raise concerns, the final evidence did not show any violations of

the organic rule.

While sometimes the investigations help us to verify compliance by certified operations, we try to minimize time spent investigating complaints with no violations.

Our other typical closing actions include various administrative actions such as written warnings or complaints for hearing with an administrative law judge, as well as the other outcomes you see listed here.

We continue to rely on the California state organic program and our foreign trading partners to investigate complaints in their geographic areas.

When we have the evidence to support enforcement actions, we use a variety of tools to levy penalties, establish settlement agreements, and in rare cases refer bad actors for criminal investigation.

This figure shows the investigative trends at the NOP over the last 10 years. In 2017, NOP began applying that risk-based approach that I mentioned to separate our incoming inquiries from

substantiated complaints.

This has sped up our investigative work on cases that have a larger impact and has also created the space for those kinds of data-driven surveillance work I mentioned earlier in this presentation.

Again, with the additional resources provided by the most recent farm bill, we are now resolving more complaints than we receive each year.

The pie chart here sheds a little light on those inquiries that the NOP did not accept for investigation. Many of those inquiries are just questions.

A common example would be a complaint where a person thinks that a product is noncompliant because it says organic but doesn't display that USDA seal. We resolve those sorts of complaints with educational information about what is required versus optional on organic labels.

In rare cases our customers do respond to us with additional evidence to explain that original inquiry. When that happens, if we can

then substantiate that inquiry we will open an investigation and instead treat the inquiry as a traditional complaint.

The final thing I'd like to share with you today is the launch of our online complaint filing form. Complaints from consumers, competitors, and certifiers will always provide vital information to the NOP and we want to make the complaint filing process clear and as easy as possible.

Last winter, we launched an online complaint filing form, which has been a big success. While this online form has streamlined the process for both the NOP and our customers, I want to assure everyone that we will always accept complaints by email, phone, or postal mail. Our goal is to remain transparent and accessible to our stakeholders.

So that is the end of my presentation. It's always a pleasure to have an opportunity to spend time with the NOSB. And with that, I will turn it back to Chairperson Steve Ela to facilitate the next item on the agenda.

CHAIRMAN ELA: Thank you very much, Betsy. I do appreciate it, and it's always -- it's fascinating to see what you're doing for enforcement.

So we appreciate your efforts because I know -- I don't know how many times we heard about this in the -- you know, in the -- when I first came on the board about what we needed to do for enforcement.

So with that, I will open it up to the board to ask questions of Jenny or Betsy. Do people have questions? If you do, go ahead and raise your hand. I think I have -- I have vision again.

So, Emily, please go ahead.

MS. OAKLEY: Thanks, Steve. This is a question for Jenny regarding the survey results from ACA, Organic Farmers Association and the National Organic Coalition, regarding differing interpretations and application of the three-year transition period in greenhouses, hydroponics, and poultry operations, and I think the results kind of gave us some of the data that we had at least

received anecdotally through public comments in the past and gave us some numbers to show where there is inconsistency.

And I know that the NOP already said that they would be taking this up and looking at it but is there a specific way that the NOSB can help further this topic and, particularly, getting consistency and interpretation of that three-year transition period. So thank you.

DR. TUCKER: Thank you very much, Emily. It's good to see you, and Steve, good to see you on camera now. Glad you were able to add the visual to the audio visual there.

So I want to thank everybody who participated in the survey and the group that put the survey together, and so I know that anytime you're doing something like that and trying to get responses from all those certifiers it's a heavy lift. So a big thank you to the -- to the groups that spearheaded that and made it happen.

And so I think it also -- for me, it was a really good reminder of what a nice partnership has been built over time between these

organizations. We meet very regularly now with the Accredited Certifiers Association.

We have had a lot of great conversations about areas where inconsistency site-specific conditions, that it can be hard to kind of parse out what is a topic of site-specific conditions versus what is an overarching inconsistency.

So we very much value the survey. I appreciate everyone who participated in that and we'll review that carefully.

At this point in the game, we know that, you know, hydroponics and containers and greenhouses they're all very much connected. There is a lawsuit underway right now related to hydroponics and so while that is in the court system we're going to see what happens with that.

And so once that makes its way through the court system, so a part of the NOP -- civics of NOP as the judicial branch has an important role to play in judging and shaping, sometimes, policy, and so we're going to let that play out and then that will help guide next steps and how -- what that looks like for the program for certifiers and

with the board.

So thanks for the question.

MS. OAKLEY: Can we do a quick follow-up?

CHAIRMAN ELA: Yes.

MS. OAKLEY: I definitely appreciate and understand the program restraints with regards to hydroponics and even some greenhouse areas where there, you know, might be -- it might be open to interpretation as to hydroponics, as to containers, et cetera.

However, the survey did point out inconsistencies in areas unrelated to that like, you know, growing and a greenhouse or a hoop house in the ground or the poultry example, I think, is a pretty big one.

I definitely live in poultry country and have seen some of these things as well. So I was wondering if there might be room to work on some of these less controversial or potentially litigated areas now before that litigation process goes through because that could take a long time and some of these areas could, potentially, get

clarity sooner.

DR. TUCKER: I'm open to those ideas. We'd like to take a bit more time with the survey and so that's a fairly recent deliverable and so we'd like to review that.

And I believe that the work agenda process with the board has been working really, really nicely in the past few years in terms of the sort of framing out what is the advice that we are seeking related to the standards.

And so that has been a collaborative process, I believe, with the board and I could certainly see that process playing out here. We need a bit more time to review the results of the survey.

CHAIRMAN ELA: Are there other questions from the board?

(No response.)

CHAIRMAN ELA: I have one myself for Betsy and, I guess, you as well, Jenny. What -- in terms of enforcement, I know the CACS subcommittee spent quite a bit of time under Scott's leadership when I first came on the board

about dealing with enforcement and that was especially at the height when we were hearing about ships coming in to port and lots of imports and such.

Is there anything -- what can the NOSB do to support you or, I mean, is this pretty much a program level thing at this point where the NOSB has passed on some of those things to you or there are things that the NOSB needs to do to continue to support you in that enforcement?

DR. TUCKER: Yeah, I'll respond first. Then if Betsy wants to jump in.

I think the work that the board did in response to the imports agenda item a few years ago, we had asked the board to consider import oversight as an agenda item.

That led to a very insightful panel and discussion document, which I think did inform strengthening organic enforcement as that unfolded.

So a lot of enforcement really does have to happen within sort of the federal family, so to speak. So there are many hands within the

federal government that are supporting that effort.

But a lot of it does stay kind of behind the curtain. So I think that strengthening organic enforcement will be a very significant initiative and there are going to be probably lots of questions that come from that and so the devil will be in the details with respect to certifier consistency, which we all value.

And so I have no doubt that that will lead to more conversations with the board, moving ahead. You know, our work is never done here.

Our work is never done, and so there will continue to be bad guys who will continue to find ways to try and cheat the system and we will continue to find ways to protect the farmers playing by the rules. And so this will continue to be a work in progress and the board is an important part of that conversation.

Betsy, anything you want to add?

MS. RAKOLA: No, I'd just say sort of previewing what you'll be hearing shortly from Lea Bigelow from Customs and Border Protection, we are

doing a lot of work within the federal family and that is an area where by having these new partnerships we have been able to explore and develop a lot of new tools.

The more we partner and the more serious the issues get, the more they are held confidential and so that does sort of challenge the ability to collaborate with the NOSB on some of these issues.

But I have enjoyed seeing how rapidly the work has evolved and how rapidly new opportunities and solutions have come available the more that we continue to partner with other federal agencies on these extraordinarily complex import oversight topics.

CHAIRMAN ELA: Thank you very much.

Looks like Scott has a question.

MR. RICE: Thanks to both of you for those presentations. I wanted to circle back to you, Jenny, on the Organic Integrity Learning Center.

I think there's been a lot of great work done on that, clearly, and in reviewing all the

comments for the Human Capital document, which we'll get to a little later, a lot of folks pointed to the Learning Center as a great resource.

Among those comments, folks were interested in seeing that be a resource not just limited to the certification community but to potentially universities or technical colleges, kind of giving folks an idea of what certification looks like as a potential career and I want to just clarify access to that and also acknowledge that there are some things that are probably better suited not open to everyone.

I know that's kind of hard sometimes when you're generating content of public dollars. But just wanted to clarify who's able to access that.

DR. TUCKER: Yeah, what a great question. I appreciate that, Scott.

The Organic Integrity Learning Center has -- it's still kind of young, right. We're in our second year of it and I think there are a lot of possibilities for the future that blend well with the Human Capital Initiative that we just

haven't explored yet.

So right now, anyone can get an account on the Organic Integrity Learning Center and anyone can access any course with one exception. That we did serve as a pilot test we have established a special course for NOP auditors that only NOP is allowed to view.

You know, originally, when we set up the Learning Center we did contemplate a kind of a different audience kind of segmentation where there would be courses that only certifiers can take, and we may go there. We may end up having specific courses that only certification staff or inspectors can take.

There are lots of logistics on how to go about doing that. I also think there is a role for pointing to other resources and highlighting potential career paths through the Learning Center.

So that was something that we had envisioned early on that we just haven't done yet and we just haven't gotten there yet. Could we have a process for reviewing external content and

then having it be kind of a placeholder in our learning management system that then points to another resource but, essentially, says we support this training.

Now, there are all sorts of criteria and processes that would have to go into that. But I think as we think about career paths and learning paths within colleges and universities, how do we build those partnerships not only person to person but system to system.

We had just launched a couple of food fraud, organic fraud, courses that were done in cooperative agreement. A university system contributed to those courses.

So I think that's a very early example of how this could play out. There's a lot of online learning that's happening around the world right now and we're all learning a lot in unique time.

So I'm excited about, Scott, where that could go and I don't consider anything off the table in how we -- how we think about it with respect to both becoming part of a larger ecosystem of learning but also thinking are there going to be

times where we really need to deliver to a very specialized audience.

And we're going to restrict access to courses based on that, and I do think that that's allowed as long as we explain why certain groups are allowed and certain groups aren't.

MR. RICE: Great. Yeah. Thank you. I think it's that sensitivity to and perhaps that's the motive about sort of limiting the accreditation audit side of it and had some conversations about, you know, laying out the path to fraud in showing how we investigate, for instance, and just be mindful.

DR. TUCKER: Yeah, that's sort of the downside of openness and transparency. I think this is going to continue to be a tension in this community and it's one that we might as well get out on the table and really talk about is openness and transparency are absolute core values in organic and we support those, and we got some bad guys out there who are more than happy to learn from our openness and transparency. And so that becomes, I think, is what makes organics so

interesting and vibrant over time.

MR. RICE: Great. Thank you.

CHAIRMAN ELA: Yeah, thank you, Jenny. It looks like Jesse has a question for you.

MR. BUIE: Yeah, and this is kind of for Betsy. During your inspections, have you found much noncompliance in the acreage versus yield production? And I'm -- I hope I'm pronouncing that right, the acreage versus the year production rate.

MS. RAKOLA: Yeah, we have found some troubling concerns there and I think that we have seen certifiers respond nicely over the last couple of years to start to pay some more attention to the quantitative aspects of certification, which I'm helping my seven-year-old with math right now and I think yield analysis to them feels like New Math feels to me.

But I think folks have really invested a lot in it and we have been also trying to figure out, you know, how do we make these tools simpler, can we make something that is replicable.

I know a question we have gotten

frequently is, do I have to do this for absolutely everyone I certify. We're all trying to make sure that certification can be timely and cost effective.

And so, again, there's sort of that balancing act of, you know, risk-based analysis, risk-based certification decision making, making sure that we're appropriately thorough to the complexity of the size, the impact of the farm, while also wanting to make timely decisions.

So I think all of that is moving in the right direction. When we did first start taking a look at these -- some of these numbers, some of them were a little bit alarming.

There was just simply no way that the harvest numbers we were seeing were possible on the acreage we were able to identify and may have been a little bit of a supportive bias saying, you know, organic farmers have been innovative and have produced great yields.

That is true, and we still need to make sure that we're reality checking just what a particular acre can produce, what we have seen in

a specific region, and for certifiers that are really spreading their geographic reach or spreading across a lot of crops, we also need to make sure certifiers are asking good questions about do I have the capacity to understand this region, do I truly understand what is normal in this state, in this country, do I have the level of familiarity I need to be able to sort of compare -- you know, kind of come up out of the organic system and look, you know, left and right and make sure that the numbers we're seeing for organic harvests make sense.

So, again, I think things are moving in the right direction and we did -- we did find some problems when we first started this work.

MR. BUIE: Thank you.

CHAIRMAN ELA: Betsy, could I actually follow up on that? I know for ourselves, and I'm in specialty crops. I don't know how it works in the major commodity crops.

But, for example, with crop insurance we have to turn in our yields annually and they are quite specific on the records to document that.

While that's not organic per se, you know, we do at this point have to say whether it's organic production.

But is there a way to -- well, and also, you know, what we found in this area is the county averages are pretty easy to beat if you're -- if you're an astute grower. So, I mean, we probably doubled that at times or occasionally even tripled it.

But is there a way to link at least some of that -- those crop insurance numbers for -- at least for a county to be able to get kind of a realistic sense of what's possible and then identify or flag those that go well above that?

MS. RAKOLA: Yeah, I think those are kind of exactly the kinds of questions we are continuing to ask as we look at all of the available data sources and try to make sure that we're selecting the right ones, and then also applying what do we know, what does the research say, are there particular crops where the organic systems are historically out--performing conventional versus things like our field crops where there may

be sort of statistically a yield drag on a global scale.

And so that's why I rely on my Ph.D. economists to ask and answer those tough questions. We are doing a lot of communicating with the various different data agencies that we have here in the United States, and then if we're looking at some of these questions overseas we're working a lot through our agricultural attaches that are part of USDA at our embassies all over the world and making sure that we are finding best available data in those countries as well.

And we're not stopping with the data. We are also trying to work with those market experts that I had mentioned to say, all right, here's what the numbers tell us. Did we get it right or did we get it wrong; what would you say from your knowledge on the ground.

So it's really an iterative learning process. We are oftentimes simply asking the question and, in response, seeing the farm surrender its certification. So the questions themselves can be very powerful.

CHAIRMAN ELA: Looks like Rick has a question.

MR. GREENWOOD: A quick question for you, Betsy.

Sometimes law enforcement is used as a tool between competitors, and I was just curious does that ever happen in the organic industry where someone puts in a complaint about a competitor? Have you run into any of those kinds of issues?

MS. RAKOLA: Sure. I think it's human nature. That is certainly something that we see from time to time. So it's sort of a double-edged sword.

Often, your competitors will have a unique perspective that we, sitting in the National Organic Program offices couldn't see, and we need to make sure that we are evaluating the interests of the person who is filing that complaint and what objective they may be trying to achieve.

So for us, it is all about the evidence. So we will take a look at the evidence. If the evidence does show noncompliance and does show concern, then we would enforce.

If the evidence mostly shows a competitive self-interest and no evidence of noncompliance, then we would not take action. So we try to view everything through as neutral a lens as we can and make sure that we're putting everything in context before we would take any enforcement action.

That's a good question, I think.

CHAIRMAN ELA: Are there any other questions for the board?

(No response.)

CHAIRMAN ELA: I'm not seeing any further questions. So thank you so much, Betsy. It's always fascinating to hear this -- your side of things and I think, as you said, your Ph.D. economists.

The data trail is pretty stunning how you worked through that. I'm glad I don't have to sit in that cubicle and figure all that out.

But with that, Jenny, I'm going to turn it back to you and you can go on with your introduction. So but thank you to both of you for being open to questions.

DR. TUCKER: I want to thank Betsy very, very much for being with us today. This is sort of one of the benefits of a virtual meeting is we can invite all these people to come and talk. So, Betsy, thank you for being with us today.

MS. RAKOLA: My pleasure.

DR. TUCKER: And so our next speaker is Lea-Ann Bigelow, and I'd like to share -- before I share Lea-Ann's bio, I want to tell you why you need to know about Lea-Ann, why Lea-Ann is so important to everything that we're doing right now when it comes to import oversight. So let me tell you a little bit about Lea-Ann.

She -- we have really gotten to know here through our monthly meetings of our Organic Interagency Working Group, and so the farm bill required the standup of the Organic Interagency Working Group.

We have been meeting monthly now for way more than a year, and Lea-Ann is the representative from CBP, leadership representative from CBP, and many of her staff also attend the meeting.

But she's a real critical partner with us on everything that we're doing in that CBP relationship. So I wanted to make sure you knew why Lea-Ann is important before I tell you more about her.

And so Lea-Ann is a recognized sort of strategy and operations expert. She has lots of experience in innovation, coalition building and leadership in both the federal and the private sector.

So right now, she leads CBP's very broad mission to collaborate with more than 50 federal agencies who are involved in cross-border trade, and so she's very much involved with state, local, foreign governments (audio interference) other global trade partners working on topics in trade policy, trade-facilitating technology, and trade security and enforcement.

And so she leads three major operating branches within Customs and Border Protection. One is One U.S. Government at the Border, affectionately called 1USG, so One U.S. Government, Quota and Agriculture, and the

Commercial Targeting and Analysis Center, which is an interagency fusion center that works to reduce illicit trade in unsafe products to protect health and safety of consumers while also expediting the flow of compliant international trade and the entry of imported products that meet U.S. standards, and in fact, we now have a staff member who is very much engaged with CTAC thanks to Lea-Ann's bridge work there.

So in her current role, she also administers the Border Interagency Executive Council, a very, very important forum where different government agencies all come together to coordinate on issues related to customs, transport security, health and safety, sanitary requirements, conservation, trade, all sorts of agencies with border authority and responsibilities to measurably improve supply chain processes.

So Lea-Ann is at the center of a whole lot of activity at CBP and has just been a wonderful partner. She oversees right now all the agency technology enhancements to the automated

commercial environment.

We have talked about that a lot in these meetings, the ACE environment, that is the sort of system of record by which electronics, trade, and financial transactions are overseen by CBP and that's where the organic import certificate lives. And so tying all that together.

I'm going to now turn it over to Lea-Ann to give us her perspective.

Lea-Ann, so grateful to have you with us here today. I know how busy you are. So thank you for being part of our journey here.

MS. BIGELOW: Oh, gosh. Thank you. Thank you, Dr. Tucker, and incredible to hear you say how busy we are. I know how busy you are. I think it's mutual.

Can everyone here me? Good. Okay.

So I'm presenting from a very small screen so I have my notes on the same page as the Zoom meeting where it's a little tricky to balance.

But esteemed representatives of the NOSB, good afternoon. Before I begin, please let me say how grateful I am for the opportunity to

speak to you today about U.S. Customs and Border Protection's commitment to strengthening organic imports and strengthening the enforcement of organic imports.

I also want to thank you for your work, your work, the board's work, in helping to develop and uphold strong, sound, and sustainable U.S. organic standards on behalf of global producers and consumers.

Last but not least, I must echo and share appreciation for Dr. Tucker and her team in the National Organics Program. It's been a sheer delight partnering with Jenny, Betsy, and Jonathan and the entire team to advance the current NOP rulemaking import certification and bring to fruition the organic agriculture mandates of the 2018 farm bill.

They're one of the most dynamic forward-leaning can-do teams I have the pleasure to work with. So thank you very much, Jenny.

And as a proud member of the interagency working group on organic imports, as Jenny mentioned, I know full well the actions we are

taking to modernize organic trade processes to ensure full traceability and tracking of imports and account for the increasing complexity of the organic supply chain are critical ensuring the continued growth of the organic sector. They're critical to ensuring the safety of consumers and protecting the integrity of the USDA organic seal.

In the time I have with you today, I'd like to cover a few things: some background on why organic agriculture is a trade priority for U.S. Customs and Border Protection, a glimpse, very quick glimpse, into the U.S. Customs operational ecosystem, and give you a sense of the progress we have made as a result of the interagency working group on organics imports.

Toward the end of my presentation, I'll also make some specific asks of the NOSB and we would dearly like your help in the coming months and years. I think there are ways that we can support one another.

I also want to recognize something that Betsy had mentioned right off the bat, that while CBP, like NOP and NOSB, is committed to full

transparency and openness regarding U.S. government standards and rules and requirements at import, we pride ourselves on our extensive public/private sector, engagement mechanisms, and the outreach and education we provide to trade to foster informed compliance with U.S. import and export rules.

But CBP is also a law enforcement agency and some of our methods in strengthening organic enforcement will and must remain protected as law enforcement is sensitive.

This may pertain to what I'm able to share with you in response to questions you may have and may shape future presentations to the board.

You see, I am already -- I'm already asking to come back and share more information with you over the coming years.

So next slide, please.

So why is organic agriculture a big deal for Customs, for U.S. Customs, and why did it come to be a priority?

A little background. The Trade

Facilitation and Trade Enforcement Act of 2015, as we like to know it TFTEA, was signed into law in February 2016.

TFTEA was the first comprehensive authorization of U.S. Customs and Border Protection as an agency since the Department of Homeland Security was created in 2003.

The overall objective of TFTEA is to ensure a fair and competitive trade environment. We're all interested in that. Thanks in part to TFTEA, CBP has since embraced a renewed approach to trade facilitation and enforcement.

This includes seven priority trade issues, or PTIs. PTIs represent the highest risk areas that can cause significant revenue loss, harm the U.S. economy, or threaten the health and safety of American people.

These seven PTIs, priority trade issues, of which agriculture is one drive risk-informed investment in CBP resources and enforcement and facilitation efforts including but not exclusive to the selection of audit candidates, special enforcement operations, outreach, and

regulatory initiatives.

TFTEA did not prescribe or otherwise delineate why agriculture was included as a PTI. But the facts speak for themselves. As you all know, U.S. agriculture and related industries are a bedrock sector of the U.S. economy, employing one in ten of the U.S. population and contributing over a trillion, approximately 5 percent -- a trillion dollars to U.S. GDP and fiscal 2019 marked more than 52 successive years that U.S. agriculture has enjoyed a trade surplus, although the surplus fell to below 5 percent from double digits in prior years.

As you can see from the chart, agricultural imports to the U.S. and imports -- imports are the bread and butter of CBP's Office of Trade, totaled $131 billion in 2019.

Of all agricultural subsectors, and again, I'm not telling you anything you don't know, organics is the fastest growing, increasing in the double digits annually, and in fact, I believe Jenny shared with me previously that it accounts for nearly 5 percent of total U.S. food sales.

Is that right, Jenny?

So it's critical to U.S. -- the U.S. economy and it has a potential for significant economic impact and return for the U.S. and can help us even the trade playing field.

The 2018 farm bill requires that CBP and USDA AMS work in close concert on ensuring compliance of organics inputs.

Partnering with AMS and improving organic enforcement standards at the border plays extremely well to CBP's strengths, aligns with CBP's mission and is well received by key stakeholders for both of our agencies.

So no wonder it's one of our major priorities in 2021.

Next slide, please.

MS. ARSENAULT: Lea, you're muted.

MS. BIGELOW: Oh, sorry. I was just saying that 2020, with all of its challenges, has nevertheless been a very productive year for the CBP's partnership with USDA AMS organics program.

In April 2020, the AMS deployed an organics certification focused enhancement to the

automated commercial environment, or ACE, otherwise known as the single window for trade.

The ACE electronics certificate allows for automated processing of organics import certifications. Links back to AMS's organics registration system and supports that product integrity and traceability.

Also beginning in 2020 AMS began working in earnest with CBP on joint import monitoring, risk assessment, and enforcement via the Commercial Targeting and Analysis Center, CTAC.

CTAC is an interagency fusion center hosted by CBP. We don't run it. It is an interagency organization of 12 member agencies and growing, so AMS is in addition to those 12 existing members, and we work together. We're hosted by CBP but it is an interagency group.

The purpose of CTAC is to reduce illicit trade in unsafe products, protect the health and safety of U.S. consumers, whether people or animals, and expedite the flow of compliant international trade and the entry of imported

products that meet recognized U.S. government standards.

So it's the two sides of the coin, always looking to protect our borders from illicit dangerous goods. Meanwhile, we have to facilitate and, as always, a tricky balance but something that we are deeply sensitive to.

CBP will use AMS NOP's uniform national standards -- that's their published organic regulation -- the strengthening organic enforcement rule once it is final to regulate trade at the border and further improve enforcement of organic standards at the border.

CBP and NOP are collaborating on a phased implementation plan regarding the use of NOP import certificates to identify fraudulent imports and capture aggregate organic import data.

As I mentioned earlier, one of the mutual strengths of CBP and the National Organics Program is our commitment to transparency and providing the latest information to trade stakeholders in a timely fashion. Not always real time but as timely as possible so that decisions

can be made by the trade community.

In 2020, this has included informational announcements to trade through a wide variety of established channels, both those operated by the U.S. Department of Agriculture, Customs and Border Protection, and our interagency partners.

We have also delivered training webinars for major brokerages, trade brokerages, and CBP's federal advisory committee, the Commercial Customs Operations Advisory Committee, or the COAC.

We have provided advanced notice to importers and their representatives through CBP's various platforms including the trade bi-weekly ACE stakeholder meetings and a messaging system that sends automated messaging out to the millions of trade participants that use the automated commercial environment.

A critical step in strengthening organics compliance and enforcement will be to continue this outreach in education.

As Betsy noted in her presentation,

NOPs compliance program has a direct correlation between -- has seen a direct correlation between training, education, and awareness and a reduction in noncompliance.

So the more we can get the message out, train, increase that information flow and make sure that the stakeholders and the trade community understand their obligations when it comes to organics, the better our compliance rates will be. We'll always have the outlier (audio interference) the deliberate bad actors. But, overall, our compliance will grow.

Towards the end -- towards this end, CBP's agriculture trade priority issue has designated 2021 as the year of organics education and compliance with CBP and AMS working in collaboration to provide training and education to trade members, congressional representatives, CBP field officers, and CBP policy analysts regarding organic certification labeling requirements and more.

This gels well with the NOP's strategic goal of engagement and outreach for fiscal year

2021.

I'm going to pause there briefly.

Jenny, are there -- would there be any questions or any -- any questions in the chat box so far?

DR. TUCKER: No. We will hold until the end of your presentation for the board members to ask their questions. So keep on going. You're doing great.

MS. BIGELOW: Wonderful. Thank you.

It's always a little nerve wracking when you're the talking head and you can't necessarily see anybody else. But thank you.

DR. TUCKER: This is why I stayed in camera so you'd have somebody to talk to.

(Laughter.)

DR. TUCKER: It's always -- it's really nice to have another human being up on the screen responding to you. So keep going.

MS. BIGELOW: It is indeed.

Well, next slide, please.

In order to ensure that goods entering the United States meet all import requirements and

comply with U.S. standards and laws, imports must pass through what I like to call the two front lines of trade facilitation and enforcement.

One of our front lines is, as this picture would indicate, our physical inspection personnel, import specialists at our ports and Centers of Excellence, and CBP's agriculture specialists.

CBP is a field-based organization with 328 ports of entry and an operational presence in 52 countries. We have more than 1,700 employees working internationally.

CBP has, roughly, 25,000 CBP officers at our ports and a much smaller and still mighty corps of 2,500 agriculture specialists, our aggies.

Each year, CBP agriculture specialists intercept tens of thousands of actionable pests, those identified through scientific risk assessment and study as being dangerous to the health and safety of U.S. agricultural resources.

They're looking for hidden threats in truckloads and trainloads and containers of fresh

items that could seriously damage or threaten U.S. agriculture, our natural resources, and our economy.

I cannot overstress how critical the agricultural specialists are on our front -- that first front line. Extraordinary and terrific scientists as well. Some of the best entomologists we have in the United States are CBP agriculture specialists. Very proud of the work they do.

Now, if we could move to the next slide. I'm going to do a little bit of footwork here and go -- we'll go back to that previous slide again towards the end of the presentation.

So next slide, please.

The other front line for trade and imports is the automated commercial environment. So I think it was -- it was hinted at earlier by one of the board members that you've heard lots about ACE.

But, so hopefully, I'm not repeating anything. But I want to stress that this is truly a front line when it comes to monitoring and

enforcement of the imports coming to our country.

We cannot -- we simply cannot do it with our boots on the ground and the individuals at the ports. They are one important front line and this is the other.

The Automated Commercial Environment is the United States' single window for trade. It's the primary processing system through which the trade-related data required by all government agencies is submitted and processed, which means all import and export transactions for goods coming in and out of the U.S.

Calling the U.S. single window a second front line is certainly not meant to diminish the incredible, tireless, and oftentimes ingenious efforts of our women and men in field operations.

But it remains true that the volume of trade made it long ago impossible for us to process imports and exports manually. The volume, the sheer volume, necessitates state-of-the-art automated processing and monitoring capabilities.

Give you some statistics for a typical day of trade at CBP. Each day in 2019 CBP processed through its two front lines 78,000 truck, rail, and sea containers.

Nearly 100,000 entries of merchandise at our air, land, and seaports of entry were filed. $7.3 billion worth of products came in to our country every day, and we exacted $224 million in duties, taxes, and other fees.

On the flip side of the enforcement work, we actually seized $207,000 in undeclared or illicit currency and $4.3 million worth of products with intellectual property rights violations. That's per day.

We also intercepted 314 pests every day at U.S. ports of entry and 4,695 materials for quarantine, including plant, meat, animal byproducts, and soil. So a very busy daily regimen for everyone at CBP.

So I think you can see why this mandates strong and streamlined automation of which the National Organics Program has already begun to avail itself through its new message set

implemented this year.

Beyond its use as a real-time import monitoring and surveillance program, ACE also enables the big data import data analysis that Betsy referenced during her presentation enormous swarms of data coming through our system every day, and we store it and it's there for historical analysis.

ACE is the U.S. system of record for import data. Even the Census Bureau and the Bureau of Economic Analysis get their raw data from ACE and then they process it into our formal U.S. trade statistics.

So just a little bit more about ACE. I don't want to cover old ground, but I think just giving you a sense of how ACE works is important to the work of the Organics Program.

We have 49 different partner government agencies. In each of those that includes the U.S. Department of Agriculture. Each of those has a memorandum of understanding with Customs and Border Protection to enable the use of ACE and continual real-time data sharing around

importation data, and some agencies utilize export data as well. This allows for the paperless streamlined processes that benefit both government and industry.

The transition to ACE was actually enabled by an executive order in 2014. We have had an automated commercial system of some form or another for many decades.

But, really, the modern instance that we are using now that can do so many things and combine so many different partner government agencies' data needs that only came into play as a result of the executive order in 2014 and we pushed the final core implementation phase out in February of 2018.

So it's still a pretty recent development that we have this wonderful united single window for trade in the U.S.

So thinking forward -- if you wouldn't mind moving back to the previous slide -- so we're, clearly, always working on enhancements to ACE and need your help with that and thinking through how we can use automation, the tools available to us,

to further strengthen organic enforcement and make sure that the standards are being upheld internationally for U.S. imported organic foods.

That said, where we need your most urgent help over the next year, as I'd referred to before, we're very keen on doing outreach and engagement for 2021 and I think that the NOSB can help with doing that trade engagement and compliance work.

So if we can put the ask out to you, and I'd love your reaction to this, to join with us in helping to educate the larger organics community in the U.S. and globally about the importance of trade compliance and compliance with the new organic standards and the rule that is being finalized that will be enormously helpful and reduce noncompliance.

It would also be helpful to this end to have your support in developing a fact sheet. CBP often issues fact sheets to the trade community which provide a very brief, concise, and user friendly -- precise, concise, and user friendly lineup of all of the authorities and

requirements for a particular sector of imports.

We recently did a fact sheet, for instance, on cut flowers, of what are the many requirements to send in cut flowers, including organic cut flowers, to the United States.

It would be wonderful if we could develop something similar for organic so that our staff within CBP and all those in the trade community can refer to this publicly--facing document.

We would also like to invite you to be available for joint stakeholder training of the trade community and to provide potential leads of organizations and stakeholders that you think would stand -- could benefit from additional outreach and training over the next years or so.

So with that, Jenny, I would like to stop there and see if there are any questions.

DR. TUCKER: Lea-Ann, we're going to turn it over to Steve to facilitate questions from the board. But I want to give a big round of applause for your presentation.

Thank you so, so much for being here.

It is a true honor getting to work with you. So thank you so, so much for the partnership.

Steve?

MS. BIGELOW: Thank you.

CHAIRMAN ELA: We'll try that again.

I have to say those numbers are pretty stunning. I can't imagine keeping track of all those and but anytime you visit a border or a port you definitely see those -- the amounts of things that go through and then, certainly, APHIS and your insect interception. I mean, as we have more and more invasive insects that we all deal with that's a critical part, along with the fraud enforcement.

So it looks like Dave Mortensen has a question for you.

MR. MORTENSEN: Yeah, thank you very much for the presentation. It was very interesting.

I had two questions. Back in late 2016, 2017, the board, along with NOP and the many NGOs and farmers that the board represents heard that we were badly understaffed in APHIS to do the

work that needed to be done on the increasing numbers of inspections that needed to be performed.

I wasn't clear. Is -- are the CBP ag specialists, the 2,500 that you mentioned, are they APHIS people?

MS. BIGELOW: No, they are not.

MR. MORTENSEN: Okay.

MS. BIGELOW: I think, sir, the response would be -- would be similar with regard to the CBP staff. We're never anywhere near well enough staffed to deal with the level of -- with the threat level for agricultural pest and disease, and a lot of that is stemming from the movement to e-commerce platforms, smaller packages, and mail for the shipment of agricultural products. And so if you can think about the numbers that I presented actually don't include mail. Mail is on top of that.

MR. MORTENSEN: Yeah. Okay. Okay.

MS. BIGELOW: So I can't speak and would not wish to speak for APHIS. But if our experience is any guide, I'm sure that they're

suffering similar under staffing problems.

MR. MORTENSEN: And I guess just to follow then, and not to suggest that there's a problem but how does -- how does -- my sense was that APHIS was, like, seriously under staffed and there were several federal presenters at a panel session that we had that indicated that, you know, we had a real problem there and it was going to be hard to really ratchet up enforcement at the border if we didn't have better kind of oversight.

Now, it could be that the ACE system has helped to take the pressure off the, as you said, boots on the ground. But I was just trying to get a sense for how well covered we have things.

MS. BIGELOW: Yes. We will have to rely, as we do for all of our threat streams, not just, you know, fraudulent organics, we have to rely on ACE, and ACE is -- it's a system but it's also a legion within CBP and across the interagency of analysts that are using this data.

So there's very active surveillance and monitoring, risk assessment, and enforcement work that happens because of the data in ACE.

We have long relied on physical inspections which, you know, I think we probably connote agricultural inspection with physical inspection because we have the visual.

And I wasn't helping with my presentations. I showed you some of our wonderful agriculture specialists with the grapes. It's a very real part of the job. We're always looking to keep that at a very small fraction.

The physical inspections are a small fraction as we're hoping to catch things before they even get here. One of the things that I didn't specify is that we're looking at ACE through ACE.

We receive bill of lading data, so that's pre-arrival information for shipments. It's notoriously difficult to analyze sometimes because it's not as -- the architecture around the bill of lading is old as the hills but there's a lot of free form designation of goods. When you get to an actual entry and make a filing in ACE it's not quite as free form.

You have to pick a few things and you

have to pay duty. On the manifest, it's really a cargo description. It can be very broad and it can lump lots of different goods in a major container or vessel together.

So difficult to analyze but we're getting better at it, doing that text analysis, and I think, generally, very, very eager to combine all of our different data assets for analysis to help us in this constant battle against (audio interference).

MR. MORTENSEN: Thank you.

CHAIRMAN ELA: Yes, and I can -- from personal experience we who ship like to lump versus split because it's a lot less writing. So I can imagine what you're up against.

But Rick has a question.

MR. GREENWOOD: A quick question.

A number of years ago I was a science advisor with FDA in the Los Angeles District and so we had the San Ysidro port of entry. We did a lot of testing of pesticide residues in strawberries and salmonella in shrimp.

I didn't hear you mention FDA in your

presentation, and, obviously, I caught you, yeah. So we're both looking at the same things and I'm wondering how you coordinate now in this system. Since you're both looking at that -- FDA has entomologists, too -- how do you parse out the work now?

MS. BIGELOW: Oh, that's -- and that's the genius of the ACE system. Prior to the single window, which is thusly cool because we are combining U.S. government equities and authorities and data needs in one system, FDA was collecting data through its proprietary system in a separate fashion.

Now we coordinate not just in terms of data collection but we have always coordinated in terms of our resources at the ports.

So I didn't mention the FDA nor did I mention NOAA, National Marine Fisheries Service, or APHIS in particular because they are part of that 49 federal government agency -- the broader interagency One U.S. Government movement that we have to work with and coordinate with at the border.

It's very -- I think Betty was the one who said this -- it's extraordinarily complex. But we -- thanks to our systems, we have been able to make it a little easier both for trade and for ourselves in terms of working together and finding those threats.

MR. GREENWOOD: Okay. No, thank you.

MS. BIGELOW: Mm-hmm. One thing more --

CHAIRMAN ELA: Nate? Okay.

MS. BIGELOW: -- with FDA and APHIS. CBP has labs and scientific services capability, which I didn't mention as well. So we share science.

We share -- we share our scientific analysis and the work that FDA does and the entire HHS enterprise is crucial for that, and I think without that shared capacity if we were just trying to do everything in silos we would not be anywhere near as effective as we are.

MR. GREENWOOD: No, thank you.

CHAIRMAN ELA: Funny how cooperation helps on things. Striking.

MS. BIGELOW: Absolutely.

CHAIRMAN ELA: Nate Powell-Palm has a question for you.

MR. POWELL-PALM: Thank you so much for your presentation.

I just wanted to ask a bit of a follow-up question on CBP's ACE system. I was interested to see that for different products AMS set up a different message set, I think is how you described it, that allows them to get pretty specific information based on a particular product, for example, like, imported pistachios being tested for aflatoxin.

And so I was wondering if you could offer any thoughts on how we might get to that point for imported organic products, having a similar level of detail in product-specific requirements.

Like, if we could specify in areas of concern for imported products like testing for GMOs or pesticide residue for countries of concern or importers of concern.

MS. BIGELOW: Sure. Well, I think

it's probably much like the enhancement that NOP has developed and deployed for the certification. If we can develop business requirements and actually provide some very fine-tuned -- you know, we'd have to do some up front analysis.

But I don't think there's anything that's not possible in terms of what you've just described. There's no -- there's no real technology boundary.

MR. POWELL-PALM: Okay.

MS. BIGELOW: Really, the process and procedural and potentially legal boundaries to collecting that data.

Jenny, did you -- did you want to chime in there? Certainly don't want to put NOP on the spot. But, you know, we're here to support at CBP. We're happy to try anything when it comes to (audio interference) within the system.

DR. TUCKER: Yeah. So I agree with that assessment. I think, you know, as the data start to flow in, I mean, the organic import certificate, or message really has just been programmed and businesses are just start to use

it in a very, very early, early, early kind of pilot -- very long pilot phase.

And so as we start getting data and we, at the program, will be able to make better decisions on where that surveillance is needed, where do we need to do more sampling and testing, what does that look like based on all that risk assessment, we're going to learn a whole lot over the next year here. And so that will inform a myriad of next steps.

MR. POWELL-PALM: Thank you so much.

CHAIRMAN ELA: Jenny, just a quick question for you. What -- I can't remember what of the 50-some staff you have now, if I remember right, what -- how many are dedicated to enforcement?

DR. TUCKER: So Betsy's team is about 20 people right now. That's in compliance and enforcement. But we have also built out in accreditation overseeing the certifiers and we now have a five-person team in trade systems. And so we are in the 60s.

We have a few new people starting and

our count changes sort of every day as we have new staff come in. But Betsy's team has doubled and that doesn't even include external support that we use through a contract to work on some of the complaints. So, you know, we have put those resources to good use.

CHAIRMAN ELA: I'm just then thinking, as Lea-Ann talks about the number of things they inspect and you say as the data starts to flow in I hope you have a good computer.

So it is kind of, again, I'm going to say stunning what kind of forensics you have to do to tease out some of these -- some of these anomalies, I guess. So I'm very impressed.

DR. TUCKER: Yeah, back to -- back to Betsy's Ph.D. economists, you know, that's why we really looked ahead and hired those -- hired those folks.

CHAIRMAN ELA: Yes, and I'm sure Lea-Ann's has -- you know, has the same -- same sort of staff. But are there any other questions?

MS. BIGELOW: Well, I think across --

CHAIRMAN ELA: Go ahead. Yes.

MS. BIGELOW: Steve, I was going to say I think across the U.S. government I'm very proud, not just of our individual agencies but also the U.S. government's advancements and use of data science and investments in both the critical talent needed to do the data science but also the systems.

I think over the last three to four years it's just been a groundswell of effort there and across all different domains, not just the enforcement and monitoring work we're talking about. So I'm hopeful that that'll just continue to grow and our capacity will build.

CHAIRMAN ELA: Yeah. Yes. Well, it sounds like it's needed.

Are there any other questions from the board for Lea-Ann?

(No response.)

CHAIRMAN ELA: I'm not seeing -- I do know, Lea-Ann, that any time we have had presentations from your agency I think it's eye opening.

So thank you for taking the time and

helping with us, and I think I can speak for the board in saying we are curious how we can help and, certainly, our Certification and Accreditation committee has not -- with strengthening organic enforcement out they haven't had lots to do. But I'm sure they're just waiting for more work to be put on their agenda.

(Laughter.)

CHAIRMAN ELA: But no, I think, seriously, it is -- we look forward to that collaboration and what we can do to really protect our organic growers and handlers. So is there anything else?

MS. BIGELOW: Yes, I'm sure --

CHAIRMAN ELA: I'll turn it back to -- good. Yeah.

MS. BIGELOW: I included a contact email there. It's for my Quota and Agriculture branch and I would like to give recognition to two people that are attending today. I believe they're watching. Julia Peterson, who is the branch chief for Quota and Agriculture. So she's really our lead on the agriculture priority trade

issue, and Drew Veilhaber (phonetic) who is a superstar member of our Quota team -- our Agriculture and Quota team.

So if anyone wants to get in touch with us, the email that I provided at the end of the presentation is a good way to do it.

Thank you.

CHAIRMAN ELA: Yeah, thank you so much. So I'll let you get back to your day job.

But, Jenny, I'll turn it back to you to just -- if you have any further comments and then I'll take it and we can break for lunch. But do you have anything, Jenny?

DR. TUCKER: Just a final thanks and round of applause for Lea-Ann for being here. I think that was very informative for all of us. We have really, really enjoyed working with her and her team. So thanks to the community for being with us through these presentations, and we turn it over, Steve, to you for next steps.

CHAIRMAN ELA: Okay. And I -- and I hope in the future if we do get back to in-person meetings maybe we can find a way to hybridize so

that we can bring some of these people -- as you said, you can't have them travel because of the time commitment but find a way to link in some of these people so we can get their expertise while making it not a huge time demand. I think -- again, as technology advances hopefully we can do that.

Thank you.

DR. TUCKER: But I do think Lea-Ann was willing to come to Iowa with us. That's where we're supposed to be. So that's how important this is. So, you know, instead she's attending from -- remotely. But yeah, I think there are lots of future opportunities for that in a face-to-face world. So --

CHAIRMAN ELA: Well, knowing that we have snow on the ground here and were down to three degrees the other night, and hearing the temperatures in Cedar Rapids, we may be happy we're not traveling to Cedar Rapids right now.

(Laughter.)

CHAIRMAN ELA: But as much fun as it would have been.

But with that, we are going to break

for lunch. We will return at 2:00 Eastern time and -- let's see, yeah. Oh, this is where I always get messed up on my times. 3:00 Eastern time. Am I right?

Help me out here, Michelle. Yes, 3:00 Eastern time, and we'll move on at 3:00 Eastern time into the Livestock Subcommittee along with policy development and the CACS Committee.

So we will see you all at 3:00 o'clock Eastern and enjoy your lunch break, and we will talk to you after that.

All right. Thank you so much.

CHAIR ELA: I'm just going to quickly go through roll call for the Board again, so we document that everybody is back from break and, especially, since we're going to be having some, some votes, after this. So, Sue, are you here?

MS. BAIRD: I am.

CHAIR ELA: Sue, are you -- thank you, Sue.

MS. BAIRD: I actually --

CHAIR ELA: Is there --

MS. BAIRD: -- flashed my video for

you.

CHAIR ELA: Oh. Excellent. I can't see everybody's video, the way my screen works, so I can only see a few. But, Asa, are you here?

MR. BRADMAN: Yes.

CHAIR ELA: Jesse?

MR. BUIE: Present.

CHAIR ELA: Jerry? Jerry, are you there?

We'll come back to Jerry. Rick?

MR. GREENWOOD: Here.

CHAIR ELA: Kim?

MS. HUSEMAN: Present.

CHAIR ELA: Mindee?

MS. JEFFERY: I'm here.

CHAIR ELA: Okay. Dave?

MR. MORTENSEN: Here.

CHAIR ELA: Emily?

MS. OAKLEY: Present.

CHAIR ELA: Nate?

MR. POWELL-PALM: Here.

CHAIR ELA: Scott? Do you see Scott?

MR. RICE: Present.

CHAIR ELA: A-dae?

MS. ROMERO-BRIONES: Here.

CHAIR ELA: Dan?

DR. SEITZ: Here.

CHAIR ELA: Wood? Wood, are you out there? Do you see him on the screen --

MS. ARSENAULT: He --

CHAIR ELA: -- Michelle?

MS. ARSENAULT: He was here a moment ago. He dropped off, yes.

CHAIR ELA: Okay. Jerry, are you out there?

MS. ARSENAULT: Jerry is mute.

CHAIR ELA: Do we see --

MS. ARSENAULT: Let's see. Jerry, you may --

CHAIR ELA: -- if he is there?

CHAIR ELA: Okay. So it looks like Wood is the one we're, we're missing. All right, well why don't we -- we'll keep our eyes open for Wood, when he joins. Let's welcome back, everybody.

I want everybody to notice that I'm

wearing my livestock shirt. Well, I don't have a livestock shirt, so I think, last spring meeting, I used some cows, so in the interest of keeping the range wars to a minimum, I'll use sheep for this discussion. And you can see our Australian Shepherd that we use to herd our trees in the background. It's very important for a fruit farm to have a herd dog.

I'm going to turn it over to Sue, for the Livestock Committee. So, Sue, do you want to take it away, with Livestock?

MS. BAIRD: Yes. Thank you, Steve. Livestock Committee had eight sunset reviews and one petition proposal for fenbendazole. And, fenbendazole's coming up and I, I'm taking the lead on that.

This is the third time that we've considered fenbendazole. We had a petition, in July of 2019, to, to, to change our annotation for fenbendazole parasiticides, which is 205.603(a)(23).

And then, (a)(23)(i), fenbendazole CAS number 43210-679, milk, or milk products, from a

treated animal, cannot be labeled, as provided for in subpart (d), of this part, for two days following the treatment of cattle, 36 days following the treatment of goats, sheep, and other dairy species.

And the Petition asks that annotation be amended, to allow use of fenbendazole, for laying hens and replacement chickens intended to become hens.

The -- as I said, this is the third time we've considered that, the first time was a discussion paper that was, actually, led by Ashley, at that time, who's on, as the Lead, for this particular product.

We had a lot of comments on fenbendazole, but a prevailing comment was that, we would ask for a limited TR, considering the fact that, the biology of a bird is so much different than mammals.

And so we followed up on that and we did request a TR, limited TR, just specifically for poultry. We received that back and then, we considered, again, in April of 2020, we had not received the TR, at that time, and so we're bringing

the results of that TR into the discussion today.

As you can imagine, this has received a whole lot of comments, both from our producers and from the consumer. The major reason for the consumer concern is that the residual that is still in the egg, at two ppm, for up to eight days.

Producers were getting varied comments. Some had stated that they absolutely must have it. Others are saying well, you know, we do well without it.

So that's kind of where we're at, and so I just want to open it up for discussion from everybody.

CHAIR ELA: Great. Thank you, Sue. I will open it up and try and call on people, and Nate has a question, comment.

MR. POWELL-PALM: Thank you, Sue. And thank you, so much, for your work on this material. I think it's been really interesting. This is my first year on the Board, and so I've been excited to see this happen.

As, in addition to being an organic farmer, I'm an organic inspector and I get to spend

a really great amount of my time on the road visiting organic farms.

It was a little bit different this year, but as a large component of my work, I do a lot of organic poultry layer operation inspections.

And, when I first got on the Board, I was able to, kind of, put into my back pocket that we're working on fenbendazole and I was able to take to each of my inspections the question of, so what is your parasite level and how are you grappling, how is this economically affecting you, posing that questions to my inspected parties.

And, over about -- I've inspected just a little over two-million birds this year. And resoundingly the answer has been that organic layers are going well.

That there's a respectively, you know, robust production system that isn't running into a lot of parasite issues that are economically damaging to prospects of these farmers.

And, I was also able to call up and pose the question to some really large egg processors, have you gotten complaints of worms in eggs, and

again, unanimously, no, the worms have not -- we have not gotten any complaints from consumers, or any evidence, when we're screening eggs, of worms in our eggs.

And so for me, I really like to approach this process, and again, this is my first year, but I really wanted to approach this process that, if farmers in industry, the folks who I've spoken to and who are on the ground, you know, possibly requiring this substance, if they're not calling for it, I think it's a poor precedent to set that we would add something that I don't think has had sufficient callout, by the folks who would actually use it.

And so that's why I would, I would think that there's a, you know -- I, in my experience, I have not seen a lot of farmers or handlers actually say that they need this product.

MS. BAIRD: Steve, am I to admit the --

CHAIR ELA: Comments?

MS. BAIRD: -- discussion, or you? I'm sorry, I don't know the procedure.

CHAIR ELA: I'll, I'll head it and call

on people and --

MS. BAIRD: All right.

CHAIR ELA: -- then, if you --

MS. BAIRD: Thank you.

CHAIR ELA: -- want to respond --

MS. BAIRD: Because you can see it --

CHAIR ELA: -- to it --

MS. BAIRD: -- I can't.

CHAIR ELA: -- go ahead, but --

MS. BAIRD: Right.

CHAIR ELA: Yes. Other, other comments from the Board? Scott, go ahead.

MR. RICE: Thanks. And -- yes. Sue, thank you for all your work on this. I know that it's something that Ashley a lot on as well, and I would just echo Nate's thoughtful comments on the topic of need and necessity.

I generally am supportive of tools in the toolbox and, obviously, want to be judicious in how we do that, especially around synthetics.

But, I think, you know, in thinking this through and, you know, there's -- none of us want consumers to be finding worms in eggs.

But, as Nate pointed out and as others, in public comments, we haven't really been hearing that, or seeing it. And, I think I would rather be on the side of the discussion explaining why, perhaps, if it ever happens, there's a couple eggs that are found versus, why organic is still organic and the gold standard, but also, trying to explain, why there is, potentially, some residue in an egg.

I just feel that, in this particular material, I haven't seen the bar met for, for that essentiality. So those are my thoughts at the moment.

CHAIR ELA: Dan, you're next.

DR. SEITZ: Thank you. Also, thank you, Sue, for your work on this, I appreciate that. And, also, I just want to offer a few perspectives from both what I understood from testimony and comments submitted, and also from public members' perspective.

So I would echo the concern about there being a chemical residue left in the eggs. And just for the record, I do eat raw eggs, not plain, but in the form of mayonnaise and eggnog, which

is coming up, so I would have a concern about that and I think other consumers would.

We did hear that parasite infestations can be addressed through cultural methods. Another comment was that the idea of an emergency was too vague, at this point.

And then, I would think it would be very antithetical to a consumer's perspective that an entire flock would be doused with a synthetic chemical.

So this is a very different situation from where an individual animal, as is the case of the livestock use. And then there were a number of certifiers and producers who absolutely did not see a need, as was mentioned a little bit earlier.

So again, I think there's sort of a critical mass of things that would caution us from adding this to the list at this time.

CHAIR ELA: Next up is Jesse.

MR. BUIE: Well, I'm really torn with this, because, as a farmer, you know, we're always interesting in having tools to deal with certain situations. And with that in mind and the, you

know, there are circumstances where the culture methods, cultural practices have not worked.

So I'm really struggling, from the standpoint of having a tool and then having another substance that, you know, that because of the, we don't have a time delay, could be problematic. So I'm really favoring it, but it's hard to do that with, with those drawbacks.

CHAIR ELA: Thanks, Jesse. It looks like Sue, you had a follow-up?

MS. BAIRD: Yes. I -- and I appreciate everybody's comments and especially Nate's experience in going out. I do, though, you know, PCO said that all of their egg layers were asking for the product.

I don't know if it's because they know it's out there and so they want it, or maybe they'd been -- I'm not sure why. And then, I've done some of my midnight farmers here in Missouri, who said yeah, we're seeing worms in eggs.

And, so I'm wondering if it's not, perhaps, climate-driven. In some drier areas, they're not seeing the egg problems, as some of

the more -- you know, we get 40-something inches of rain a year, so we have a lot of cool, wet days.

And, in fact, Organic Valley said that in the spring, they were seeing more and more, because of the cool, wet days, climate change. And I'm not sure if that's what the reason is, but -- I don't know.

You know, we did get the testimony from the Penn State pathologists, avian pathologists that said they'd seen the increase 900 percent, since 2017.

Now, we don't know if that's in organic. That's probably just in all poultry, completely. So I'm -- I'll be honest, I'm torn as well.

CHAIR ELA: Next up, we have Rick and then, Dave. Go ahead, Rick.

MR. GREENWOOD: Yes. Thanks, Steve. My concern and Dan mentioned it, is the quote, emergency use definition, and I was reflecting, a number of years ago, I studied American foulbrood in honey bees, and one of the treatments was Terramycin.

And, Terramycin was used as a

treatment. But what happened was, and I know this from the field, watching the beekeepers, they thought if a little was good, just throwing it in the hives all the time was better, so it became a prophylactic use.

And I'm just afraid, if it gets approved, that it may be misused. And that's obviously true of any of the things that we approve.

But I have some major concerns about that, even though it is a tool. A little is okay, and to prevent things, why don't we just give them to the flock, so I have some concerns about that.

MS. BAIRD: Thank you.

CHAIR ELA: Dave, go ahead.

MR. MORTENSEN: Yeah. And I, you know, I also recognize a lot of work's gone into this and, and I appreciate that. I'm particularly concerned about the motive action of the compound being a cell-division inhibitor.

And the thought of residues of a compound like that, in food eaten by, you know, by folks who -- our cell division is fundamental to all life, but particularly for children and

unborn children in pregnant moms. So that's a big concern of mine.

And I'm also excited that we, as a Board, have, I guess, we'll vote on it, but in our research priorities for 2020, have highlighted the need for systems-level work to, you know, improve our capacity with our foundational practices that help mitigate and, hopefully, prevent this problem from being in a flock in the first place. So I -- those, those are some thoughts that I have about it.

CHAIR ELA: Thanks, Dave. Asa, you're next.

MR. BRADMAN: Yes. I mean, I think many of the other comments echo my concerns about this material. And I guess the notion of an unlabeled ingredient, unlabeled residue concerns me.

And, I understand that, you know, if we have a withdraw rate of zero plus zero, it still equals zero. But, you know, it seems to me there is information on retention, in terms of biological half-life in poultry, and that, you know, given

this is a synthetic pesticide, essentially, for controlling these infestations, flock-wide, you know, not on an individual basis, you know, I would prefer to see some sort of withdrawal period.

Especially, given that as Dave said, there may be vulnerable populations, in terms of intake, and particularly children and others.

So and again, also, just within the principle of organic, the idea of, you know, an unlabeled ingredient or residue concerns me.

CHAIR ELA: Are there other comments from the Board?

Wood has a comment, question. Go ahead, Wood.

MR. TURNER: Thanks, Steve. I just wanted to point out that I'm agreeing with a lot of these, a lot of the comments I'm hearing, about concerns about residue and, and appropriate means for managing parasites.

I just wanted to make the point, to anyone who has concerns about the animal welfare issues associated with, you know, leaning against this inclusion is that, you know, that's -- I

certainly share those concerns.

I'm deeply concerned about the animal welfare issues that are implicit in not using this material, or not allowing this material to be advanced, but I do think that is trumped by some of these other considerations that we're hearing in the discussion.

CHAIR ELA: Anyone else from the Board?

All right. With, with that --

MR. D'AMORE: Excuse me. Steve. Steve, I did have my hand up and, I guess it doesn't register.

CHAIR ELA: Okay.

MR. D'AMORE: Yes.

CHAIR ELA: I'm sorry, Jerry, I didn't see it. Thank you for stepping in.

MR. D'AMORE: No, not at all. And Sue, I, too, thank you for all the work and having followed this, and I guess I'll have to admit that I'm in awe of the rest of my teammates, who are so scientifically based in their observations, or through practical experience, with Nate, as well.

I get closer to a comment that Scott

made, where he went towards the consumer. And I will tell the team that, from the first reading of this, I've had an uncomfortable feeling.

And it was heightened when one of our team members asked, well, at the end of the day, these eggs are going to get cooked and does it get cooked out of the product, and the answer there was no, it doesn't.

No cooking will reach the temperatures that would preclude this from potentially being passed along. So I, too, am in the camp of the, you know, the rewards don't seem to be balanced, or to seem to outbalance the pluses on this one.

CHAIR ELA: All right, then. Thanks, Jerry, for jumping in. For some reason your hand didn't pop up. And so the other Board Members, do the same, please, if for some reason, I don't see you or call on you. Any other comments, before we go to a vote?

All right. In that case, we will move to a vote. The motion is to amend the listing for fenbendazole, to include fenbendazole for use of laying hens, or replacement chickens, intended to

be laying hens, at 7 C.F.R. 205.603(23)(i).

The motion was made by Sue Baird, it was seconded by Kimberly Huseman. We are going to start the voting with Sue Baird.

MS. BAIRD: I'm going to say yes.

CHAIR ELA: Asa Bradman?

MR. BRADMAN: No.

CHAIR ELA: Jesse Buie?

Jesse, are you there?

DR. SEITZ: Still muted, if you are, Jesse.

MR. BUIE: Sorry about that. No.

CHAIR ELA: Thanks, Jesse. Jerry D'Amore?

MR. D'AMORE: Respectfully, no, as well.

CHAIR ELA: Rick Greenwood?

MR. GREENWOOD: No.

CHAIR ELA: Kim Huseman?

MS. HUSEMAN: No.

CHAIR ELA: Kim, we're not hearing you -- okay. Wait -- yes. Mindee Jeffery?

MS. JEFFERY: No.

CHAIR ELA: Dave Mortensen?

MR. MORTENSEN: No.

CHAIR ELA: Emily Oakley?

MS. OAKLEY: No.

CHAIR ELA: Nate Powell-Palm?

MR. POWELL-PALM: No.

CHAIR ELA: Scott Rice?

MR. RICE: No.

CHAIR ELA: A-Dae Romero-Briones?

MS. ROMERO-BRIONES: No.

CHAIR ELA: Dan Seitz?

DR. SEITZ: No.

CHAIR ELA: Wood Turner?

MR. TURNER: No.

CHAIR ELA: And the Chair votes no. Scott, what is the take on that?

MR. RICE: You want -- I'd pass that over to our Secretary, Jesse, if you would like?

CHAIR ELA: Sorry, Jesse.

MR. BUIE: Great.

CHAIR ELA: That should've been -- I'm sorry.

MR. BUIE: Okay, hold up.

MR. RICE: I'd be happy to --

MR. BUIE: Okay we --

MR. RICE: -- confirm what I have, though.

MR. RICE: As we get --

MR. BUIE: Okay, who -- we --

MR. RICE: -- our legs under us.

MR. RICE: I have one yes and 14 no.

MS. BAIRD: Yes.

CHAIR ELA: All right, well with that, the proposal fails. Or the -- yes, the proposal fails. Okay, Sue, I'm going to turn it back to you, for the sunset substance reviews.

MS. BAIRD: Am I supposed to read it, or is Jerry supposed to read it? I'm confused now.

CHAIR ELA: The sunset you are supposed to read.

MS. BAIRD: Okay, thank you. The --

CHAIR ELA: I'm sorry.

MS. BAIRD: The next one, first Sunset, is butorphanol, and that is Scott. Butorphanol is CAS 42408-82-2. Federal law restricts this drug to use by or on the lawful written or oral

order of a licensed Veterinarian, in full compliance with the AMDUCA and 21 C.F.R. Part 530 of the Food and Drug Administration Regulations.

Also, for use under 7 C.F.R. Part 205, the NOP requires, (i), use by or on the lawful written order of a licensed Veterinarian.

And, (ii), a meat with raw period of at least 42 days, after administering to livestock intended for slaughter, and milk discard period of at least eight days after administering to dairy animals. Scott.

MR. RICE: Thanks, Sue. Butorphanol, we had a, pretty much, a reiteration of the comments that we did in the spring, overall support, noting that this is an important, if not infrequently used, control for pain and overall welfare of the animal.

We did have one comment that specifically asked that the Subcommittee that information be presented about impacts of butorphanol and its metabolites when excreted, as well as, given its extra-label use, there was a comment requesting the NOSB get a written

determination from FDA, regarding the illegal use of butorphanol in food animals.

These are a couple of items that might be considered for our next sunset round. I would say, in terms of animal welfare and the, what appears to be from comments, infrequent use that it would still suggest this is essential to production. I would turn it back for questions.

CHAIR ELA: Thanks, Scott. Are there questions on this material for -- questions, or comments, for, for Scott, or for anybody else? Asa.

Go ahead, Asa.

MR. BRADMAN: Sorry --

CHAIR ELA: Asa, you --

MR. BRADMAN: -- sorry.

CHAIR ELA: -- may be on mute.

MR. BRADMAN: I -- yes.

CHAIR ELA: There you are.

MR. BRADMAN: Sorry. I mean, I guess, in contrast to the last material, this does have a withdrawal period. And I think that kind of reflects consideration of, you know, the goals of

organic and the careful use of pharmaceuticals and animal pharmaceuticals.

So, you know, as with all of these materials we'll be talking about today, in terms of veterinary medicines and livestock, you know, there's always room for more information, and I would be curious to see more about, you know, how it's excreted, if it's getting into pasture, and things like that.

But, my understanding that this is not, certainly not used herd-wide and it does have considerations for withdrawal and I think that favors it.

CHAIR ELA: Any further comments, or questions?

All right, not seeing any, we'll move to the vote. There's a motion to remove butorphanol from 205603 of the National List of the Organic Food Production Act. The motion was made by Scott and was seconded by Dan. I believe the voting starts with Asa. Asa?

MR. BRADMAN: Okay, I --

CHAIR ELA: And then, just to be clear,

a yes vote -- oh gosh, I'm going to get this wrong, now. A yes vote is to remove butorphanol from the National List, a no vote is to keep it on the list.

MR. BRADMAN: Thank you. No.

CHAIR ELA: So -- okay. Jesse?

MR. BUIE: No.

CHAIR ELA: Jerry?

MR. D'AMORE: No.

CHAIR ELA: Rick?

MR. GREENWOOD: No.

CHAIR ELA: Kim?

MS. HUSEMAN: No.

CHAIR ELA: Mindee?

MS. JEFFERY: No.

CHAIR ELA: Dave?

MR. MORTENSEN: No.

CHAIR ELA: Emily?

MS. OAKLEY: No.

CHAIR ELA: Nate?

MR. POWELL-PALM: No.

CHAIR ELA: Scott?

MR. RICE: No.

CHAIR ELA: A-dae?

MS. ROMERO-BRIONES: No.

CHAIR ELA: Dan?

DR. SEITZ: No.

CHAIR ELA: Wood?

MR. TURNER: No.

CHAIR ELA: And the Chair -- Sue. Sorry, Sue.

MS. BAIRD: No.

CHAIR ELA: And the Chair votes no. Jesse --

MR. BUIE: It --

CHAIR ELA: -- what is there --

MR. BUIE: -- 15 no, 15 yes -- 15 -- zero yes, 15 no.

CHAIR ELA: All right. The motion fails --

MR. BUIE: Yes.

CHAIR ELA: -- so we will -- that should be relisted. Sue, back to you, for the next Sunset.

MS. BAIRD: The next sunset is flunixin and I've got the lead on it. It is -- oh, I'm supposed to read it first. I'm sorry. Okay.

Flunixin referenced 205.603(a), as disinfectant, sanitizer, and medical treatments, as applicable, 12 flunixin, CAS Number 38677-85-9, in accordance with approved labeling, except that for use under 7 C.F.R., Part 205, the NOP requires a withdrawal period of at least two-times that required by FDA.

Flunixin is a non-narcotic, nonsteroidal analgesic agent, with anti-inflammatory activity. It's used intravenously or intramuscular, and used to reduce fevers, lung inflammation, typically accompanies bovine respiratory disease.

And so overwhelmingly, both in spring meeting and this meeting, we've had people that, states that it is imperative that, our producers are saying it's imperative that we keep it on.

CHAIR ELA: All right, questions from, or comments, from the Board?

All right, I am not seeing any, so we will move to the vote. The motion is to remove flunixin from 205.603 of the National List, based on the following criteria, under the Organic Foods

Production Act.

The motion was made by Sue, it was seconded by Dan. I believe we will start with Jesse on the vote. So, Jesse -- and, again, this is -- a yes vote is to remove it from the list, and no vote is to keep it on the list.

And I will note that for anything to be removed from the list, it takes a two-thirds vote by the Board. So, Jesse, your vote?

MR. BUIE: No.

CHAIR ELA: Jerry?

MR. BUIE: No.

CHAIR ELA: Rick?

MR. GREENWOOD: No.

CHAIR ELA: Kim?

MS. HUSEMAN: No.

CHAIR ELA: Mindee?

MS. JEFFERY: No.

CHAIR ELA: Dave?

MR. MORTENSEN: No.

CHAIR ELA: Emily?

MS. OAKLEY: No.

CHAIR ELA: Nate?

MR. POWELL-PALM: No.

CHAIR ELA: Scott?

MR. RICE: No.

CHAIR ELA: A-dae?

MS. ROMERO-BRIONES: No.

CHAIR ELA: Dan?

DR. SEITZ: No.

CHAIR ELA: Wood?

MR. TURNER: No.

CHAIR ELA: Sue?

MS. BAIRD: No.

CHAIR ELA: Asa?

MR. BRADMAN: No.

CHAIR ELA: And the Chair votes no. Jesse, what is the vote?

MR. BUIE: Zero yes, 15 no. The motion fails.

CHAIR ELA: All right. Sue, back to you, for the next sunset.

MS. BAIRD: The next sunset is magnesium hydroxide, CAS Number 1309-42-8. Federal law restricts this drug to use by or on a lawful written or oral order of a licensed

veterinarian, in full compliance with the AMDUCA and 21 C.F.R. Part 530 of the Food and Drug Administration Regulations.

Also, for use under 7 C.F.R. Part 205, the NOP requires use by or on a lawful written order of a licensed veterinarian, and this is Jesse's.

MR. BUIE: Okay. Magnesium hydroxide is used as an antacid for temporary relief of upset stomach.

Subcommittee review, the public comments found that magnesium hydroxide, compliant with OFPA and the Committee does not recommend removal from the National List.

For a special note, one of the stakeholders summarized that the annotation restricting the use of the product as a medical treatment, at 205.603(a)(18), causes confusion, but -- and that was just as an aside.

So the Subcommittee recommends that magnesium hydroxide not be removed from the National List. Are there any questions?

CHAIR ELA: I'm sorry, I missed the mute button. Are there any other questions from

the Board?

I do not see any, so we will move to the vote. The motion is to remove magnesium hydroxide from 205.603. The motion was made by Jesse and was seconded by Kim.

I believe Jerry votes first on this. And I do -- before we go to a vote, I neglected to say at the top of all this that we did poll the Board for conflicts of interest or refusals, and we did not have any from any of the Board Members.

So I just needed to -- neglected to read that into the record, but it is proper for all Board Members to vote on all these materials.

Jerry, starting with you on the vote, a no vote indicates -- a yes vote indicates to remove the product from the list, a no vote means to keep it on the list. Go ahead, Jerry.

MR. D'AMORE: Sir, my vote's no.

CHAIR ELA: Steve -- I mean, Rick?

Rick, we're not hearing you. Rick, are you out there?

MR. GREENWOOD: No.

I'm trying to press that pink button --

CHAIR ELA: So you=re not out there, okay.

MR. GREENWOOD: -- but I think Michelle muted me.

CHAIR ELA: All right. All right, Kim?

MS. HUSEMAN: I vote no.

CHAIR ELA: Mindee?

MS. JEFFERY: No.

CHAIR ELA: Dave?

MR. MORTENSEN: No.

CHAIR ELA: Emily?

MS. OAKLEY: No.

CHAIR ELA: Nate?

MR. POWELL-PALM: No.

CHAIR ELA: Scott? Scott, you may be have been on mute.

MR. RICE: No.

CHAIR ELA: A-dae?

MS. ROMERO-BRIONES: No.

CHAIR ELA: Dan?

DR. SEITZ: No.

CHAIR ELA: Wood?

MR. TURNER: No.

CHAIR ELA: Sue?

MS. BAIRD: No.

CHAIR ELA: Asa?

MR. BRADMAN: No.

CHAIR ELA: Jesse?

MR. BUIE: No.

CHAIR ELA: And the Chair votes no. Jesse, the vote?

MR. BUIE: Zero yes, 15 no.

CHAIR ELA: Sounds great, thank you very much. I have to laugh at this, because the mute button is akin when we're in the live meeting where we forget to punch the button on our mics, so I don't think we've lost or gained anything in these virtual meetings.

Sue, back to you for the next sunset.

MR. BUIE: You're right, I did it the same way, so --

CHAIR ELA: We're consistent.

MS. BAIRD: Consistency, that's right. Our next substance is poloxalene, and poloxalene is 205.603(a), and this is Dan's product.

DR. SEITZ: Okay. So poloxalene is used for the emergency treatment of bloat. And, it's used fairly infrequently, but it's considered to be an essential tool to have for that, for treatment of that life-threatening condition.

The comments that were received this time around were very much the same that we received last time. About ten comments supported continuing to list Poloxalene.

There were two comments that cautioned that there should be strong evidence for continuing this, but generally speaking solid in favor of continued relisting. And also the Subcommittee agreed that it should be relisted. Any questions, or comments?

CHAIR ELA: Asa has a comment.

MR. BRADMAN: Yeah. Dan, I've read, you know, many of the comments and see, I understand the support for this and that it's used relatively infrequently.

You know, it is a synthetic. Chemically, it's close to many of the plastics we're talking about. And it, you know, it's

described as a copolymer of polypropylene. And I'm just wondering, it seems like the last technical review of it was in 2001. And, you know, I'm just inclined to wonder if it's time for an update here, given that it's been 19 years and that, you know, this is clearly a synthetic and derived probably from petroleum feed stocks. And I, again, I see that, you know, the infrequent use, might, combined with its essentiality, apparently, in some situations.

But I'm just a little concerned that we don't have up-to-date information on fate and transport and, you know, I want, possibly, alternatives, but really, kind of, fate and transport.

And I'm not going to vote against it, or I'm not going to vote to relist it, but it feels like, you know, going on 20 years, it's time for an update for this material.

CHAIR ELA: Asa, I would absolutely agree that that's a very good point and I'm not -- I don't remember back to when we were talking about the need for TRs, why that wasn't flagged as a

useful step to take. I think that's an excellent observation and, unfortunately, obviously, it's up for vote this meeting.

CHAIR ELA: Kim, you had a question, comment?

MS. HUSEMAN: Asa, well-pointed out, but triggered me to, on the 2001 review, but I'm going to go back to the two commenters that did not promote the relisting.

If I'm hearing you correctly, Dan, there was not alternatives, or other information provided, other than just a comment to delist, is that correct?

DR. SEITZ: It wasn't even necessarily a comment to delist, it was sort of, I would say, a general statement that is certainly a reasonable one that, unless there's strong evidence for need of this, it should not be relisted.

MS. HUSEMAN: Okay.

DR. SEITZ: Yes.

MS. HUSEMAN: Okay. Thank you for clarifying that. Just, in the industry, you know, I don't know all the tools that are available for

bloat, but I would lean strongly towards the ones who have promoted relisting it, at least until more further evidence can be provided, with a more current review.

DR. SEITZ: Yeah. I mean, I did not come -- I did not see something that was -- that, any comments that said, we actually have this other substance that works just as well that better conforms to the organic standards. It seemed to be a, something of a unique substance there for use. I'm not --

MS. HUSEMAN: Thank you.

DR. SEITZ: I don't raise livestock, so I can't speak from experience.

MS. HUSEMAN: Thank you.

CHAIR ELA: Are there any other Board Members that wish to ask a question, or make a comment?

Not seeing any, we will move to the vote. The motion is to remove poloxalene from 205.603(a) of the National List, based on the following criteria and the Organic Food Production Act. The motion was made by Dan and seconded by

Nate. We will start the vote with Rick, I believe.

Rick, go ahead.

MR. GREENWOOD: No.

CHAIR ELA: Kim?

MS. HUSEMAN: No.

CHAIR ELA: Mindee?

MS. JEFFERY: No.

CHAIR ELA: Dave?

MR. MORTENSEN: No.

CHAIR ELA: Emily?

MS. OAKLEY: No.

CHAIR ELA: Nate?

MR. POWELL-PALM: No.

CHAIR ELA: Scott?

MR. RICE: No.

CHAIR ELA: A-dae?

MS. ROMERO-BRIONES: No.

CHAIR ELA: Dan?

DR. SEITZ: No.

CHAIR ELA: Wood?

MR. TURNER: No.

CHAIR ELA: Sue?

MS. BAIRD: No.

CHAIR ELA: Asa?

MR. BRADMAN: No.

CHAIR ELA: Jesse?

MR. BUIE: No.

CHAIR ELA: Jerry? Jerry, you're on mute, I think.

MR. D'AMORE: Sue, I borrowed that out of your playbook.

The answer's no. Thank you.

CHAIR ELA: And the Chair votes no, as well. I thought we were going to have a perfect round there, but not quite. We'll keep working on it. So, Jesse, the vote?

MR. BUIE: Zero yes -- zero nos, 15 yes, the motion fails.

MS. BAIRD: Other way around.

CHAIR ELA: Thank you.

MR. D'AMORE: Other way around.

CHAIR ELA: I think you got that the other --

MR. BUIE: Oh. Oh. Oh --

MR. BUIE: -- zero yes, 15 no.

MS. BAIRD: Right.

CHAIR ELA: And the motion fails.

MR. BUIE: Right.

CHAIR ELA: Thanks, Jesse.

Sue, I'll give it back to you for the next one.

MS. BAIRD: Yes. And this would be 205.603(b) formic acid, and this is Nate's.

MR. POWELL-PALM: Thank you, Sue. Formic acid is a pesticide employed to control Varrora and tracheal mites in honeybee hives, deployed in the form of a compressed pad inside the hive and the material volatilizes to kill the mite throughout the hive, including mites that attack the broods.

And across the comments, both in the spring and for this meeting, it has been consistent that this is a material we want to keep, as we don't want it taken off the List.

I think it's a fairly uncommonly-used material, partly because it's only used in apiaries, but the folks who do raise bees and the certifiers who do have certified operations who are listed in their OSPs do identify it as a

critical material without an adequate substitute.

Any questions from anyone?

CHAIR ELA: I am not seeing any, so we will move to the vote. The motion is to remove formic acid, 205.603(d) of the National List. Now, the motion was made by Nate, it was seconded by Scott, and so we will start with Kim on the vote.

MS. HUSEMAN: No.

CHAIR ELA: Mindee?

MS. JEFFERY: No.

CHAIR ELA: Dave?

MR. MORTENSEN: No.

CHAIR ELA: Emily?

MS. OAKLEY: No.

CHAIR ELA: Nate?

MR. POWELL-PALM: No.

CHAIR ELA: Scott?

MR. RICE: No.

CHAIR ELA: A-dae?

MS. ROMERO-BRIONES: No.

CHAIR ELA: Dan?

DR. SEITZ: No.

CHAIR ELA: Wood?

MR. TURNER: No.

CHAIR ELA: Sue?

MS. BAIRD: No.

CHAIR ELA: Asa?

MR. BRADMAN: No.

CHAIR ELA: Jesse?

MR. BUIE: No.

CHAIR ELA: Jerry?

MR. D'AMORE: No.

CHAIR ELA: Rick?

MR. GREENWOOD: No.

CHAIR ELA: The Chair votes no. Jesse.

MR. BUIE: Zero yes, 15 no, the motion fails.

CHAIR ELA: All right. Sue, back to you.

MS. BAIRD: Our next sunset material is EPA List 4, inerts of minimal concern, and this is Scott's.

MR. RICE: Thanks, Sue. This is a broad-listing category. If any of us is unfamiliar with this after public comments,

perhaps you missed public comments.

There's been a lot of discussion on this across both the Livestock Subcommittee and with Asa's leadership on this in Crops, and a lot of robust discussion.

I think, it's safe to say that the Board is looking for some forward motion on moving from this outdated list thing that's no longer supported by EPA and finding a way forward.

We've had some, lots of discussion on Boards previous to ours, and a 2015 recommendation that points to the Safer Choice List as a potential way to do that.

I think it's worth mentioning, you know, we heard from stakeholders that using a Safer Choice List as a direct replacement for EPA 4, List 4, isn't practical, noting that the List is predominantly cleaners, or for substances using cleaning agents. But, I think it's important to note, as Asa did in his comments, and hopefully he can elaborate on this. You know, we weren't looking at it as a direct replacement, per se, but as a model for the architecture for review and a

listing system that uses that as a model, but it's tailored to those materials that would be used in organic production. Again, let Asa expand on that.

And, you know, we're, I think, united in our agreement that we'd like to move beyond this. I think it gets down to how we want to send that message and make that motion.

And, you know, from our Subcommittee, we moved out of Subcommittee with a motion to relist for 603. Obviously, Crops came to a different vote on that.

I would like to think we can send a comment, message, you know, in our recommendation, but I think it's pretty clear that we're united in just wanting this to move forward, so I think it just gets down to that board process.

I would just note, I think, from a stakeholder and transparency perspective, I don't think it's good practice for the Board to move recommendations forward, if we know they are with the understanding that they're not going anywhere.

I think that, even if there is an

understanding amongst some of us, some of our stakeholders of what that means, it's, I think, not a best practice, in my opinion, because, we don't have those stakeholders at the table to sort of see all the nuance and inside baseball as to maybe why we're doing that.

I'd prefer see a recommendation to relist and move to just a real strong message to the program that we really want to see this move forward. So with that, I would move it to questions and discussion.

And, also, I think, if for the benefit of those who didn't hear the comments from Dr. Tucker during the Webinar, it might be useful to hear from her some thoughts on this. I'll turn it back to you, Sue and Steve.

CHAIR ELA: Thanks, Scott. Yes, I think Jenny did make some comments during the oral comment section, but I would turn to her and ask her if she would restate her thoughts on List 4.

We know it's a complicated subject and we obviously struck a chord with our, our stakeholders. Go ahead, Jenny, if you're willing?

DR. TUCKER: I'll restate what I said during public comment. But, actually, I want to add a big picture summary statement right out front, that I think an inherent tension with the question before the Board right now is nothing inspires like a deadline, and nothing is as scary as a deadline.

And so I think that is directly related to, sort of, the question of do we -- to relist or not to relist, and how do we want to perceive that deadline, in terms of inspiring, or just really scary, and that seemed to be reflected in the full range of comments that I've heard.

So this is very much a complex problem. You know, when we don't move ahead with something, we did not move ahead with this in 2015. And I was very clear when I took this position that it was going to be a while, before we're going to pick this one up, because we had other priorities. There were other things we had to get done, and so I think it is complex and it, also, is time.

I think the way Safer Choice has been described over this meeting has been very helpful,

as sort of a model, as an architecture, just, you know, it's not a ready-to-go list.

It is not a ready-to-go replacement for Lists 3 and 4 and I think people learned a lot about the nature of what this List is and how it's built.

You know, one important feature, depending on how you look at it, a feature or bug, is -- Safer Choice is not codified in the Regulations. I mean, it's -- Lists 3 and 4 were in the EPA Regulations, and Safer Choice is not.

And so one question comes when you're referring to another list held by another agency, if that's not codified in their regulations, it's not under the same Administrative Procedures Act controls as our Regulations.

And that's when the legal questions, and we have spoken with our Office of General Counsel about this rule, that raises very real questions.

So I want to right now, kind of, focus on process of what, given that complexity and given that, I think, public commenters pointed out that it would take time to figure this out, given its

complexity.

Let's remind ourselves of the process here. NOSB has a very specific role and NOP has a very specific role, and so you are considering you know, in the NOSB role, what you want to do with this listing.

If you vote on a -- to remove. So if there is an affirmative vote, a decisive vote to remove, then it would be referred to the Program and we would then engage in a rulemaking process that would be governed by the Administrative Procedures Act.

And that has a slightly different set of criteria than what the Board considers. So we, for example, have to consider economic impact. We have to include the cost benefit analysis.

And so the -- we would not be able to finalize rulemaking to remove without rulemaking to replace. There has to be a replacement mechanism in order for removal to be successful, in those cases.

That would have to really go hand-in-hand to be workable, and that replacement

is further complexified by the fact that we do need an NOSB recommendation to add a synthetic.

And does referring to this other third-party list that's an interesting framework, but not actually a list, is that actually a recommendation to add a synthetic, and so the, again, the complexity of the legal questions.

Given the complexity, a common tool used in the federal government, we haven't used it as much in the Program, but this is a good use case for it, is an advanced notice of proposed rulemaking, where we would describe the problem, you know, like I'm doing now, and describe a range of options for moving forward with a replacement that would happen concurrently with a removal.

That would give the opportunity for formal comments and a public comment process in response to that advance notice of proposed rulemaking, which would give us a lot more data in terms of, well, what do we actually need? Do we need a different kind of recommendation from the Board, as a replacement? What are our options moving ahead? So that would be, we talk often at

NOP about agile project management.

Rulemaking is not particularly agile, but this is a way of learning about what the best solutions are moving forward, in a process that would be controlled and governed by the Administrative Procedures Act.

So, Steve, what else would you like me to cover in that? That's essentially the key points that I covered during the public comments.

Let's see, the only other point I wanted to make that OGC brought up. I already talked about the fact that referencing a non-codified list in the Regulations can be problematic. It's, also, you know, as with some other rules we've talked about in the past, you do have to read the statute very carefully here.

When the statute, Organic Foods Productions Act, was written, it was written with this kind of Lists 3 and 4 in mind, in the context of that kind of legislative action.

Without Lists 3 and 4, OFPA can actually be read in a very different way, when those lists go away, and so the interpretation of Organic Foods

Production Act and what it actually allows for, with respect to this category of materials without Lists 3 and 4, there are some statutory authority questions that would also come up. That would be something that we would describe in an advanced notice of proposed rulemaking, to get public comment on.

But, this is another one similar to origin of livestock, where, well, the statute says something, what does rulemaking look like, in a way that, legally, is linked to the statute.

So now I'm going to stop. Steve, what did I miss that you'd like me to cover?

CHAIR ELA: I just have one question that, to make clear in my own head. If, hypothetically, the Board voted to delist, and -- I mean, the sunset is, I believe, in two years, if I -- off the top of my head.

If we weren't successful in coming up with an alternative within that two years, does the sunset automatically relist, if no other rulemaking is taking place?

DR. TUCKER: I think that becomes

what's called an invalid listing, and somebody's going to IM me and tell me if that's wrong, but -- and so it would've been something that would've been voted to have been removed, but wouldn't actually have been removed. So it would still be on the List.

I think, sort of -- we have other parallel cases where the Board has made a recommendation and we have not implemented that recommendation. It certainly would start the clock. That is a potential risk, in terms of causing some market confusion.

If we don't finish in time and there's, kind of, this time, well, where the Board has said it should sunset, but we have not been, we've not removed it, then -- I'm getting texts in. This is why it's great to have a team.

So they're telling me that we would renew it, to maintain the listing. So we would renew it to maintain the listing. If we weren't ready to go with a replacement, at that point, we would renew it, and then we could do rulemaking later, to really remove it. So it would stay --

CHAIR ELA: Okay.

DR. TUCKER: -- on the list to provide that market certainty. Sorry.

CHAIR ELA: Yes. Nope, it's a complex question. I asked it because my sense was that it would automatically renewed, if we didn't go to --

DR. TUCKER: Yes.

CHAIR ELA: -- rulemaking, to delist --

DR. TUCKER: Yes.

CHAIR ELA: -- it, but I wanted to make sure, before I misspoke. So --

DR. TUCKER: Yes that is correct and I --

CHAIR ELA: Okay, thank you.

DR. TUCKER: -- really have to emphasize that, so ignore what I said before. That was wrong, it would relist. Apologies.

CHAIR ELA: No worries. It's actually heartwarming to see you struggle with some of these questions, too. It makes all of us feel a little more human, so.

With that, I'm going to open it up to

questions from the Board. And normally I will let all the, the Board speak, before I chime in, but this is one time I'm going to take the Chair's prerogative to put my comment in first.

And I think this is one where every Board Member's going to have to vote based on some faith and some trust, either way. Scott and I think we come down on opposite sides, a little bit, but I think we agree, in general, and it's not really a coming down on opposite sides, we're both straddling the fence, leaning one way or the other.

And at the risk of irritating and alienating most of the stakeholders, of which I am one, I know what Harold Austin said, that if these materials are delisted with no alternative, that 60 percent of the Washington specialty tree fruits would go away. I disagree with Harold; I think it would be a much higher number. I think it would probably be 90 percent, and I would be one of those people that would go away if these materials weren't allowed.

So it does have a very visceral impact on my own operation, as well as my stakeholders.

However, having said that -- so I'm not in favor of having these materials delisted at all without a viable alternative. I want to make that very clear.

And I think a lot of the stakeholder comment we heard was a very visceral and strong reaction that these materials would go away and then we'd all be in a boat-load of trouble.

And so I want to be very clear that I am not in favor of that. However, I'm going to take the unusual step of saying I believe in delisting.

I know there have been comments that says this may not be a good procedure. That really we should only vote to delist something when there is a viable alternative present.

However, I also think this is a very unique listing, in the sense that it's a listing for over 200 materials. Most of our listings are on one material that we can very easily see if there's a viable alternative or not, and vote on that.

So I think, because of this unique

listing and the number of materials covered, it's very hard, initially, to say what the viable alternative is.

I also know that, in listening to the public comment, and I tried to ask some questions in that, our stakeholders are against removing it, but I did not hear any great comments of how we should move forward to rectify this situation, and I think that's the real issue.

So my thoughts are, we have two choices, one is to delist, one is to relist. If we delist it, we do create some paranoia in the marketplace and some uncertainty, but I think these materials cannot be delisted, because of the economic impact, until we have something that will replace them.

So I think -- I want to emphasize, I truly believe that we will not lose these materials until we have something to replace them.

The advantage to me of delisting are a couple. One is, I think we put the ball in Jenny's court, unfortunately for her. But we really show that we don't believe this is a valid listing and that it is a broken link, because of

that EPA is not renewing this.

I think it's a real problem for manufacturers that want to make new products, because there's not a way to put a new product on this List, or have any new products relisted. So we're stifling innovation, even though we're also then protecting what is already there.

So I think it is a bad listing. And so by putting it in Jenny's court, we are giving her ammunition to go to her higher-ups and say, this is a very high priority. And I believe that it will be a high priority in the NOP at this point.

The other advantage is that the NOP has paid staff. And they have people that can be in direct contact with EPA, through interagency agreements.

The NOSB does not have that, and I worry that, if we vote to relist, it's going to fall -- we can ask for a work agenda item for the NOSB, but we only have two one-hour calls a month, and I think it is an overwhelming task for the NOSB to work on as a volunteer group, and to look at over 200 materials.

If we don't come up with some viable grouping, I think there's no way that the NOSB can look at 200-plus materials and that many TRs, and do it in a cohesive manner.

So I would rather see the NOP work on it, in conjunction with the NOSB, and open this with stakeholders, through the, as Jenny said, the proposal getting advanced rulemaking, and really have the paid people come up with a grouping that makes sense in the EPA context, as well as, the USDA context.

So I understand that this is unusual, but I really believe that delisting is the best way we can force the Program to deal with this, and I'm very worried, if we vote to relist, that we will be in this same exact spot in five years.

So that is my comment and my argument to delist, even though it is unusual. But I, again, I want to say that I am not in favor of taking the materials away until we have something else to replace them. With that, I will be quiet and turn it over to other comments, from the Board.

Emily, and then Asa. Emily, go ahead.

MS. OAKLEY: Thanks for your excellent explanation, Steve and Scott. I definitely understand where you're coming from as well and I think, you know, this is a tremendously complicated situation. I would also just say that, you know, I know we heard from public commenters concerned about sort of the optics and also just the process of delisting something as you stated without the need to replace it but I just want to emphasize that I think relisting it in its current broken form also sends a similarly negative message. So I support the comments that you made. Thank you.

CHAIRMAN ELA: Go ahead, Asa.

MR. BRADMAN: Thank you, and thank you, Steve. I think you kind of summarized the issues very well and I appreciate that. And also, I appreciate Scott's position as well. And also, you know, I am sensitive to and understand a lot of the objections we heard on particularly the pesticide industry side last week. You know, I have gone to biopesticide industrial alliance meetings and I've followed this field carefully

and, you know, I think there is a lot of merit in the development of less toxic and softer materials in agriculture.

And I think that industry has provided leadership and, you know, is developing and seeking out markets for better materials and to the extent that we have materials that can overlap in the organic sector and hopefully also into the conventional sector that are less toxic and have less environmental and health impacts then that is a net positive, absolutely. You know, we have heard as Steve said that, the current listing with the defunct EPA list four inhibits innovation. And then just structurally, as part of the organic community and the way the overall system works, there really has to be opportunity for input on what goes on the national list.

And we have this situation where, you know, we have a reference, I guess as Jenny would say, on a statutory basis, but it's a reference that's actually not maintained by the agency. So I feel like we need to move forward in a way that can provide both -- could be responsive to all

sectors of the organic community and that ultimately, we'll come up with a better system.

And I guess I'll say one more thing again, you know, I know no one pats me on the back for this one but just in principle I don't think we should have unlabeled inerts in any pesticide formulation. And when, at least especially in the organic sector, when you bought a pesticide that was OMRI-approved and have the list of all ingredients. I know that's unpopular in many manufacturing fronts but both conventional and organic side but I'll put in that little pitch here in addition to my comments on this.

CHAIRMAN ELA: We'll go to Dave and then Rick.

MR. MORTENSEN: Yes, I appreciate the thought of full synthetic comments that have been made and definitely the written public comments were stinging at times. But I think the point for me, one of the points that really is compelling is Steve's last point about is this really the right thing for the National Organic Standards Board to be doing or is this some sort of interagency larger

task that's conducted perhaps in concert with NOSB.

But there is no way that the time is available to do this justice with a volunteer board in my view. Given that the scope of the work that's needed here it is on the scope of, you know, a cadre of BPA folks and others working together with NOP and NOSB to get the job done. So I just think it's undoable to do it well, and I think it's not wise for us to kid ourselves to think that we can do it well when we really can't do it well with a volunteer board that is overwhelmed with work as it is.

CHAIRMAN ELA: Thanks, Dave. Rick?

MR. GREENWOOD: Yes. Steve, again, thank you for your thoughtful comments. And I have a couple of things. Number one, I hope we can get away from the term inert. That just drives me crazy because we know that there's a number of items out of the 200 that we probably wouldn't allow if they came up now as a petitioned item. And so I'm glad that we're going to review it. And again, Dave and I talked one time I think at one of the other calls about the fact that it really does it's

going to take a lot of thoughtful analysis and the board really doesn't have the time to do well.

And so I think that, you know, even though we have been cautioned about delisting it, I'm for it. I was against it in the beginning because of the optics but it just makes more sense to me to move it over to the NOP and I know that Jenny has hundreds of people that will work on this starting tomorrow, so I'm not concerned. But, you know, all kidding aside it's just, it's the wrong thing now. And I know when I buy an organic insect treatment and it's 1% active ingredient and 99% inert, in the past I never quite knew what that was, and now I know that I don't know what it is and some of it might not be something that I want to use. So I go with removing it and having a new system at some point.

CHAIRMAN ELA: Other comments from the board? I know that this is a hot potato and it's strongly felt. It looks like we have Sue and then Dan and then Nate.

MS. BAIRD: Yes, and I appreciate the complexity of this and I appreciate Steve's comment

and I will state that when this first, we first started discussing this method of moving forward it caused me great angst in my tummy thinking about potential to our producers and it still scares me. But they are so complex and if nothing else, if Jenny were not so inclined to move forward, I think as soon as we delist this, and especially of course we're talking livestock now, but I think we're talking both.

When we get a lot of our producers who all of a sudden can't use products because their inerts are no longer allowed, that if NOP does not move quickly, they will probably have a lot of lawsuits on their hands. So with that, assurances that we will get some kind of quick movement to have a true review by those scientists who are more qualified to review all of these things than perhaps I am, it seems to be the way to go.

CHAIRMAN ELA: Go ahead, Dan.

DR. SEITZ: I would just like to echo Asa's broader comment that any substance that comes before the board in the future should list every last ingredient, that there shouldn't be any trade

secrets or something that is left out because the manufacturer would not like to reveal what the full set of ingredients is in a substance. If a company or a user is interested in something being listed as acceptable and organic, the board should have full knowledge of what's in that in order to be able to make an informed decision.

CHAIRMAN ELA: Nate, you're up next.

MR. POWELL-PALM: I wanted to just echo again the deep leadership that I feel like you've offered, Steve, on this and the amount of time that everyone I've had conversations with so many folks about this very subject and I still feel deeply conflicted. I thought the comment in the oral comment period was that similar to, you know, taking away healthcare without and identified alternative really resonates with me and I think that I am first and foremost and farmer, and I never want to move forward without a real idea of how we're going to this on behalf of other farmers so not to cripple the tools that farmers have and need.

And I also, in looking back, I wasn't here then, but the 2015 recommendation I think was

very clear and I wish it would be implemented and put to rulemaking, but yes, I would say it's -- Sue said it well, it just leaves me kind of sick that we don't have an alternative before delisting. But I just wanted to say thank you everyone for the deep consideration that's gone into this.

CHAIRMAN ELA: Asa, you have another comment?

MR. BRADMAN: Yes, just to add and reiterate that we do have these, you know, recommendations from 2015 that I think help, you know, provide a roadmap as to go forward. I'm also just so impressed with comments submitted by the National Organic Coalition this time around and last spring and they derive in part from the 2015 recommendation and prior discussions.

You know what, I think we do have some clear ideas about how to move forward and understanding that we're not, some of the discussion about EPA was not to simply replace the SCIL list, you know, list forward with the SCIL list, rather it was to open up a process and, you know, I think that's what we're all kind of voting

for now is that process, it will be.

CHAIRMAN ELA: Anybody else from the board? I will note that we will continue this discussion in crops as well since it's on both, some sorts on both sides of crops and livestock. Well, I am seeing no other comments at this point. What I'm going to -- oh, Scott has a comment. Go ahead, Scott.

MR. RICE: Sorry, I didn't, couldn't find the button fast enough. Just a quick question as a follow-up for Jenny. I mean, is there anything that would prevent the program from moving towards something like the notice of proposed rulemaking for the board to vote to relist? Is that a scenario that can happen were you to do that? Just for the sake of understanding.

DR. TUCKER: Sure. To understand what the options are. You know, on one hand nothing inspires like a deadline. On the other hand this would be a pretty tight deadline. You know, I have been calling them inerts but I will train myself to call them something else, so other ingredients. I have started, we've started that discussion

internally. We do have support for an advanced notice of proposed rulemaking, ANPR.

Based on the conversation that has happened during the public comment period and during this meeting, and the fact that you did give us a 2015 recommendation that we haven't moved forward with, I had said about a year and a half, two years ago that it would be at least a year and a half before we could pick it up and here we are. So I think there is an argument for moving forward even if you relist it. And there's nothing as inspiring as a deadline. So it would be very hard from -- I can't commit to a timeframe here and how that timeframe would be different.

Ultimately the regulatory agenda process that we've all been sort of engaging with over the last few years here remains the process. And so it would need to go through a process to get on the regulatory agenda. I have started the discussion internally about the importance of doing an ANPR and there is support for doing that.

CHAIRMAN ELA: Wood?

MR. TURNER: I just wanted to say I've

been torn up about this decision as well and I feel like, you know, it's, to your point, Steve, the idea of not having critical materials available is beyond my ability to comprehend but at the same time, you know, I think we have to move forward. And I think what I'm realizing as a first-year board member is that I, you know, this is a complicated, everything we do is complicated. Everything we're doing here is quite, it taxes the brain in ways I never really imagined and I'm feeling like my -- I'm leaning in the direction of trusting the process to your point and to Jenny's point.

But I did want to ask Jenny a question on the notice of advance rulemaking. Can you give a sense, Jenny, of sort of how, just as a gesture, you know, any signal to the community, how quickly would that notice occur if we did vote to remove it from the list? I'm just curious if, you know, is that something that's months away? Does is come on the heels of this meeting fairly quickly? Or can you give any sense of that? I know you said you're hesitant to discuss timelines about the

process in general, but I am curious about the notice.

DR. TUCKER: Yes, an advanced notice of proposed rulemaking it is something that goes through the standard clearance process within OG -- so it would go through the Office of General Counsel first and then it would go to administration. I don't know if an ANPR has to go through OMB or not. And if somebody on my team knows the answer to that feel free to text me in. And so we would need to figure that out. I think, you know, Jared, since he got here has been very involved and has been in staff level meetings with the EPA and a number of meetings, at least a couple meetings with OGC at this point.

So I think he's already started to put together what would end up being the ANPR, getting it through the clearance process is just, it is a process. It is less weighty in that all we're doing is kind of describing our problem and describing what the different options are. We're not actually proposing anything so we don't have to do an economic analysis write-off and things

like that. And so that makes it a little bit easier. Shannon has signaled that she thinks that we don't think an ANPR would have to go through OMB. We'd have to confirm that but that sounds right to me, I just didn't want to say it without somebody else agreeing with me. So spring-ish. Yes, there are a lot of factors --

CHAIRMAN ELA: You use ish like I use --

DR. TUCKER: There are a lot of factors that would, could impact our timing, so I just, spring-ish is the best I can do. And I promised myself that after SOE and OMB for nine months that I wasn't going to do timeframes anymore so I'm going to slap my own wrist for that one.

CHAIRMAN ELA: I'm going to -- we're getting a little short on time. We're going to have more discussion on this in crops as well. I'm going to make one comment and then Sue can make a final comment and then we'll move on from there.

I guess I still feel strongly that I want to, sorry Jenny, but I really want to hold Jenny's fingers to the fire of having them work

on this and I think the best way to do that is to vote to delist. I truly believe that there is no way that this is going to be delisted without a viable alternative because the status quo is relisting on either with the two year deadline or just because I see no way it will go through rulemaking with the economic impact it would have.

And so, you know, Harold Austin=s comments about how much, you know, the devastation it would cause if these were removed I think can also be taken in the positive sense that there's no way these will be removed because of the economic consequences. So I want to put all the pressure I can on Jenny and then, you know, she can use that for higher-ups as well to say this really should be a very high priority within the program.

And I also, I just believe that even if we don't finish this in two years and they are relisted, we have started the process then on the program and I don't see it as being abandoned once we've started down that road. And, you know, then in five years when it is, if it does get relisted and we're back at the sunset review, we will have

a viable alternative at that point to put forward. So I just, I want to put all the energy we can behind this to move it forward and put all the pressure we can on Jenny. Apologies, Jenny, but Sue, one last comment and then we'll close out discussion.

MS. BAIRD: This has been great discussion and, Steve, I guess I was just going to say the same thing you did. Even if we vote to delist, that doesn't mean the NOP is going to move to take it off the list. We've seen that happen in the past. And I think that's the assurance that our producers will have is that if we voted to delist it, I don't see it ever coming off the list until we have a true viable option. So producers can breathe easy. They're not going to lose their products.

CHAIRMAN ELA: All right. We're a little bit overtime on this discussion but I think it's a really good discussion and it really is needed just because we -- I will apologize to our stakeholders in that while we thought we really did a good job on the write-up on all this, we

probably didn't, weren't clear enough on some of our thoughts and I do apologize for the uncertainty that we created in the community because that certainly was not our intention and it was not our intention to take away these materials.

What I'm going to suggest is since we have a similar, a very similar discussion in crops tomorrow -- oh, Mindee, you have your hand up. Is it very quick, because I'd like to move on.

MS. JEFFERY: Sure. I'm just really cognizant of all the tension and taking in all the perspectives and want to remind us that consumers choose organic because of their concerns about pesticides overwhelmingly. And in this situation, in our community, I really see this as a moment where we can begin a new kind of partnership in the community where we hear all concerns and trust our partnerships both with the board and with the program.

And I think that's a really interesting moment in organic, that this is a moment we're in where all sides are taken into consideration in difficulty looking towards both the board and the

program we're working together on something that we need to make progress on, and it's something that we need to open ourselves up to choosing powerfully in moments like this, especially in a time like this in our history as a country.

CHAIRMAN ELA: Thank, Mindee. All right. I'll close out discussion. What I'm going to suggest is because we do have this same -- they're different in livestock and crops, but essentially the same discussion, I would like to defer this vote to we have a section for Friday, on Friday for deferred votes. I would like to defer this vote to Friday so we can have the discussion in crops as well and give that airtime equally to livestock. Does any of the board have any objections to deferring this vote until Friday?

MR. MORTENSEN: No.

CHAIRMAN ELA: Okay. As such we will defer it to Friday and that will give crops a chance to give their discussion as well. Okay, moving on, Sue, we will move on to excipients.

MS. BAIRD: Yes. Excipients are 605 -- 205.603F, and then it correlates to the

definition which is found in 205.2, which says any ingredients that are intentionally added to livestock medications, but does not exert therapeutic or diagnostic effect at the intended dosage, although they may act to improve product delivery enhancing absorption or controlling release of the drug substances that are used in new animal drug applications, but not as approved by FDA and in animal care, healthcare products that do not carry the NADA registration.

They're also using new drug applications in drugs marketed for human consumption that may be administered to animals, such as aspirins. There are about 8,000 excipients available. And they're found ubiquitously in all of our drugs and biologicals. We've got our comments basically are correlating this to the same thing as inerts. Excipients do many times exert some kind of a therapeutic or diagnostic effect at the dosage. We've been called as a livestock to provide consistency in the interpretation and in the definition.

We've been asked to state that they must

have adequate information about the identity and function of the excipients. There's comments saying that we need clear meaning for it for production age, and yet with all of this confusing and inconsistencies among certifiers for what is allowed as excipients and what are not all allowed as excipients, and we had that pointed out several times in the comments. Producers overwhelmingly are crying that we must keep excipients on the national list. They're saying we cannot remove excipients unless we have information on products that would pertain to the effects on the health of the animals. Some stated that if we took excipients out, that especially some of our sanitary, sanitation products, it would impact food safety, it would be a food safety impact as well.

So overwhelmingly from producers, we've been asked to keep excipients on the list.

CHAIRMAN ELA: Okay. Are there comments and thoughts or questions for Sue? Asa?

MR. BRADMAN: I had a question. This might be for Scott more than Sue if we're at that

stage of the discussion. But maybe, well, just from a certification point of view, in some of the comments, I mean, there's some overlap here with kind of inerts in some ways, although these aren't necessarily broadcast into the environment in the same way that many pesticides are.

It sounds like there's a role there for certifiers to actually review materials and drugs. I want to understand that a little bit more. I've been trying to read up on that and that there seems to be potential there for discrepancies or inconsistencies among how excipients are viewed. I don't know if you can provide clarification on that.

CHAIRMAN ELA: Scott, you want to try and answer that? Or Nate as a certifier? Or I guess Sue as lead? I think you stumped them, Asa.

MS. BAIRD: Hearing from neither of the others I will say that I would agree as a reviewer and as an inspector of several different certifiers, I would agree there probably is inconsistency and the amount of time to research through excipients -- yes, there's probably

inconsistencies.

CHAIRMAN ELA: I will make a comment and then we can move on. I recognize that this is very similar to the list scores and that some stakeholders may say we're being inconsistent. I think that the big difference on this one is really that, to me, is the list of things that the excipient has to be number one, two, three, and four, and that it, you know, that does -- is a pretty restricting list.

I also, we had pretty strict rules on the use of these drugs and biologics in livestock and also often have the referral dates on them so I do feel like it's a little different situation where there are more restrictions on these. So I don't feel like they're quite the same situation.

Any other comments from board members?

Okay. I do not see any so we'll move to the vote. The motion is to remove excipients from 205.603 of the national list. It was made by Sue, seconded by Jesse. Jesse, am I correct we're starting with Mindee or Jesse or Scott?

MR. RICE: I think --

MR. BUIE: Sorry, I was on mute. I think it was -- what I had was, let's see, one, two, three, four five, I think we're on Kim if I'm not mistaken.

CHAIRMAN ELA: I think we started with her last time.

MS. HUSEMAN: I was the first one the last time.

MR. BUIE: Okay. All right. So we're on to Mindee. Sorry about that.

CHAIRMAN ELA: So we're on to Mindee. Okay. No worries, just wanted to double check my note taking. So vote on the motion again of a yes vote is to remove, a no vote is to keep it on the list. So, Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse? Jesse, are you there? We didn't hear a vote.

MS. BAIRD: Should we count him as absent?

CHAIRMAN ELA: Still not -- Jesse, are you there?

MR. BUIE: I'm here. Can you hear me?

CHAIRMAN ELA: Okay. Now we can. What is your vote again, Jesse?

MR. BUIE: Okay. No. I -- no, no.

CHAIRMAN ELA: Perfect. Somehow we couldn't hear you. So, Jerry?

MR. D=AMORE: No as well.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: And the chair votes no. You want to give us the tally, Jesse?

MR. BUIE: Zero yes, 15 no. The motion fails.

CHAIRMAN ELA: Thank you, Jesse. Okay, Sue, you're last sunset.

MS. BAIRD: Yes, this is 205.604, prohibited non-synthetic substances strychnine, Nate?

MR. POWELL-PALM: Thank you. So strychnine is a toxic alkaloid that is a transparent crystalline power and it's what they use to poison rodents and other animals. And it leads to a fairly violent death in those mammals that consume it. Comments both in the spring and the fall were unanimous that overall across I think it was about 30 commenters gave their support to relist it. Any questions on that?

CHAIRMAN ELA: Any questions for Nate on this, or comments? I do not see any so we will move to the vote. The motion is to remove strychnine from 205.604 of the national list. The motion is by Nate, it was seconded by Jesse. We will start with Dave. Dave your vote?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D=AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: And the chair votes no. Jesse, the count?

MR. BUIE: Is zero yes, 15 no. The motion fails.

CHAIRMAN ELA: All right. Thank you very much, Sue, for your leadership on the livestock subcommittee. I believe that finishes the livestock section and thank you to all the committee members on that committee. I know there was a lot of discussion, especially on fenbendazole, but also on the spores as well as the others. So we appreciate the time and hard work on that.

With that we're running a little bit ahead of time so it's possible we will go a little bit overtime at the end. But I wanted to make sure and give the list for plenty of time for discussion. We're next going to move to the Policy Development Subcommittee. Rick, I will turn it over to you.

MR. GREENWOOD: Okay. Thank you, Steve. We have a discussion document that the committee prepared about the potential use of a consent agenda in our meetings. And for those of you who are not familiar with them, if you haven't read the document, they're used many times in government when there's non-controversial issues that come up for a vote. Anyone on a board of if it's a board of supervisors can pull an agenda item for further discussion or comments, but after that, the group of (Inaudible) can be voted on as one group.

So what the thought is is that this would be a method to possibly streamline some of the meeting agenda when we have examples of what we consider non-controversial items like ammonium carbonate and ammonium bicarbonate, rather than

doing each of those separately potentially having them come up for one vote. What we wanted to do was get some discussion from the board about this to see if it's anything that has interest where people can, we can talk about it now to see if it's worth the Policy Development Subcommittee doing additional work on it. If people aren't interested, you know, we can go back to business as usual.

We did get two comments from the written comments. One was against it and one was for it. So we're not going to get a lot of leverage there, but I'd like to open it up for discussion. And I think we might even use today's livestock subcommittee. If you think back to some of the items that we've talked about, they've been read into the record, people haven't had any discussions, and then we go through the voting.

So we could, if you think about it, list all of the ones that we did just a few minutes ago and then people obviously would have pulled out the inerts, they could pull out the excipients, but then we could vote as one vote for all of the

others. Probably save, you know, save some time for each of these for the meeting for other more thorough discussions. So I'll stop here and get an idea of how people think about it and whether it's worth looking at. Just another way to work on our policies and procedures and see if there's a way to make them more efficient.

MR: ELA: Thank you, Rick. Is there discussion among the board, or comments? Asa?

MR. BRADMAN: Sorry, I --

CHAIRMAN ELA: Go ahead, Asa.

MR. BRADMAN: I had to unmute there. You know, I think this is an interesting idea, Rick. I would be concerned though that, you know, individual materials get evaluated individually, but I do feel like I'm not sure if now is the time to discuss it, but I do feel like there's inefficiency in our system where we often repeat content and review and discussion in the spring and the fall and at the extent that we can spend less time on sunsets and more time on -- less time that's duplicative, and more time on other imperative policy issues then, I mean, I think

there's some time value in that.

I get heartburn right now, but I also sometimes take a longer term if, you know, I was on the board for seven years, the kind of two and a half year rookie period I would have a longer period where I felt more comfortable with the process. With that, something to consider even, you know, we have this five-year sunset renewal process. I do think that there's potential for increases in efficiency and more time for us -- a way to reduce duplicative time on some issues. And anything that moves in that direction I think will be helpful.

MR. GREENWOOD: Yes, good comments. And again, I agree with you, you know. Maybe we spent 15 minutes just reading through some of the sunsets and we've done that several times, that's time really that we could spend on some of these issues, like the excipients or the inerts that have more meaning, I think, and need more discussion. So now how we do that is another issue but no, it's a good point.

CHAIRMAN ELA: Dave and then Emily and

then Wood. And hopefully Asa didn't give you a heart attack with the possibility, with the thought of extending your terms. Go ahead, Dave.

MR. GREENWOOD: No, he was talking about you, Steve. I think I have a term limit.

MR. MORTENSEN: Yes, I agree with Asa. And I think the intent of what you're working on, Rick, anything we can do to, you know, provide more time for discussion of the more difficult issues. I do like the idea of triaging the list, which is how I see what you're describing here. I think the, you know, the thing that comes to mind then is if we were going to do it that way, what's the process by which grouping occurs, right?

So that way we don't, you know, because often we skip down to the nitty-gritty after the last public comment and, you know, like oh, this, you know, this one's really an issue we need more time on and this one is a no brainer that, you know, everybody agrees that this is going to go through. So I just, I guess I would just underscore the importance of the process by which if we did do this, something was grouped into the, you know,

doesn't require, you know, let's triage the less -- these seven don't require, you know, the additional time.

MR. GREENWOOD: No, I agree. And that was one of the things that we actually talked about in the committee. It's one thing to think about this in general terms, it's another thing to how we actually operationalize it and make sure that it fits within the guidelines of the system where we have people's votes on record too. So there, you know.

MR. MORTENSEN: Yes, yes,

MR. GREENWOOD: It's complicated even though it sounds pretty simple.

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Next we have Emily, then Wood, then Sue, and after that we will probably have to move on just so that I want to make sure we get the strengthening, or the human capital management and then CACS. But go ahead, Emily.

MS. OAKLEY: Thanks, Rick, for your work on this. And I was also surprised by the lack of public comment on this, so I was wondering if

PDS might, I mean, not that they weren't two very important comments, but that more stakeholders I should say didn't weigh in. So I was wondering if PDS might consider reissuing this or putting forward some more questions for the spring to see if there's additional feedback because, you know, like Dave stated, I think we all agree absolutely with the need to find more time to discuss the issues that require more debate.

And we're also looking for ways to do that that doesn't preclude robust discussion or make someone feel like they're not able to bring up a point for fear of, you know, not going with a consent calendar view. So is there a way that we could put out some questions perhaps to the stakeholder community to help us try to resolve that issue and that challenge that we're facing and see if there might be some other ideas that folks have.

MR. GREENWOOD: No, okay. And good point because I actually expected to have a number of comments because people might think it's a way to limit discussion and that we would, you know,

use it to ramrod things through and that isn't the intent at all. And anyone who has been to county board of supervisors meetings knows that, you know, things get pulled and discussed and that starts other discussions. So it's not a way to just rubber stamp votes. But yes, that's a good idea maybe about reissuing it.

CHAIRMAN ELA: Wood and then Sue.

MR. TURNER: I may be reiterating some points that have already been made, Rick, but I love this idea and I just wanted to make the point that , you know, as long as there's not a -- I think sometimes we have to make sure we're moving in the direction where individual voices on committees. And on the board we have the ability to raise those voices and, you know, I don't want there to be sort of a, you know, a sense where there's momentum at a committee level to kind of move forward when one person may feel like they have a need to sort of hear how others on the board, on the full board may feel about this in open discussion, bring an issue in open discussion.

So as long as there's some way I think,

and you're thinking about this, that sort of makes sure individual voices are heard and if there is a strong feeling by an individual person to be able to bring something to the board for full discussion that there's an opportunity to do that. I think this is a great way to think about efficiency and really getting to the heart of the matter of what we're here to do.

MR. GREENWOOD: Yes, and I, to me a lot of it being through a number of these meetings now, is we do so many thing, I hate to say it, by rote, but on the sunsets in particular, we spend a lot of time saying yes, yes, yes, and I'm just thinking that maybe we can do that in one set of yes, yes, yeses, or no, no, nos, than, you know, take strychnine as an example or something. But it'd be interesting. So you had one more comment?

CHAIRMAN ELA: Yes. Just for the record I want to make sure I'm not taking strychnine.

MR. GREENWOOD: Oh, okay.

CHAIRMAN ELA: Sue, go ahead.

MS. BAIRD: Yes, not identical but

similar method was used back when the first five-year sunset and they had all of these materials that they had to review and there was obviously no time for it. And they just kind of whipped through them very quickly and kind of grouped them together and voted to relist. And then the action was taken by the policy that we broke them down and that's the reason we're really working on 2022 stuff so that we won't ever have that happen again.

So I think that there is a quasi-precedent set for this type of a motion and I really think it's something that needs to happen. We need time to really consider those issues that are -- and I'm not saying not -- I started saying that are important, the rest of them are not, that's not what I mean. But, yes, we do need to have quality time on some of the issues and others are just more easily determined.

MR. GREENWOOD: Okay. No, yes, good comments. And, Steve, yes, I think you should watch out for strychnine based on some of your votes but that's okay.

CHAIRMAN ELA: Fair enough. It just always worries me when somebody says take strychnine. But I will just say for my own comment and we need to move on is the only worry I have is I still think we need to present on each sunset the pros and cons to honor our stakeholders and the public comments that went in. So I hate to just group them and then not have any recognition that we have read the public comments.

And then secondly, it makes my head spin as to how to think about grouping things. Maybe it's because my head already spins. But it kind of adds another layer onto things. I just think we want to make sure we're very clear to our stakeholders and the other board members on how we group things. So I'm not necessarily against it, I just think there needs to be a high amount of transparency. And I know you agree with that as well.

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Well, thank you, Rick. We appreciate your comments. We're going to move on to Scott as the chairperson of Compliance,

Accreditation, and Certification Subcommittee. Scott, why don't you take it away. I know we're going to run a little bit overtime and I think that's okay. I think we've had some important topics this afternoon. So, Scott, I want to make sure we give you your due time as well. So go ahead, Scott.

MR. RICE: Okay. Thanks, Steve. And always challenging I know to be the last for the day, but I appreciate everybody sticking around for this. I think it's a pretty great one to dive into. We had saved 30 minutes for this and I've got about, I mean, we received a lot of great discussion and comments. So I did want to acknowledge and honor those and really give it a good shot at summarizing. So I've got about 10 minutes or so to just give you that summary and then looking forward to board discussion. I just wanted to give you sort of a lay of the land there.

I wanted to start by extending thanks, my thanks are that of a number of stakeholders and Jenny for drafting this memo and kickstarting the conversation. Judging from the comments we

received and some of the discussions that have already taken place, timely and pre-write for further exploration as our certification role grows and expands its responsibilities and scope. The need for bolstering our community in practice and inspection certification is pretty clear. Mainly clear by the constraints placed on our system by the pandemic that we're living through.

Certification and inspection work isn't easy and requires a high degree of technical skill and understanding. IOIA put a fine point on it when they said in their comment, we're facing a potential and imminent crisis of an adequate number of qualified, trained, and ready inspectors. Before diving into the details of the comments that we did receive, I wanted to pause for a moment and acknowledge some commenter's concern with the use of the term human capital.

While there's a broad body of work from which that term is drawn, some expressed the term comes across as dehumanizing or impersonal and generally they don't feel comfortable referring to humans as capital. Some suggested alternatives

for the term included human capacity, perhaps stewardship of expertise, so something that we can continue to discuss.

The comments received offered a wealth of suggestions and thoughts across the human capital dimensions identified in the memo. I made an effort to organize those according to the dimensions outlined in the memo and identify some common themes. That said, there's much crossover and many of the ideas expressed are shared across those dimensions.

A common concern across many of the ideas shared is a need for funding to move them forward. The initiation of a credentialing system for inspectors, an inspector cooperative, or a central database of inspectors and evaluations. All of these require some sort of funding. With margins tight it's difficult to see this coming from the inspectors themselves, but some commenters offered suggestions for funding sources such as organic manufacturers, USDA, or capitalizing on existing programs and networks.

Data, or the lack thereof, figures

pretty prominently in many comments as well. There's a need to have a better understanding of just how many inspectors are out there. The ratio of inspectors that certify operations, the range of inspector compensation, geographic location of inspectors, the list goes on. The data gap also extends to the ability to determine performance history of the inspector pool.

So starting as Jenny's memo did with strategic workforce planning, there was some themes of collaboration. ACA pointed to the collaboration with IOIA and NOP as a positive impact on the development of inspectors and staff through education, training, and networking. One of the weaknesses on that is that not all inspectors are associated with IOIA or ACA. Other collaborations include joint ACA, NOP and IOIA trainings. Town halls for IOIA inspector members, quarterly certifier inspector dialogue calls, all provide a form for identifying strengths, weaknesses, and strategies.

Moving on to work force in general, IOIA noted inspector interest and registration in

online courses is down this year. Virtual conferencing and webinars though can reach potential inspectors and build up that interest. As we enter a period when more operations will require a certification under the strengthening of organic enforcement role, the industry needs to be seeing that greater interest and not that attrition building up that inspector and reviewer workforce.

Geographical shortages were identified, particularly in the southeast U.S., which is seeing growth in organics but lacks a robust inspector pool posing some challenges and opportunities as well. Navigating state, local, and federal labor laws can be challenging when working with contractors and can also prevent providing services such as direct training or offering an hourly rate.

Moving to talent management, in particular pipeline development, there was a focus on apprenticeship. Many long-term inspectors are pulling back on inspection work as they near retirement. Also had a concern for exposure

during the pandemic. That presents an opportunity to tap into their experience and cultivate mentorship and apprenticeships with new inspectors. But to so that requires, again, something to cover the expenses of what that structure will look like. With virtual inspections taking place, technology definitely offers opportunity to expand with apprenticeships.

While virtual training and apprenticeship can be a burden to the value of face-to-face mentorship and skills conveyed in person can't be overstated. It's just a real valuable part of that relationship. Another lower cost option shared was an open office hours concept that provides an open forum for Q&A outside of a formal training and allows some good dialogue between inspectors as well as inspectors and reviewers.

Some other commenters pointed to IOIA as a natural fit to host an apprenticeship program and they are currently managing and looking to develop further such a program. Some identified other partners such as ACA, IFOAM, NOC, OTA, to

develop further partnerships in this regard.

One commenter pointed to the Department of Labor's apprenticeship program in auditing as a model for how we could move forward with inspector apprenticeships, and I think that's just a good area to look at in general of what those, build on existing programs and resources.

In terms of work force sourcing IOIA appointed the potential resources for inspector pool as being new farmers, crop advisors, retiring farmers and professionals. Also important to reach folks at a younger age to present the organic sector field, through career options, through organizations such as FFA, 4-H, and others.

Many pointed to the costly investment in training inspectors and reviewers, staff, or contract, only to see those folks go work another certifier, whether for greater compensation, more workplace flexibility, or other factors. Recruitment sources outside the organic sector include looking at forensic sciences, agro, food science, sources could come from the organic industry itself via QA managers with processing

firms or farm managers, production side.

One great idea was to match research assistants with NOSB members to help conduct and provide literature reviews, write drafts, support NOSB members in their work. We've just heard from discussion about the challenges we face as the board that has a lot on its plate. So that was a wonderful idea to also expose those folks to pretty high-level technical detail and understanding how our industry works. Also setting up university work study programs can help expose student to the industry.

Looking at recruitment and management, excuse me, matching during recruitment, some expressed difficulty in finding inspectors and reviewers who have direct experience in specific production areas, especially livestock. To tackle this, certifiers hire inspectors who conduct those inspections for other certifiers or reviewers who have done this work with other certifiers because, again, that's a limited pool of knowledge sometimes. Of course a weakness of this is that kind of cannibalizes our certifier

and inspector work force where, as I said earlier, you just trained somebody and off they go. But a strength is that cross pollination can improve overall skills of our certification world and the inspection community.

ACA and certifier members pointed to the potential of an interactive job board accessible by certifiers, universities, and other organizations. There was broad support for the idea of an inspector registry, excuse me, which would bring awareness of the breadth and skills of the full inspector pool.

Comments cautioned such as registry would need to be mindful of confidentiality and walk a careful line when it comes to sharing evaluations of rating of inspectors, like a due process and how that works. Of course you don't want to have a blacklist of sorts without having some way of managing that in a due process kind of way.

In terms of ensuring recruitment practices, some noted the potential of overly prescriptive qualification requirements to limit

otherwise promising and talented individuals, especially those who may be socially disadvantaged and who may not have had access to education but have gained experience from other life experience.

Turning to performance management and evaluation, we got a lot of comments on compensation. Many comments reflected the challenge of compensating inspectors or as inspectors securing compensation themselves that reflects the expertise, training, and experience level which they operate. Some inspectors may also keep fees low and believe that they need to do so to remain competitive with fellow inspectors, or to secure work with certifiers to take the lowest bid versus the best fit.

Lower compensation is a risk to organic integrity for the inspector feels rushed to complete an inspection in order to keep their margins at a level that offers them a living wage who are at a rate that the operation is paying. Some commenters suggested six traits recognized by all certifiers and inspectors could help raise all to a wage to acknowledges that experience and

education. Some said they were actually in cost-share payments having a downstream impact on compensation and then inspectors may keep these lower than necessary to meet margins and expenses. Recognizing that cost if often passed on to certified operations.

Looking at evaluation, data management, inspection performance, and qualification could be helpful in tracking the number of inspections and scope conducted each year. Continuing education hours, field evaluations, complaints, again, some data that is super useful. But evaluation can be subjective and numerical measures such as number of inspections conducted or hours of training completed don't tell the full story of an experience. One comment raised mentioned that standardization officer used in certain auditing schemes should be responsible for ensuring consistency and adherence to recognize levels of performance.

And finally, credentialing. Some pointed to the need for an industry-wide

credentialing system similar to licensing but this requires funding and likely as to be standardized would need to be accredited itself.

Finally, professional support and educational infrastructure. A lot of really great thought on education. Folks pointing to look for opportunities to engage with the universities including supporting curriculum that mirrors training for certification reviewers and inspectors. A natural focus could be on land grant universities with outreach to historically black land grant colleges and as well to regional technical schools.

Local small business associations and state extension services also great resources for developing business skills for colleges and universities with campus farms. A call to involve students with a certification for those farms to foster a greater understanding of that certification practice, excuse me, process. Kind of moving beyond just the production practices that we offer on those farms. Kind of presenting certification as a professional option.

Again, the learning center is a great space for students and professionals and a great resource. Education is key, but some caution that over prescriptive requirements and some concern for what FOE has laid out a bit could tighten an already pool of inspectors.

We also need specialized audit training and traced back and mapped out auditing, investigation, and interviewing. Also I think very essential we heard about the soft skills that make good inspectors, such as curiosity, critical thinking, good communication, knowing how to kind of read a room and when to stop talking and let the other person keep going. Foundational skills that's for anyone going into the business themselves such as time management, budgeting, accounting, information technology and software also very crucial.

Some comments on the essentiality of inspectors be experienced in the scope and scale of production of the inspections, assuming the operations they're inspecting. That's something we heard a lot in our conversations around fraud

and some of those, I think we tackled in earlier discussions.

And I'm at the end here. Professional support as independent contractors, inspectors do not have access to a common source for liability and health insurance. Some good ideas about organization of perhaps IOIA, perhaps another that has an umbrella policy that would cover their members. For a number of areas apprenticeship training insurance, some commenters pointed to the role of an inspector cooperative or broader association to meet two of those shared needs.

Those are about as fast as I can move on a pretty deep topic and just really fantastic to get the response that we have already and really would just point to those comments that we received during -- on the docket in further detail. But we would love to hear some other ideas from the board or reflect on what was heard already. So I'll hand it back to Steve.

CHAIRMAN ELA: Thanks, Scott. Wow. Good job. It is a hugely complex issue obviously and it's not one I was aware of until you all have

been starting to talk about it. Now it does make me worried. I think it's a huge topic for organics and especially where certifiers are really the key to our whole system in terms of verification. So thank you for summarizing that. And I'm worried that as you leave the board your immense knowledge on this will go away but I also know we have other board members who are going to pick it up. But your thoughts and work on this as well as organic enforcement will be sorely missed. It looks like Dave has a comment.

MR. MORTENSEN: Yes, I just wanted to say thanks to Scott and too what I thought, for me at least, was it's not my area of expertise by any stretch and I really appreciated the written and public comments that in the same way that Scott would appreciate the much more deeply than I. I thought the creativity and the kind of problem-solving oriented approach to the suggestions was really cool.

I love the idea of universities stepping up and playing a bigger role and I could see all sorts of possible ways based on things that

were suggested and based on personal experiences with getting research projects certified as systems experiments where we could have done more to leverage that as a learning opportunity, as opposed to a kind of hoop we had to jump through. So I thought there was some very thought-provoking things said, so thanks, Scott, and stakeholders.

CHAIRMAN ELA: Other people from the board comments? Creative ideas and what we, you know, if you see any fast forward on this, Kim?

MS. HUSEMAN: Following up on some of Dave's comments, when I first look and started writing my notes to what you were saying, Scott, the list kept getting longer and longer because of just bullet points. How do you eat an elephant one bite at a time? So, you know, I think there's so many aspects that you touched on. It seems it needs maybe to go into different, you know, several silos. And hitting on also the education component, when I think of other industries and how the university system, and very specifically land grant schools, tend to be all over this.

You know, I think there is, you know,

I'm not in that arena directly today but just the potential for opportunity to help create a standardized education system, or at least an approach that can be so vertically integrated. And when you touched on college farms and the schools that I've been part of and their farming operations, there's a huge need there and a potential through, you know, funding of some sort of course, but in order to expose individuals in that learning environment from the ground up. So I'm excited to see where this goes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: I was like Kim, trying to keep up with all the note taking from Scott's bullet point bacchanal but I think that the one think I just wanted to add to that because I think that was just a truly comprehensive summary of all the input that's been given. I'm pretty close to this issue just as I've been an inspector since 2012 and a teacher of organic inspectors since 2017 and so these discussions are kind of part of my every day.

But the one thing that I think that we

miss in these discussions is being an organic inspector is just the most incredible job. It's just a job that I feel like few farm kids could ever imagine having and I don't think we do a very good job of selling that. And so I think when we talk about integrating it into universities and other more formal education programs when I was at an, you know, in a college of agriculture in Montana, oftentimes professors would pose what job do you want when you graduate? And in many ways, that's sort of a limited list depending on where you live.

You can be a salesman of some sort, you can maybe be an agronomist for a company, but if you're truly into organic agriculture, lots of times there's not a long list of jobs for you other than starting your own farm or joining a larger operation as a farmer agronomist. And so when we talk about this, I think things like every independent contractor job needs a better access to healthcare. And so I think that's not something unique to organic inspectors.

But I think talking about it as this

pretty incredible viable job that allows the status of organics to also be elevated when we see formal tracks at universities training and expecting folks to get jobs as organic inspectors after their coursework I think does nothing but improve and increase the general public knowledge about the organic certification process.

So I'm not saying anything that anyone doesn't know, but I think reminding ourselves that the enforcement work, rather the reporting work, of the organic inspector is what keeps us all going, but it's also, it is not judgery it is just an incredible privilege of a job. And so I encourage everyone who's interested in seeking it further, but also just wanted to color the conversation a little bit with that.

CHAIRMAN ELA: Thanks, Nate. You know I was actually going to call on you whether you wanted to or not. Because I know your experience in that is interesting. I mean, as an organic grower, we're certified in the state of Colorado so we get state staff that are also doing many other things such as pesticide inspection and such and

so they have diverse jobs so I don't really see the independent inspector side of things.

So this has been a very interesting conversation for me to listen to and again, I think it's incredibly important. Are there any other comments from the board for Scott or CACS on this?

MR. RICE: I would just offer, you know, this isn't the end of the discussion. I think Jenny's intent was this would kind of kick us off. So I might be heading out but I know that all of you and the new folks coming in, we've got Kyla Smith taking the certifier seat and she has a deep wealth of experience on this as well. So I think it's just the beginning of the conversation and I'm happy to share my bullet point bacchanalia with anyone who cares to have it.

CHAIRMAN ELA: Great. Well, thank you. I don't see any other comments from the board. But I want to recognize that Sue is also has been an inspector and I know has been interested in this as well.

So I want to thank the board. I apologize for going overtime but I think it's been

for good reasons on the discussion here, especially on fenbendazole and inerts and such. And I apologize to the Policy Development Subcommittee and CHCS for not having a shirt for you or a background change for you as well. I don't want you to feel slighted. I just wasn't adept enough to change all those on the fly.

But with this we are going to stop for the day. We're going to recess until tomorrow at noon eastern time where we will pick up with the Handling Subcommittee and I hope you all have a good afternoon, or good evening. And we will see you all tomorrow. So thank you. Michelle, do you have anything before we sign off?

MS. ARSENAULT: No. It's just --

CHAIRMAN ELA: I guess not.

MS. ARSENAULT: -- that the link for the board meeting is the same for all three days so if you got there through the NOSB web page, it's the same link. Maybe you bookmarked it.

CHAIRMAN ELA: All right. We could never do that.

DR. TUCKER: I just wanted to say thank

you, Steve, this was a complicated day today with all these votes. We didn't do that as much in the spring. And so very nicely facilitated. Thank you so, so much. Nicely, nicely done.

CHAIRMAN ELA: Well, thank you. And thank you for the background support on all this. It is important. So we will see everybody tomorrow at 12 noon eastern time. I still have trouble with my conversions. So have a good evening. Take care.

(Whereupon, the above-entitled matter went off the record at 5:19 p.m.)

UNITED STATES DEPARTMENT OF AGRICULTURE

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NATIONAL ORGANIC STANDARDS BOARD

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FALL 2020 MEETING

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THURSDAY
OCTOBER 29, 2020

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The Board met via videoconference at 12:00 p.m. Eastern Time, Steve Ela, Chair, presiding.

PRESENT
STEVE ELA, Chair
SCOTT RICE, Vice Chair
JESSE BUIE, Secretary
SUE BAIRD
ASA BRADMAN
JERRY D'Amore
RICK GREENWOOD
KIM HUSEMAN
MINDEE JEFFERY
DAVE MORTENSEN
EMILY OAKLEY
NATE POWELL-PALM
A-DAE ROMERO-BRIONES
DAN SEITZ
WOOD TURNER

ALSO PRESENT

DR. JENNIFER TUCKER, Deputy Administrator, National Organic Program; Designated Federal Official

DAVID GLASGOW, Associate Deputy Administrator, National Organic Program

MICHELLE ARSENAULT, Advisory Committee Specialist, Standards Division

JARED CLARK, National List Manager, Standards Division

SHANNON NALLY YANESSA, Director, Standards Division

DEVON PATTILLO, Agricultural Marketing Specialist, Standards Division

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(12:03 p.m.)

CHAIRMAN ELA: Welcome back, everybody, to the Thursday edition of the of the NOSB meeting. I just finally got my video on so I will be putting up a different background picture. Once I get it up, I want Rick to notice that I am promoting avocados.

I think as we move into Handling, once I get my picture up, I want you to notice the beautiful flaky pie crust, or galette crust, with apple in it and a little glop of guacamole on the side and we'll decide where handling goes.

MR. GREENWOOD: I appreciate that.

CHAIRMAN ELA: Notice to people that I have my Handling shirt on with a martini which is obviously a handling product through fermentation. We will jump in.

Jenny just noted -- made some comments about how well yesterday went and we'll keep our fingers crossed that today goes as well.

Asa, are you on now?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Oh, okay, great. Sounds good.

The schedule for today is we're going to do Handling and the Materials Subcommittee will take a break in the middle of Handling because we have a fairly extensive docket in the Handling Subcommittee. I am now going to turn it over to Asa to handle the Handling Subcommittee.

Asa, just as a heads up, Jared does have intros for both low acyl gellan gum and ion exchange. So, Asa, it is you.

MR. GREENWOOD: Steve, do we need to do a roll call?

CHAIRMAN ELA: That would probably be a good idea. Thanks, Rick. I appreciate that. Yes, we will do a roll call.

Sue, are you there? Sue, are you on mute?

MS. BAIRD: I am.

CHAIRMAN ELA: Excellent. We wouldn't want you to change.

MS. BAIRD: Thank you.

CHAIRMAN ELA: If you change, you won't

be predictable and then we won't know what's happening.

So Sue is here. Asa, you're here. I heard your voice already.

Jesse.

MR. BUIE: Present.

CHAIRMAN ELA: Okay. Jerry.

MR. D'AMORE: Yes, sir.

CHAIRMAN ELA: I am here. Rick.

MR. GREENWOOD: Present.

CHAIRMAN ELA: Kim.

MS. HUSEMAN: Here.

CHAIRMAN ELA: Mindee.

MS. JEFFERY: I'm here.

CHAIRMAN ELA: Dave.

MR. MORTENSEN: Here.

CHAIRMAN ELA: Emily.

MS. OAKLEY: Present.

CHAIRMAN ELA: Nate.

MR. POWELL-PALM: Here.

CHAIRMAN ELA: Scott.

MR. RICE: Here.

CHAIRMAN ELA: A-Dae.

MS. ROMERO-BRIONES: Here.

CHAIRMAN ELA: Dan.

DR. SEITZ: Here.

CHAIRMAN ELA: Wood.

MR. TURNER: Here.

CHAIRMAN ELA: All right. With that, Asa, it is your court now.

MR. BRADMAN: Thank you. I must say learning to navigate all of this laptop screen is a little challenging. I tried to set up a dual screen situation here last night but without success.

We have a very long agenda today so we can get right into it. I think our first issue of the proposal for the low-acyl gellan gum.

Scott, I think you're the lead on that.

CHAIRMAN ELA: And Jared will have an intro for that.

MR. BRADMAN: That's right. That's right, yeah. So why don't we get started.

Sorry, Jared.

MR. CLARK: Low-acyl gellan gum has been petitioned for addition to 205.605 for use

in processed organic product. The petition was submitted by CP Kelco in August 2019 with the petition addendum received in March 2020.

I will now pass it back to you, Asa, to introduce the lead on this proposal.

MR. BRADMAN: Thank you. Again, Scott and Jerry, I think you had the lead on this.

MR. RICE: Yes, I had this one. Jerry also is taking a look.

As Jared noted, we've got a petition for low-acyl gellan gum and this was petitioned in the low-acyl form. It's worth noting in 2004 CP Kelco petitioned to add gellan gum to the list and the NOSB recommended it be added. Proposed rule was published in 2009 and in 2010 it was added to 605(a).

At that time an annotation limited its use to high-acyl form which is what appears there now. Also outside of USDA organic regulations there's no differentiation between the low and high-acyl gellan gum made in regulatory approval. For instance, the CAS numbers are identical and they are, from a regulatory perspective, treated

the same.

To manufacture the low-acyl form an alkali is added. The temperature is raised to remove acetyl groups. A strong acid is then used to lower the pH and the gum is recovered from pollution by clarification and precipitation. The high-acyl form is not subject to this deacetylation with an alkali fault and, thus, would be nonsynthetic.

After fermentation the high-acyl form is precipitated from pollution with isopropyl alcohol. It is that deacetylation and the removal of the acetyl groups that results in a chemical change and, thus, at the time of rulemaking NOP determined that in accordance with the NOP definition of synthetic that the resulting substance is synthetic. At the time of rulemaking they made that clarification on that synthetic/nonsynthetic determination.

The low-acyl gellan gum is used in a number of different food formulations for, as you might expect, gelling purposes; put in jellies, suspension of things in drinks and milks,

nutritional products, quite a number of items.

I think one of the unique properties about this, or one of the properties that I think brings consideration to the Board is the use of low-acyl gellan gum in hard and soft capsules which give the functionality that can't be achieved with other materials on the national list.

As you may recall from a lot of discussion about carrageenan before and by this Board, that is the only material that has been listed which offers hard and soft capsule with the function and properties needed for such a use.

Excuse me a moment. We did initially bring this forward as a discussion -- we did not initially, excuse me, bring this forward as a discussion document because we felt its similarity to the high-acyl form in the discussion and documentation on that from the 2018 technical review on gum, as well as the discussion around low and high at the time of listing, as I mentioned, initially provided enough ground to move forward with the proposal versus that discussion document.

As I noted, it's technically synthetic.

However, from a regulatory perspective it's identical in the high-acyl environmental and human health perspective. The production of the material doesn't present significant concerns.

The solvent used separates the gum at the dissolution phase of the process, which is typically isopropyl alcohol, and the residuals of those levels are established. Further, there is a recovery procedure used to reclaim that isopropyl alcohol in terms of any exiting the system.

I think for me the option of this for use in vegetarian capsules is perhaps the most persuasive argument for the listing. Consumers have voiced concern over the years with carrageenan as I noted. It's our understanding that low-acyl gum in combination with other structural components such as pullulan which is in federal rulemaking to be added to the national list to provide that alternative.

In terms of comments, we did receive comments from the Petitioner and other manufacturers supporting this and highlighting those uses in dietary supplements to provide a

non-animal base alternative. We heard from a candy company that would see this as functioning a little more easily in some of their formulations than the low-acyl formulation.

You heard comments opposing this listing citing that the synthetic is not necessary and taking issue that there are unique properties to this and that those are already available without the addition of this.

With that, I will turn it back to discussion.

MR. BRADMAN: Thank you.

CHAIRMAN ELA: All right.

MR. BRADMAN: So I think -- so, Steve, you have the information on who's raising their hand?

CHAIRMAN ELA: Yep, yep. We'll open it up. Do any of the Board members have questions, comments?

I'm not seeing any at this point. Oh, Emily has one.

MS. OAKLEY: Well, I actually was going to try not to have a comment so I wouldn't speak,

but then since no one had a comment, I thought I would go ahead and just say that I do find this material to be a little bit challenging because I, like Scott, find the uses for an organic vegetarian capsule to be very compelling.

And I also find the argument stating that there should be, in essence, a higher bar for adding materials to the national list. That is also compelling so I just wanted to put it out there that I find myself conflicted on this one.

CHAIRMAN ELA: Thanks, Emily.

Dan has a comment.

DR. SEITZ: Just a question. There were comments that said, if I understood correctly, in essence this was not necessary that there were other substances that could meet these needs, perhaps not as ideally as this one. I was just wondering how this subcommittee -- if someone could speak to what it was about the comment saying -- recommending not to list. How did they view those comments a little bit more specifically. Scott, you referenced those but I would like to hear a little bit more of the thinking process that

got you to recommending approval.

MR. RICE: I think for me -- sorry. For me this comes down to the -- where one feels about synthetic versus nonsynthetic on the list. I agree that we should be judicious in those synthetics that we do add to the list and that we keep there.

I think in terms of the comments that we received, I still found that we don't have a lot of options, as I understand it, for encapsulation and to provide that vegetarian alternative.

In terms of the use of -- I think we turned to pullulan as one that was brought up earlier and had predominately been used as a vegetarian alternative and a nonsynthetic that will be on the national list as an option.

I think if you add this as another option to be used with pullulan or another substance to make that usable capsule, I think when we're seeing increased consumer demand and an interest in that vegetarian option, this presents a fairly -- a very low toxicity and low concern

option. Does that help address what you were getting at, Dan?

DR. SEITZ: Yes, thank you. Appreciate it.

CHAIRMAN ELA: Scott, I guess I have a question or comment. I think I would feel a little differently about this if it was actually -- I mean, for our list it's a different substance but essentially, as you noted right off the top, it is not generally separated as high-acyl and low-acyl and kind of given that it makes me wonder why we separated it. I mean, do you see any compelling reason to have them separated at this point?

MR. RICE: Well, I think the synthetic and the nonsynthetic determination would keep them on different parts of the list so that would be -- that would be the rationale for having them in two different places if that's what you're asking.

CHAIRMAN ELA: Thanks. Any other comments?

Seeing none, we will move -- Dave has a comment.

MR. MORTENSEN: Yeah, I just had a question. I see that the way that it's handled internationally varies from one entity to another. For example, European economic community doesn't list it and another place doesn't list it and then another one does list it. Did you get any insight into whether our approving this could influence the ability to sell an organic product abroad?

MR. RICE: No, I did not review trade implications. I think it's also important to note, though, that materials are listed differently in different regulations so I think we need to remember that just because something like gellan gum isn't explicitly listed would not necessarily prohibit it from that regulation. It really just depends on the regulation.

CHAIRMAN ELA: Thanks, Scott.

Moving on, we will move to the vote. Okay, thank you. So we have a classification motion that was to classify low-acyl gellan gum as non-agricultural synthetic. It was made by Scott and seconded by Jerry and we will start the voting on that classification, it looks like, with

Emily.

MS. OAKLEY: Yes.

CHAIRMAN ELA: So, Emily, this is the vote to classify it as --

MS. OAKLEY: Yes.

CHAIRMAN ELA: Okay, great.

Nate.

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott.

MR. RICE: Yes.

CHAIRMAN ELA: A-Dae.

MS. ROMER0-BRIONES: Yes.

CHAIRMAN ELA: Dan

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood.

MR. TURNER: Yes.

CHAIRMAN ELA: Sue.

MS. BAIRD: Yes.

CHAIRMAN ELA: Asa.

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse.

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry.

MR. D'AMORE: Yes.

CHAIRMAN ELA: Rick.

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim.

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee.

MS. JEFFERY: Yes.

CHAIRMAN ELA: Dave.

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Chair votes yes.

Jesse.

MR. BUIE: Fifteen yes, zero no. The motion passes.

CHAIRMAN ELA: Okay. Now we will vote on the national list motion. The motion is to add low-acyl gellan gum to the national list to 205.605(d). The motion was made by Scott and seconded by Jerry. We will start the voting with Nate. Just to remind people, this is not a sunset so the motion is if you vote yes, it is to add it and if you vote no, it is to not add it to the list.

Nate.

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott.

MR. RICE: Yes.

CHAIRMAN ELA: A-Dae.

MS. ROMER0-BRIONES: Yes.

CHAIRMAN ELA: Dan.

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood.

MR. TURNER: Yes.

CHAIRMAN ELA: Sue.

MS. BAIRD: Yes.

CHAIRMAN ELA: Asa.

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse.

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry.

MR. D'AMORE: Yes.

CHAIRMAN ELA: Rick.

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim.

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee.

MS. JEFFERY: Yes.

CHAIRMAN ELA: Dave.

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily.

MS. OAKLEY: Abstain.

CHAIRMAN ELA: Chair votes yes.

Jesse.

MR. BUIE: Okay, 14 yes, one abstention. The motion passes.

CHAIRMAN ELA: All right. Thank you very much.

Back to you, Asa.

MR. BRADMAN: Okay. Well, our next topic is the ion exchange filtration.

Steve, you're on deck for that, and also Scott.

CHAIRMAN ELA: That is correct.

Jared, do you want to give the introduction to this?

MR. D'AMORE: No, sir, I don't but I would like to make a comment.

CHAIRMAN ELA: Jared, not Jerry.

MR. D'AMORE: Oh, I'm sorry. While I have you, may I continue to a second?

CHAIRMAN ELA: Let's wait until we get

it introduced.

Go ahead, Jared.

MR. CLARK: Ion exchange was referred to the NOSB by the NOP via an August 2019 memo. The memo requested a review and recommendation from the Board to help address inconsistencies in how the ion exchange process was being reviewed for use in the production of organic processed products. In support of the NOSB's review of the process, a technical report was written and posted to the NOP website in August 2020.

I will now pass it back to the proposal lead, Steve Ela, for discussion.

CHAIRMAN ELA: Thanks, Jared.

Jerry, do you have a real quick comment before I introduce it?

MR. D'AMORE: No, sir. Not to this one so let's just keep on going.

CHAIRMAN ELA: Okay. Let me get my screen changed here. So ion exchange, as Jared noted, was referred to the NOSB by the Program to help give our recommendations on discrepancies as to whether either just the recharge materials

should be on the national list, or whether both recharge and the resin materials should be listed.

It's a complicated topic that certainly involved some chemistry as well as regulatory issues. We received comments from a number of people, both on the side of kind of maintaining the status quo that only recharge materials need to appear on the national list, to comments that compellingly argue the opposite, that both recharge materials and the resins should appear on the national list.

Just reading from a few of the comments, for example, one commenter supports the allowance of ion exchange filtration as an organic processing method. In general I would say there were very few comments saying that it should not be used at all so most commenters agree that it should be allowed, but then it comes down to the details.

This is one that supports our previous recommendation that we just -- this is from a discussion document last spring that only the exchange recharge materials must be on the national list.

This one in particular; While allowing ion exchange push for that there must be -- the use of it must be described in detail on the certified operator's organic handling plan and that is reviewed and approved by the operation's certifying agent. So they did want some oversight of the process and to have it just used without verification by the certifying agency.

One of the issues that came up is FDA's classification of ion exchange resins. There's no doubt that they are second food additives but then it is whether they met the criteria further on of being approved contact substances. This was a little unclear because FDA changed their regulations. I don't have what year right in front of me but it meant that some of these resins were classified as approved contact substances.

And others, because of the change in FDA policy, they were only classified as secondary food additives but probably would have met the food context surface definition. It's just the food contact surface definition was put in later in the process.

At this point NOP has said that if it's food contact substance, it's allowable but there were certainly a number of comments saying just because FDA makes a policy, it is not a given that a national organic program or the NOSB should follow that guidance, that organics often have a higher level of review than another government agency might have.

This is complicated and we received a lot of comments about this. I personally kind of come down on the side that they are food contact substances by the way I read the text. That can be argued and I'll be curious to hear other Board members' take on that.

If they are food contact substances, then I tend to lean on the fact -- if the resins are, let me be clear, then I tend to lean to the fact that they do not need to be on the national list and only the recharge materials do.

I think the next question, once we get past that kind of debatable, at least in the public comment question of food contact or secondary food additives, is whether the resins are inert. We

know that the word inert is kind of a hot topic at this point so it really becomes are the resins degrading into the material that's being filtered.

The TR was a little -- basically did not cover this well but didn't provide any compelling evidence that the resins do degrade and there are remnants of the resin material in the final substance.

One commenter noted that this resin degradation and malfunction is a concern and that the TR did not comment on potential health effects from the resin material leaching into treated food products. At the time of this TR no published studies on human health effects of ion exchange degradation were found.

I will say in my write-up in the spring I did use that without that issue of public health effects or exchange the resin degradation into the product. It seemed like the resins were on the more inert side of things.

There are a couple references that people brought up of where resins do degrade but they did not have good documentation with them.

We can argue and comment in the Board of whether we should delay this and ask for specific studies of whether that happens or not or whether we move forward with the information we have at hand.

The same commenter said that the NOSB may see a need and opportunity for further research to understand the impact of leaching resin materials on human health. This commenter questioned the subcommittee conclusion that they made last spring that the fate of lost functional groups that leached or charged ion from resins would be in the recharge material and not at least to some degree in the organic product.

I don't think there's a lot of question that the recharge material that replaces ions on the resins could be present in the final product. I think the real question is whether the resins themselves are relatively inert or whether they do contribute to residues in the final product.

I think the last thing that I'm going to say is that the NOP itself has been somewhat fuzzy on this. A number of commenters noted how there have been memos that have not made it to

guidance. There have been memos that have been rescinded. The general take has been that only the recharge materials need to be certified but that has been a little fuzzy at times.

The most recent comment from the NOP that really landed this on our desk was that the resins do need to be certified. The status quo prior to putting this on our desk was in general that only the recharge materials needed to be on the national list, the resins did not, although OMRI did take a little bit different take on that.

With that, I think I'm going to open it up to questions. There was certainly a lot more technical detail in the comments that I can spend a lot of time covering and I can go into any of those in more detail if the Board members would prefer, but I think at this point I'll open it up to questions from the Board.

MR. BRADMAN: Thank you, Steve. I'm looking forward to input on this, the comments and the proposal. I think there's definitely some complicated challenging issues there so I'm hoping we get some hands raised and I would love to hear

more input and thoughts from the Board.

CHAIRMAN ELA: Same here.

Scott, I don't know if you as kind of the co-lead on this and as a certified representative want to chime in with anything on this as well.

MR. RICE: Yeah, I think you did a great job of summarizing what we saw. I think specifically on the certification side we did hear some good comments from certifiers.

As you noted, I think there's been some unclear communication in the past and not a definitive one that certifiers can point to as far as something from the NOP and so I think I'm no great fan of having something in the regulation that requires instruction or guidance to get everybody on the same page.

But I think in this instance because of the history that we have, it would certainly be helpful for the NOP to come up with something like that. I think that would help bring any sort of outline -- sort of action on this in line. That's what I think most certifiers are operating

in a manner that is parallel with what our subcommittee recommendation is here.

CHAIRMAN ELA: I would agree. To me there is the argument of secondary food additive versus food contact substance and that was really the gist of a lot of the comments, but I think, you know, the other maybe bigger is are these resins degrading into the final food product.

They certainly are -- the ion exchange is changing the nature of the final food product but are the resins themselves. From the TR and the other data I've seen it showed they weren't but certainly some people called that into question.

Scott, you have your hand up again?

MR. RICE: Yeah, just real quick. I would say -- just reiterate that these materials are looked at by certifiers and the expectation that they be on the OSP reviewed and approved. Secondly, there's -- it would be helpful for guidance or instruction from NOP, I think.

It's also their option to get a legal opinion on whether or not this does fall into that

food contact substance. Depending on whatever legal opinion might emerge from that, the Board can certainly take a look at this again. There's always that option as well.

CHAIRMAN ELA: Emily, you have a comment?

MS. OAKLEY: Yes, thanks. I had a question. I know you and I had discussed this offline but I just wanted to ask particularly about the comments from Emily Brown Rosen. I also wanted to know if the Program had a chance to look at those and, if so, what their thoughts on that might be.

I should have asked you to look at them earlier so apologies for putting the Program on the spot right now. Yeah, just curious but if they have had a chance and what they think of them.

CHAIRMAN ELA: So that's a question for the Program at this point, Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Does the Program want to jump into this one?

Jared, Devon, or Jenny?

MS. ARSENAULT: I think they're working on it.

MS. OAKLEY: If not, I apologize for --

DR. TUCKER: Yeah, honestly at this one I think the comment has already been made that the Program had a little bit of inconsistency on this topic. I don't want to add to any of -- we would like to see what the Board does and then we will consider what to do next. We just don't know yet honestly and so it would be really inappropriate for me to just speculate on the moment.

It's been said it's a really complex topic. I will generally say that -- generally that instructions as a general rule are used for topics where the impact is on certifiers so the audience for an instruction we generally do an interim instruction with request for comment is when it's focused on certifiers, or something that impacts the broader industry, like this would, that would be more appropriate for rulemaking or guidance, but I would not want to speculate at this time what that would look like if we moved forward.

CHAIRMAN ELA: Thanks, Jenny. I'll jump in a little bit. I mean, I think Emily Brown Rosen makes -- she really lays out the ground work well as some of our other commenters did. You know, this sort of does come down to food contact versus secondary food additive, but it also, as I said, does come down to do these materials actually, you know, leach into the -- breakdown into the product.

I think, Emily, there's one of her points how would one calculate the amount of ion exchange resins leaching into the product when used to mobilize enzymes used during manufacture of high fructose corn syrup. In this example they make an assumption that 20 percent of the resin is lost into the corn syrup through column leaching over the service life of the column. We don't know what the service life is though there is no reference given for the basis of this assumption. Further research into the issue of migration seems warranted, especially given the concerns mentioned in the TR.

It's still -- I haven't seen any data

other than either minimal or speculative that says these resins are breaking down in any significant manner into the food product. I think that remains that it could be classified as no evidence. It could be classified as an unanswered question.

She also says, you know, like a sanitizing spray containing sulfuric acid sprayed directly on seeds or sprouts. Clearly this would not be permitted on organic food at present. If NOSB were to decide that ion exchange resins are permitted as a food contact substance, would that precedent apply to all of the substances. We can't just allow this loophole in one category and set a precedent for all the others.

I guess to me personally it still comes back to that sulfuric acid is having an effect on those sprouts whereas I'm not sure that the resins are having an effect on the food. There's kind of a subtle difference there.

There's no doubt the recharge materials are because those ions are being exchanged into the food. I think the claim could be made they are -- the resins are food contact surfaces that

really are like a vessel versus an active agent.

I mean, I'm pretty comfortable forwarding this on to the Program with the recommendation that only recharge materials need to be listed but I would not be adverse to the argument if somebody felt differently that they strongly felt that the resins did contribute to the final product.

Let me get back to Zoom. Dave and then Asa.

MR. MORTENSEN: So I'm speaking on limited knowledge here and that knowledge is using some of these kind of columns in research for binding and releasing compounds that you're measuring in the soil.

I definitely agree with the first paragraph that the exchange would result in some loss off the column so that part seems entirely consistent with my understanding of how these things work. My understanding also, though, is that the membranes and resins age and as they age their integrity drops and then you stop using them

at some point.

So I -- based on some of the public comments, I would imagine that there are things coming off these exchange columns that are moving with the food probably at very low concentrations and probably increasing as the column ages. That would be my understanding of this.

It would seem to me then that if that's true, which I think it is true, it would seem that it would argue that you would want to -- we would want to have the substances that are used to manufacture the membranes in resins be something that is looked at and is part of the review in the same way that the ions would be reviewed.

CHAIRMAN ELA: Asa.

MR. BRADMAN: This whole arena has been new to me just from a food processing point of view. Although like Dave I've used some of these perhaps similar materials in a lab related to DNA and things like that. I supported this recommendation and I think I still do but I'm kind of on the fence a little bit.

I'm thinking of the analogy of, you

know, concerns that have been raised about BPA and migration of materials from food packaging into food products as a potential NOSB issue. I guess when I think about this a little bit more, you know, maybe it's because I'm an academic and do research but it does seem like more research would be warranted.

I'm not sure if that would affect this decision on a short-term basis but it does seem like more information would be helpful. I don't know if that would affect this decision right now, but there could also be a recommendation to look into that question more carefully, you know, breakdown contamination from resin materials.

CHAIRMAN ELA: Thanks, Asa. Nate.

MR. POWELL-PALM: Just a quick comment. As an organic inspector, I think about food contact surfaces and substances a lot. And there's a lot of questions that go into writing a report when we consider those.

And so I think it is really a legal question for our food contact substances in general needing to be on the list. But if we talk about

degradation of materials, I would see that quickly spiraling into all materials that come in contact, like the boiler. You know any surface would then have to be possibly listed.

So I think that's where I see -- if we're going to say the degradation of materials in contact, we would want to, I think, sort of temper that to -- that's a much broader conversation.

I think if I understood Asa's comment right, you know, then we're talking about microplastic migration and packaging degradation and all these different things, which I don't think is what we're really getting at here with this particular conversation.

CHAIRMAN ELA: Dave, you had another comment?

MR. MORTENSEN: I forgot to drop my hand. But I guess that's a very helpful extension of the logic, Nate. I guess it seems to me that -- but I might be wrong. Maybe this isn't accurate, you know. It seems to me that the surface of a stainless steel vessel or something that is much less likely that in the aging process

significant release of compounds occurs.

And you would use that logic to guide us to look at the processes like membranes and resins for example that we know age and that in the aging process there are chemical reactions that would result in a release or, you know, just wear and tear and thus release of those materials into the food stream.

It seems a little different to me, but it's probably a continuum, you know, because when Asa brings up packaging, you know, the lining of cans and bottles, I mean, there's a whole lot in there. But it just seems to me that in the synthesis and manufacture of processed foods that we would want to be really careful with the intimacy of the degradation process during that whatever it is -- during the aging of those columns.

So I see it as a continuum, I think. And it seems to me that this is on one end of the continuum that is a little more worrying to me than the other end by quite a bit actually I would think.

CHAIRMAN ELA: Thanks, Dave. And other discussion. And, yes, this is a topic, I

mean, I think we use plastic tables in our operation and plastic totes and, you know, things that there can be a fairly, you know, it's not a fleeting contact. We have totes in our cooler or plastic bins for food safety reasons.

But it is -- I hear Emily Brown Rosen's comment of, you know, the continuum of what we allow. And I hear Nate's, you know, continuum on the opposite side. And, Dave, you know, you just made points as well. Scott has a comment.

MR. RICE: I think actually Wood was before me. I'll defer to him.

MR. TURNER: Thanks, Scott.

CHAIRMAN ELA: I'm sorry, Wood. I had you covered up. Thanks.

MR. TURNER: No worries. I just want to say I find Dave's comment really compelling. And I'm struggling with why the resin would not be -- would not also be included. And I guess what I'm trying to understand a little bit here from the certification standpoint and from sort of the process standpoint is what the implications are for pushing this back, you know, studying it

further because I just -- you know, what are we looking at here if that's the case?

Are we really going to get some compelling research? Is it so far out that, you know, we're going to be in a state of limbo for a period of time if we ask for more study on this?

Or, you know, can someone speak to that, Asa or Scott, in particular? And I guess Scott more on the certification side. Are there other real implications there? Is it fundamentally unenforceable if the resins did end up being included in the recommendation?

CHAIRMAN ELA: Go ahead, Scott.

MR. RICE: Yes. I think this may sort of tie nicely into my question, really, or sort of comment and question.

I think we're in a spot that we don't often find ourselves on the Board here depending on how you look at it, I guess. NOP asked us to take a look at this, make a recommendation. We're not necessarily recommending the addition of materials. We're trying to provide some clarification.

But I think, you know, we're not adding anything that's not already there. And that's not to say we shouldn't be looking at these things. I think all of you have been making some really great comments on the whys of that and the why nots.

I guess my question goes perhaps back to the program. What would outside of a guidance or an instruction as Jenny described, sort of what's our next step? You know, you asked us to take a look at this. We've got a recommendation here for you.

And just for the benefit of how we understand the process, what can we expect? Is there going to be that more research? Is it just going to be a thanks? Okay. We'll just keep going. That might be helpful in this discussion.

CHAIRMAN ELA: I know Jenny wanted to make a comment at the end of this discussion as well. So, Jenny, it might be a good time to jump in.

DR. TUCKER: Yes. Actually what I was going to say at the end, actually I think that answers that question is, you know, pausing and

moving, you know, back beyond this particular technical comment, topic, you know, this is a new process that whereas there has been a certifier conflict on materials. We sent out a memo thinking -- to certifiers -- that was going to resolve that conflict.

We all want consistency. This all essentially comes back to certifier consistency, right? And that's a goal for all of us. And so when we try to have certifier consistency with a memo, it ended up, oh, wait. This is way more complicated, which is why it came to the Board.

This is a new process. We're sort of trying out the process on a very technical and difficult topic.

I think the reality is while the Board has been deliberating on this, certifiers are continuing to do what they believe is correct. And so in the memo to the Board we included sort of how certifiers are interpreting. We know this is a source of inconsistency.

And so the question will be what does the Board propose to resolve that inconsistency?

And if the Board is not able to make a recommendation to resolve that inconsistency, for right now I think the inconsistency is going to continue.

We will get a question from certifiers of am I to issue? This all comes down often to the noncompliance process. So a certifier's question is, do I issue a noncompliance to an operation that's doing it a certain way or not? That will be what certifiers want to know. Is this a noncompliance or not?

I think given the range of different technical views without an additional policy statement, it would be very hard to give anybody a noncompliance on this right now, right? It is a known contentious issue.

So I think the statute quo would continue to happen. This is one source of inconsistency among certifiers. We know there are others. And so then it will end up becoming what is the priority both for the program and the Board on which inconsistencies really, really, really need attention and how quickly? Which ones are

having the biggest impact on the market?

So within that grander scheme is how we would ask a question of what is the priority on addressing this as a policy issue versus other issues? So I want to take us back to that big view.

However, we handle this moving forward is going to set a precedent on how we handle these material conflicts that we defer to the Board.

I think this is also -- final statement -- a really good reminder of how hard it is to be a certifier. And that certifiers are out there making good faith decisions every single day.

And given site specific conditions, given differences in interpretation made in good faith on highly technical content, it is really hard to be a certifier. And that does lead to sources of inconsistency. Which ones we choose to take and move forward becomes the big, big multimillion collaborative question, literally multimillion dollars in some cases.

CHAIRMAN ELA: Yes. Yes. Good point, Jenny. And we know it's widely used. And I think this is another one of those examples where

we know got beat up on the precautionary principle and other documents. But this is one that, you know, as you said, there's already a discrepancy in certifiers. It's already a widely used process.

So whichever way we make a decision, we're going to have an economic impact one way or the other. And it's sometimes hard to look back and change things versus if it's already widely used, and there is a lot of money involved.

Just to sort of finish this up, are there any other questions from the Board? If not, I'm going to throw it out to the Board to give -- I see Scott's got a question --

MR. RICE: Scott has a comment.

CHAIRMAN ELA: -- or comment. Who does -- well, Scott go ahead.

MR. RICE: You know, call me biased, but coming from a certifier world, I would say this is a priority, and we'd love consistency. Obviously, we've got a host of issues before us and always do and always will. But this is one I know that we've batted around for quite some time.

So however it comes, we'd love to see some resolution. Thanks.

CHAIRMAN ELA: Dave, do you have another thought? And then I'm going to throw something out to the Board. So go ahead.

MR. MORTENSEN: Just quickly, Steve, right? You know, like, you referred to the precautionary principle. What would be so problematic for us to just reword this and say that we believe until we have better data that, you know, that the materials, recharge materials, resins and membranes, should be on the list as opposed to --

CHAIRMAN ELA: I think the issue -- yes. I think the issue is that as Scott and Jenny both alluded there is some interpretation among certifiers that the resins do need to be on the list. There are other certifiers that have said they do not.

And so there are a number of manufacturers using the ion exchange filtration with resins that are not presently on the list. And so we suddenly changed that the resins do have to be on the list it might really change the playing

field of what is already going on. And certainly there were some comments about that that some of these materials that we use and love in the organic world might disappear if we change to having resins have to be on the list as well or certainly there could be some considerable disruption in the organic industry.

And I think that's probably true. If we include all of them, they have to be on the National List, it would create some significant heartburn and some delays and maybe make some products disappear or probably make some products disappear.

MR. MORTENSEN: So, I mean, you could be voting no, too, because you think this is too restrictive or because you think it should be more restrictive.

CHAIRMAN ELA: Yes.

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Yes. I think that's true. So, Nate, one quick one and then I'll trot on.

MR. POWELL-PALM: I think for me, and

I really appreciate Jenny's insight in this, is just sort of a legal clarification. It's seems like it's not so much a research question but more a legal question as to the review of what materials need to be listed and considered ultimately inputs as opposed to contact services.

And I think there's -- just like I alluded to before, there's so many that could fall under that that I think limiting this particular item to be needing to be reviewed as an input material would, I think, just -- it wouldn't serve the greater question of what's going into the food and wouldn't give us a framework, in the inspection world, to really move off of going forward.

CHAIRMAN ELA: Say that, again, Nate. I didn't quite follow. So are you saying this would be a precedent that would open up kind of a quagmire? Or explain a little more for weight.

MR. POWELL-PALM: Yes. It seems like getting clarification from the program if it is a -- what food contact surfaces need to be considered inputs or substances that are going to be ultimately needing to be listed rather than just

surfaces or substances.

And so it seems like taking just resins or recharge materials in this very specific instance wouldn't really give us -- wouldn't answer future questions as to does, you know, packaging material that could migrate into food substances, does that need to be listed? Things like that. And sorry for not articulating quite clearly. I'm still working this through in my head.

But if we get more guidance legally of what needs to be listed, then we would be in a much better position to use that guidance across a broader range of materials and for certifiers to take that forward.

CHAIRMAN ELA: Okay. Thanks for explaining to me at least more on that, Nate.

Well, I'm going to ask the Board -- we have a couple choices here. We can send this back to the subcommittee for more work and try and clarify some of these issues and to talk more with the program. We can vote on it now.

As it standards it's really -- it's to say the recharge materials should be on the

National List but not the resins. And I guess we can -- I'm not really sure what the ramifications are if we vote it down.

I think if we vote it down it says that we're not comfortable with this language. But I'm going to -- I guess, Jenny, would you still want us to work on it further? You know, the Board isn't happy with this particular wording and let's go back to the drawing board and work on it further? Or would you just take it as a quagmire that you're going to let certifiers be inconsistent? I'm sorry to throw that at you.

DR. TUCKER: Yes. I'm going to defer to the Board on this. If it's something you want to keep working on, we would certainly -- you know, it is an open work agenda item. And so if you decide to tell us, we know it's an open work agenda item, but for the love of God, take it away from us. I mean, we would leave that up to the Board. That's up to the Board, I believe.

CHAIRMAN ELA: Scott?

MR. RICE: Yes. I guess to answer your question, Steve, for me I would like to vote this

through as it is. It would at least send, you know, some message of consistency. But I think to Nate's point, we need somebody's opinion, a legal opinion, on the food contact side of things more than we need the Board to research what it already has.

I don't think giving the Board more time to look at this is going to result in a whole lot of difference other than making a call on looking at every food contact substance. And I think that is not the direction that this Board should go. I think that is a legal question that should be settled with the work from NOP. That's where I'm at on this.

CHAIRMAN ELA: Okay. Nate, last comment?

MR. POWELL-PALM: I just fully concur with Scott.

CHAIRMAN ELA: Okay. So I think what we will do hearing these comments is we will go to a vote. And what I will do as Chair is if it passes, we will obviously pass it on to the NOP and probably put in the cover sheet that we think that this is a legal issue that NOP needs to resolve

with some of their legal staff.

If it fails, I would then say that we should probably keep it on our work agenda. And what I would ask from stakeholders and other people is to submit research articles talking about the breakdown of the resins so that we have better clarity on that. And if we don't get that data or if it doesn't exist, then I would have a hard time not moving forward with the recommendation as it is.

So why don't we go to a vote. A yes vote is to approve the recommendation that we only look at recharge materials and not the resins. A no vote is to reject that process at this point and go back to work on it some more.

So we will start with Scott, I believe.

MR. RICE: I vote yes.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: Yes.

CHAIRMAN ELA: Sue, we're not hearing you? Okay. Asa?

MR. BRADMAN: I'm going to vote no on this. I'm going to need to put a little more thought into it.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

MR. D'MORE: Yes.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: Yes.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: The Chair votes yes.

MR. TURNER: Did you miss Jerry?

(Simultaneous speaking.)

MR. D'AMORE: I said yes, Wood.

MR. TURNER: I'm sorry. I missed it.

MR. D'AMORE: No problem.

CHAIRMAN ELA: As Jesse is doing the tabulation on this, I assume this requires a two-thirds vote because it is a proposal for the program, whatever. So unless I hear differently, we're assuming a two-thirds vote to pass.

MR. BUIE: Nine yes, six no. The motion fails.

CHAIRMAN ELA: Fails, okay. We will take it back under consideration. Thank you, everybody, for your thoughtful input on it. It certainly is a complicated topic.

With that, we're going to move on to the sunset reviews. Asa, I'll turn it back over to you. And, Asa, if you would just give an introduction to each one. You don't need to read the whole annotation but at least something so our transcriptionist knows what we're talking about.

MR. BRADMAN: Okay. Thank you, Steve. So, everyone, now we're moving into the sunset votes. And our first material is kaolin, a clay often used for -- well, for a number of processing purposes. And, Kim, I think you're onboard for kaolin.

MS. HUSEMAN: Yes. Thanks, Asa. So for kaolin, similar to the spring, there were very few comments. However, it is used. Based off of certifier response, a brief notation here that there possibly could be a substitute already allowed but most comments are positive to re-list kaolin.

CHAIRMAN ELA: All right. Are there questions from the Board, comments?

MR. BRADMAN: Just I wanted to make one comment that there was some concerns about this material in terms of nano scale size of this and that there was encouragement for annotation to limit the use of that although I think in general we have limitations on the use of nano materials. And an annotation would be beyond the scope of the sunset review right now.

MS. HUSEMAN: Correct. Thank you for bringing that up, Asa. There was a comment that was made about that.

CHAIRMAN ELA: Okay. We're going to the vote. The motion is to remove kaolin from 205605, the National List. The motion was made by Kim and seconded by Asa. And we will start with A-Dae. And once again on this just to remind people --

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: -- yes, that the yes is to de-list and the no vote is to re-list. And A-Dae voted no. Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse? Jesse, we're not hearing you.

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'MORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: And the Chair votes no. Jesse?

MR. BUIE: Zero yes, 15 no. The motion fails.

CHAIRMAN ELA: All right. Asa, back to you.

MR. BRADMAN: Thank you. So let's

move on to our next material, sodium bicarbonate. We have a motion to remove sodium bicarbonate from 605A. And I think Mindee, you're onboard for sodium bicarbonate.

MS. JEFFERY: Good morning. Thank you. It's a pretty essential substance listed with wide usage. No comments suggesting that we de-list. And I really appreciate the highlight of the undercurrent that relates to baking powder and corn starch by the certification community along with this substance.

So I appreciate those level of details even though it doesn't necessarily affect sodium bicarbonate and appreciate the level of detail by the certifier community of its wide usage.

CHAIRMAN ELA: All right. Are there comments, questions from the Board? I do not see any so we will go to the vote. And the motion to remove sodium bicarbonate from 205605A of the National List was made by Mindee. It was seconded by Asa. And we will start with Dan.

DR. SEITZ: That would be the easiest vote I have ever made. No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'MORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: And the Chair votes no.

MR. BUIE: Zero yes, 15 no. The motion fails.

CHAIRMAN ELA: Thank you, Jesse. Asa, back to you for waxes.

MR. BRADMAN: Okay. We're now moving on to waxes, non-synthetic, wood rosin and not resin as we have here in the agenda. So, Kim, I think you're on deck for that.

MS. HUSEMAN: Okay. Thanks again, Asa. So as we are evaluating wood rosin for sunset review, the feedback on fall comments, there are uses. This is a product that is used for a coating on fruits. It's used in other applications pertaining to food and candy substituted with other waxes.

However, given the climate, given exports and limitations having wood rosin in the toolbox is what is needed as comments have been made in the space. You know, using wood resin,

it's been asked that we remove and only be referred to wood rosin.

You know, beyond that as stated in the spring there was some concern around annotation so having it added with fruit coatings. That it's listed as an ingredient since it could potentially be consumed. We still get the overwhelming response of the comments is it's supported to be re-listed as it's a strong tool in the toolbox for some of the handlers.

CHAIRMAN ELA: All right. Are there questions? Asa has one?

MR. BRADMAN: Questions or discussion?

CHAIRMAN ELA: Discussion as well. Sorry.

MR. BRADMAN: Yes. So I just want to comment on two things. One, this, like, some of the other waxes that are used as fruit coatings or other coatings on products, I think that those are in some ways -- not in some ways, are unlisted ingredients in a food when you buy an apple or other fruit, for example, that has a coating particularly when you're eating the peel say in contrast to an

avocado. That should be labeled.

And, you know, I know there's concern about overuse of annotations, but I think we should make this a work agenda item to address labeling and also for this particular material, concerns about how it's manufactured and solvents and other materials used.

So that's just a comment. And that's beyond, again, the sunset review. But I think the annotation is a tool that in this case would be appropriate.

CHAIRMAN ELA: Other comments, questions? Wood.

MR. TURNER: I (audio interference) the suggestion that there could be some way to (audio interference) our process to continue to make this a better --

CHAIRMAN ELA: Hey, Wood, we're getting just kind of a digital sound. We can tell you're talking, but we can't understand it. Do you happen to have both your headset and computer on? We now lost Wood. Michelle, do you see Wood?

MS. ARSENAULT: I do see him. His mic

is muted at the moment. Wood, you were just a little garbly there.

MR. TURNER: I don't know what's going on. Can you hear me now?

MS. ARSENAULT: It's still kind of garbled.

MR. TURNER: I dialed in (audio interference).

MR. MORTENSEN: I think that first part, he was agreeing with Asa.

CHAIRMAN ELA: Thanks, Dave.

MR. MORTENSEN: That's what I heard.

CHAIRMAN ELA: Okay. We'll go to Kim and see if we can get Wood to be a little more clear.

MS. HUSEMAN: An excellent point, Asa. And you're going to see the common theme as I start talking through carnauba wax and also the orange shellac. It is a recurring theme, and I couldn't agree more that past sunset the comments that have come through, you know, bring up the valid point of further investigation into things outside of sunset should be addressed and looked at.

You know, one is, should this be listed

as an ingredient as it's a coating on the substance? It's not always used, you know, but in certain circumstances and at certain times it is. And when it is, should it be known to the consumer that that's there?

So I just want to reference. You'll hear that same theme as we move through the rest of the waxes too.

CHAIRMAN ELA: Any other questions or comments?

MR. BRADMAN: Did we lose Wood?

MR. BUIE: Yes. Because the vote is going to start with him.

CHAIRMAN ELA: Wood, I think you said you're there. Let's try you and see if you can -- we will go to the vote. The vote is the motion to remove waxes from wood rosin from 205605, the National List. It was made by Kim and seconded by Scott. Wood, you are the first voter. Can you -- we'll see if we can hear a yes or a no.

MR. TURNER: No.

CHAIRMAN ELA: Okay. That is a no from Wood.

MR. TURNER: I say no. But I may say no. Wood votes no.

CHAIRMAN ELA: We got no. So Sue is next.

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry, are you back? You said he dropped off.

MR. D'MORE: I am back audio through the telephone. Everything else has failed. But my answer is no.

CHAIRMAN ELA: Okay. Rick? Rick, are you there? Not hearing from you Rick. Michelle, can you still see him?

MR. MORTENSEN: Rick is trying.

MR. GREENWOOD: No.

CHAIRMAN ELA: Rick, no. Okay.

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: And the Chair votes no.

MR. BUIE: Zero yes, 15 no. The motion fails.

CHAIRMAN ELA: Okay. Phew. I thought we might have lost all of California there for a minute. Asa, let's move on to ammonium bicarbonate. Asa?

MR. BRADMAN: Sorry. Okay. We're on deck now with ammonium bicarbonate with Mindee.

Thank you.

MS. JEFFERY: That was a big joke when I was a kid moving to California that if I moved there we were going to fall off so be careful, Steve.

CHAIRMAN ELA: Fair enough.

MS. JEFFERY: Ammonium bicarbonate is listed as essential with minimal uses but also supported for re-listing.

MR. BRADMAN: Any comment and discussion on ammonium bicarbonate? I know there was general support. I think there was one group that was opposed to it. Any discussion from the Board on ammonium bicarbonate?

CHAIRMAN ELA: I am not seeing anybody raise their hands. All right. We will move on to the vote. Thank you, Asa. The motion is to remove ammonium bicarbonate from 205605B of the National List. It was made by Mindee and seconded by Scott. We will start the voting at the top again. Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'MORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim? Kim, we're not hearing you. Still not hearing you, Kim. Do we have Kim, Michelle or Jared or Devon?

MS. HUSEMAN: Sorry. My vote is no.

CHAIRMAN ELA: Okay. Thanks, Kim. Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No. And I'm sure the community is really wishing we were in person by now.

CHAIRMAN ELA: Wow, Wood, we can understand you actually. You actually came through really clear. Thank you for whatever you did. And the Chair votes no.

MR. BUIE: Zero yes, 15 no. The motion fails.

CHAIRMAN ELA: All right, Asa, back to you.

MR. BRADMAN: Thank you, everyone. And, Mindee, you're on deck again for ammonium carbonate.

MS. JEFFERY: Yes. Similar. Really minimal uses but also some notes from stakeholders that there aren't other alternatives and one stakeholder supporting de-listing, minimal use substance with some essentiality and some support

for de-listing.

MR. BRADMAN: Thank you.

CHAIRMAN ELA: All right. Are there questions or comments? I am not seeing any so we will go to the vote. The motion is to remove ammonium carbonate from 205605B of the National List. That motion was made by Mindee. It was seconded by myself, Steve. We will start with Asa.

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'MORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae? A-Dae, are you there?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: And Sue?

MS. BAIRD: No.

CHAIRMAN ELA: The Chair votes no.

MR. BUIE: Zero yes, 15 no. The motion fails.

CHAIRMAN ELA: All right, Asa, back to you.

MR. BRADMAN: Thank you. And now we're on deck with Jerry for calcium phosphates, monobasic, dibasic and tribasic.

MR. D'AMORE: Thank you, Asa. I've lost some of my support here in terms of

connectivity. I'll work from my hard copy.

During the April 2020 meeting, we had 16 public comments. Most of them were written and nearly all in support of re-listing. Going on to October for this current section, written and oral comments totaled 12 new comments. Again, most of them were written and about a quarter of them were against re-listing meaning 75 in support of.

We had an initial concern regarding calcium phosphates centered around potential health issues. And we were tasked to do further investigations and concluded that no single phosphate additive can be implicated as an isolated factor and the subcommittee, the handling subcommittee, was in complete support of re-listing with a determination that there's no real substitute for calcium phosphates at this point, particularly in banked products.

CHAIRMAN ELA: Thank you, Jerry. Are there any questions or comments from the Board? I am not seeing any. So the motion is to remove calcium phosphates from 205605 of the National List that was made by myself, Steve, and seconded by

Asa. We will start with Jesse.

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'MORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee? Mindee, we're still -- we're not hearing you.

MS. JEFFERY: No.

CHAIRMAN ELA: Thanks, Mindee. Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: And the Chair votes no. Jesse?

MR. BUIE: Zero yes, 15 no. The motion fails.

CHAIRMAN ELA: Okay, Asa. Asa, you're on mute. Still on mute, Asa.

MR. BRADMAN: All right. I was trying to use my space bar there. Our next material is ozone. And we have a motion to remove it. And, Scott, I believe you're on deck for this one.

MR. RICE: Thank you. We received similar comments as we did in the spring. We had comments overwhelmingly supporting the re-listing of ozone. There was also comments requesting that ozone be included in overall review of sanitizers.

The Board is looking forward to our sanitizer panel in November. And I would just like

to thank the Organic Produce Wholesalers Coalition for their very detailed comments on the many types of handling operations and many types of thesis for this. That was really informative, and I appreciate it?

MR. BRADMAN: Any comments?

CHAIRMAN ELA: Are there questions -- yes, questions or comments from the Board? I'm not seeing any so we'll go to the vote. The motion is to remove ozone from 205605 of the National List. It was made by Scott and seconded by Asa. We will start with Jerry.

MR. D'MORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: And the Chair votes no.

MR. BUIE: Zero yes, 15 no. The motion fails.

CHAIRMAN ELA: All right, Asa.

MR. BRADMAN: Thank you. Our next material is sodium hydroxide. And, Mindee, you're on board for that one.

MS. JEFFERY: Thank you. Comments reflected wide and essential usages and a lot of support for re-listing. A couple of commenters asked us to consider an annotation that would limit the use and maybe investigate for essentiality and then annotate to limit uses because currently the annotation only lists prohibited uses. That isn't really within the scope of the sunset review, but they did ask us to consider that.

CHAIRMAN ELA: All right. Are there questions, comments, about sodium hydroxide? I am not seeing any. So we will move to the vote. The motion is to remove sodium hydroxide from 205605B of the National List with the annotation as prohibited for use in lye peeling of fruits and vegetables. We will start with Rick.

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'MORE: No.

CHAIRMAN ELA: And the Chair votes no.

MR. BUIE: Zero yes, 15 no. The motion fails.

CHAIRMAN ELA: Okay, Asa.

MR. BRADMAN: Okay. Our next material is car -- I'm probably not pronouncing it right -- carnauba wax. And Kim you're on deck for that. And I think this one is the beginning of some of our more interesting and complex discussions. So thank you, Kim.

MS. HUSEMAN: Sure. Thanks, Asa. Quite a few comments were made, especially in comparison to the spring, on carnauba wax. Similar comments to what we saw with wood rosin. Some comments from certifiers listing in the multiple number of entities that do use carnauba wax. From fruit production facilities fully in support of re-listing the wax as maybe not always used in their everyday tools, but when needed especially on pears to help prevent scuffing. At certain times of year when the natural wax on the fruits isn't a strong enough barrier, this is an alternative or in-use. Again, support for if you're looking at an export market having accessibility to multiple different forms.

One commenter said that they do use

organic carnauba wax, but their application isn't prohibited or it's sufficient for a jellybean coating whereas potentially in other applications the organic form is not sufficient for their application.

It was noted the number of organic -- that there is organic availability and that should be taken into consideration, but still yet the organic form may have some downfalls to be able to be used in all applications.

Another vote to de-list essentially stated the abundance of availability of organic carnauba wax. So that was also mentioned.

I do appreciate the number of comments, especially coming from the industry and the production side to really go more in-depth as to what they were utilizing carnauba wax for and why it was important. Those really sum up the comments when last mentioned.

As we stated in our report, there is some concern around use of solvents for extraction, not part obviously of the sunset but something for the Board to consider as we move forward to evaluate

further.

CHAIRMAN ELA: Are there questions or comments for Kim?

MR. BRADMAN: I have a couple of -- sorry.

CHAIRMAN ELA: We've got Dave and then Asa. Go ahead, Dave.

MR. MORTENSEN: Yes. I was just wondering, Kim, if you could just tell us a little bit about the split vote on this. I know it wasn't even/even but, you know, it was split. And I was just curious what some of the concerns were that were expressed there.

MS. HUSEMAN: Thanks, Dave. When we discussed this, the use of or the availability of organic forms was brought into consideration and being that is available and there is a suggestion there is ample supply available in the market I think brought some of that split vote.

I believe the underlying issue is there are synthetics that are involved in the extraction process that may not be part of this being on the list or is there handling entities that are maybe

not adhering to the practice of the extraction. That was brought up also into the conversation.

But as the commenters mentioned, some of the organic form -- the organic form may not be applicable to all uses of the carnauba wax. And so I think that was the largest part of the split vote.

MR. MORTENSEN: Okay. Thanks, Kim.

MS. HUSEMAN: And, Asa, if you have more recollection there, please expand, too.

MR. BRADMAN: Thanks. And also just looking through the comments, I think the comments are a little mixed up on this material. There was a few statements that were repeated that we recommended re-listing and actually the vote was to de-list it. And then the -- I shouldn't say de-list it. To take it off of 606.

And many of the comments, especially from, you know, orchard producers, apples and things like that, it doesn't really address the question of if it's -- you know, if we take it off of 606, it's still available as a tool. It's just that it has to be organically produced.

So I think the question there is on availability. Oregon Tilth, I think, has an example. I think they hopefully specified in their comments that they have three that used a non-organic form and three that did use an organic form. So for me the question is availability of organic. And, again, I have the same concerns about this that there shouldn't be an unlabeled ingredient on a fruit that you are going to eat.

But, you know, I think the key question here is in terms of 606, or one of the key questions, is availability. And I don't feel like I have good data on that. But taking it off 606 would not eliminate it. That wouldn't de-list it or take away its availability.

CHAIRMAN ELA: Are there other comments? So, yes, a question from the Chair here. I hear what you're saying, Kim, in response to Dave's question. What is your -- I'm going to have to ask you just kind of point blank what's your gut feeling at this point?

MS. HUSEMAN: Given that I'm the first one up on the vote, should I save the suspense for

the first one or?

CHAIRMAN ELA: Well, I guess, I just want to hear if you have any more to put in except for your vote.

MS. HUSEMAN: You know, I really appreciate the depth of the comments here compared to the spring. The spring did not bring about as many comments.

I do agree with Asa. I think there were duplicated comments for wood rosin as there were for carnauba wax. People were getting misconstrued in how they were trying to type their message if it was for or against because they voted differently between the two.

And so trying to decipher or put that aside, I cannot discredit that there are ample for, what seems to be in the market space, enough carnauba wax in organic form for the overall need in the space.

But I don't feel like I have enough information to say that that organic form will be sufficient for the applications that it's being used for today nor can I make a decision on if what

is available as an alternative if the organic carnauba wax is not sufficient and is another wax that's on list is that sufficient for their uses?

We'll get to another one that is a non-vegan option based on how it's produced. So that may or may not be a solution there.

So given that information is lacking, I'm going to vote that it stays on the list. I just don't think this is the time yet to remove it. But I think this should be a strong indication given the struggle with if it should be here to hopefully have people who are using the non-organic form to really look harder at what options you may have in an organic form.

CHAIRMAN ELA: Thanks, Kim. Any other comments? All right. We will go to the vote. The motion is to remove waxes, carnauba, from 205606 of the National List based on the following criteria, the Organic Food Production Act. So it was made by Kim. It was seconded by Scott, and we will go to the vote, starting with Kim as she so aptly noted.

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Abstain.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: This is a hard one. I'm going to vote no, but I'd like to see some more work on this.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'MORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: And the Chair votes no. Jesse?

MR. BUIE: Okay.

CHAIRMAN ELA: Give you a little bit of work here.

MR. BUIE: Right. Okay, 3 yes, 11 no, 1 abstention. The motion fails.

CHAIRMAN ELA: Yes. Thank you, Jesse. We're trying to help keep you nimble here. I'm sure you appreciate that. Back to you, Asa.

MR. BRADMAN: Okay. So our next set of materials are the 18 colors. So hopefully this will be smooth and easy I say a bit ironically. But Steve and Jerry, I know you are on deck for this.

CHAIRMAN ELA: And I will just jump in very quickly by saying I took this over last spring because I did not want to saddle any new member

with 18 colors, and it's certainly not my area of expertise.

But I'm going to turn it over to Jerry. Jerry has actually stepped in and run with this and interviewed a bunch of companies and individuals. And so he is the expert. I have deferred to him and will let him present the rest of the colors. So, Jerry, go ahead.

MR. D'AMORE: Steve, I'm not going to let you off the hook quite that easily. I consider myself your willing understudy. So you can jump in at any time.

I'd like to start by telling or saying to Kimberly, boy, do I understand your pain. And you might see some of that in what comes up here. If not, you'll see it a little later in the day.

So regarding colors, I'll obviously go through each one of them individually. However, it would be difficult to go through the October 2020 written and oral comments without a brief review of the colors addressed as a whole, which is how they have been done historically.

Reviewing all the colors collectively,

there were 21 comments or presentations given in the spring and fall sessions. Most of them were written and about 80 percent of them in favor of re-listing.

This is the interesting part. Only 20 percent of the commenters, both for or against, responded to individual colors or conversely said a fully 80 percent of the commenters responded to the whole category with a re-list or de-list recommendation and did not address individual colors. So I guess old habits are hard to break.

Further, the number one reason given for a recommendation to re-list or de-list centered almost exclusively around Super Bowl commercial availability.

Comparing the comments and subsequent communications emanating from the spring 2020 meeting with the comments and conversations coming into this period, the issue of simple commercial availability is primarily the point of consideration. With that said, there has been increased dialogue with the manufacturing community but still with the same varying reports

as to commercial availability.

I need to tell you that almost universally I was getting comments about express types of concerns regarding supply chain due to the current pandemic.

Okay. Moving on to the beet juice extract, the handling committee recommended that this color be re-listed. Beyond what was available for consideration prior to the current public period, there was one new request to have this de-listed. However, I would recommend that the full Board consider beet juice extract color for re-listing due to my feeling of not suitable organic commercial availability.

CHAIRMAN ELA: All right. Are there questions? And the only thing I will chime in on -- oh, Rick, go ahead.

MR. GREENWOOD: Yes. This isn't a question. This is a comment back to my proposal yesterday for the consent agenda. And we were talking about precedents. So what we're about to vote on is approximately 18 different items with one vote. So I just wanted to point that out

because it does show that we are in a sense using this as a consent agenda.

(Simultaneous speaking.)

CHAIRMAN ELA: Rick, I disagree. We're going to vote on each of these individually because they are individual listings.

MR. GREENWOOD: Okay.

CHAIRMAN ELA: We're not going to vote on them as a group. Sorry to disturb your point.

MR. GREENWOOD: So he's right historically.

CHAIRMAN ELA: Yes. I am just going to throw out that this is a -- I agree with Jerry's assessment. This is a very complex group, and he will attempt to lump them together. But as the 2015 Board dealt with, they were going to remove a bunch of these. It came up issues of form, powders versus liquids, et cetera.

In our public comments, we had at least one fairly large manufacturer of organic colors that said they could pretty much make anything in any quantity if there was questions for it and, you know, cost was really the only factor. Cost

is not part of our analysis.

So Jerry is happy to balance, you know, comments from manufacturers. He said yes, I can do this with comments from stakeholders, other stakeholders, saying, well, maybe but we can't seem to source it. So it's a very complicated topic. It looks like Dan has a question or a comment as well.

DR. SEITZ: My question to the subcommittee, if there was a split vote, was it always on the issue of whether there was enough organic supply or were there any issues that caused any of the split votes?

MR. D'AMORE: Almost universally suitable organic supply. There was a couple that came in on health issues. But even those were overwritten by suitable organic supply.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes. Over the years that I've been on the Board the question has come up about, you know, like every meeting, I guess, really, that, you know, if we allowed a non-organic form when an organic form of something is

available, even if it's insufficiently available that we're de-motivating the private sector to move to make organic forms of the same thing more readily and widely available.

So my concern about approving these for, you know, seeing, as Jerry just said, it seems like, you know, in most cases there is an organic form available and a question of how much. And I guess the concern that we're creating a disincentive by approving all of these for the private sector to, you know, move truly organic things forward in the marketplace. That's a concern I have about this whole clump.

CHAIRMAN ELA: I'll make one quick comment before I go to Wood. Dave, as we go down through I think Jerry is not going to recommend re-listing all of these. There will be some for de-listing. So just to be clear, this probably isn't the clump. But go ahead, Wood.

MR. TURNER: That last comment, Steve, may tie into what I was going to ask which was outside of sort of weighing, you know, one commenter versus another commenter or somebody

saying there's a supply and somebody saying there's not supply, does the committee have any data to suggest, you know, any actual industry evidence about the availability of supplies or is it just truly based on the feedback we received from producers?

MR. D'AMORE: That's a great question, Wood. And, again, it varies throughout the 18 items. And piercing the veil from the associations sometimes are limited in their budgets and sometimes we'll get their mandate as one of certification and not deeper into efficacy if you will.

Getting to the manufacturing community gave me a little bit more of a headwind to make some of the recommendations that I am. It's almost getting to the point where I wonder if I shouldn't read through all of them and then come back because Steve is right. I actually conferred with him because I think I'm out on a limb on a couple of these in terms of my recommendations to de-list. But that, too, comes from some pretty intimate --

CHAIRMAN ELA: Jerry, we just lost your audio. Can you get Jerry again?

MR. D'AMORE: I'm here. I got kicked out. If that happens again, please bear with me and I'll call in through AT&T rather than do this. If it happens one more time, give me three minutes to get back with you.

CHAIRMAN ELA: Sure. No, go ahead, Jerry. You're on the --

MR. D'AMORE: Yes. I don't know how far I got with Wood understanding what I was trying to say. As a matter of fact, I'm going to disconnect my camera because that may be part of my problem with bandwidth so please bear with me.

(Simultaneous speaking.)

CHAIRMAN ELA: Yes. And I'll jump in, Jerry, too, and this is where I really want to commend Jerry. I was really relying on stakeholder comments in looking through this. And they are very confusing and not very clear. And we tried to be very specific in our questions to stakeholders to answer this on a color-by-color basis and that was often not the case.

But Jerry did reach out to a lot of stakeholders personally, companies that were for and against and companies that were manufacturers. So, Wood, Jerry's evidence is based on not just the stakeholder comments but actually taking the time to reach out to people as well to try and flesh this out a little bit.

MR. TURNER: That's helpful. I appreciate what Dave said as well. I totally understand what he's saying. And at the same time I feel like it's important to be able to understand what is actual fact about availability. So thanks.

CHAIRMAN ELA: Yes. It's a tough topic as Kim noted.

MR. D'AMORE: Yes. And now I'll get to Kim again. In terms of feeling her pain, I went through the initial pieces of this, taking a lot of this stuff at face value. And it comes down to a question are the intended consequences aligned?

But that doesn't make sense. I'll tell you that I was relying on some work documents that

were showing, you know, a large number of people using, certifiers using, the 205606 in their answer. They would tell you how many people were using that product.

And it took me a couple of weeks to understand that I wasn't even asking the right question because a follow-on to that was, well, how many are using that same product in an organic supply? And sometimes you find out that you didn't ask the right question early enough because in a couple of cases they were already using more of the organic supply than they are the non-organic.

And, again, there's no bad intent here. It's just my questions weren't the right questions to begin with.

MS. HUSEMAN: I hear you, Jerry.

CHAIRMAN ELA: Yes. We have thoughts from Scott and Mindee.

MR. RICE: Yes, thanks. Just, you know, I know it's been noted. But as a 606 material, the certifier is always going to be asking for how that company sourced organic or attempted to source organic before going to the

non-organic option. And I think that's a process that works.

And, you know, it's reminder also as I'm sure was found by Jerry in his research, you know, it might be times when that is available and times when it is not. You know, supply and demand is a tough thing. So just keep in mind that that organic option is always the one that is looked at first and before the (audio interference).

MR. D'AMORE: Right. And your comment is to -- it's a question of timing as well, isn't it? Yes. Seasonality.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: Thank you. I saw the manufacturing community come in pretty strong for re-listing. I saw the Dressing Association, Happy Family, Food Additives Council asking for re-listing almost to the substances with a couple of specifics, beta carotene, black carrot, black purple and carrot juice.

But I also heard that there was a lot of impetus to move into the direction of really functional organic colors, but that they're not

really there yet. And I think 606 works pretty well in that way. I think there can be an economic incentive to develop functional organic ingredients for 606 because then you do win the marketplace.

And so I'm pretty much in support of re-listing these colors in that I think it's a rather minor issue. There is plenty of support for re-listing. And thank you.

MR. D'AMORE: And, Mindee, broadly speaking, you're absolutely right.

MR. ELAP: Yes. And I'll jump in, too. I agree, Mindee, although I think we've seen from comments when you drill down a little more that there were some companies that said we are finding adequate supply of some of these. And this was the problem with the blanket comments versus specific comments. Even companies saying, well, we need this. You know, we're using other organic colors, and we need this. But then they wouldn't say what organic colors they were using.

I think that 606 in general is frustrating because it's really hard to get people

to commit to taking something off even if it's widely available. And so it's a tough one.

Are there further comments? Otherwise we're going to jump into the individual colors starting with beet juice extract. Any other comments before we move down that road? All right.

Jerry, if I remember beet juice extract was one you said we should re-list based on your research. Is that correct?

MR. D'AMORE: That is absolutely correct.

CHAIRMAN ELA: Okay. If we don't have any further comments on this one, we will go to the motion to remove -- if I can get my screen to come up -- the motion is to remove beet juice extract from 205606 of the National List. It was made by myself and seconded by Mindee. We are going to start with Mindee.

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'MORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: The Chair votes no.

MR. BUIE: Zero yes, 15 no. The motion fails.

CHAIRMAN ELA: All right. Just a quick note on timing. I think what we'll do is we'll do two more colors and then break for lunch and then come back.

I think we're pretty much on schedule here. So let's do two more colors and then we'll take our hour break for lunch and come back to more colors.

So, Asa, back to you and Jerry on beta carotene.

MR. BRADMAN: I think really my role here is just to introduce the beta carotene extract color, and Jerry if you want to take it from there.

MR. D'AMORE: Thank you sir. This is a short one. Research truly shows that this is one of the ones where suitable adequate supply is of a concern in the research that I did. And I'm recommending that we do re-list it.

CHAIRMAN ELA: Any other discussion on this one? Okay. The motion is to remove beta carotene extract from 205606 of the National List.

It was made by myself and seconded by Asa. We will start with Dave.

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'MORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: And the Chair votes no.

MR. BUIE: Zero yes, 15 no. The motion fails.

CHAIRMAN ELA: Okay. We will do one more. I'll just not put you on the spot, Asa. Jerry, on the black currant juice.

MR. D'AMORE: Yes, sir. This one was one I had to do a deeper dive into because I took the split and I took it seriously. But what came out of the fall 2020 commenters specifically is a "expressed increase in the comfort level that there is sufficient suitable supply." I went up and did direct communications with manufacturers and have not an overwhelming consensus but a decent consensus that this color can be de-listed without undue disruption. That's it.

CHAIRMAN ELA: Are there questions and

comments? Discussion? Okay. I do not see any. So the motion is to remove black currant juice color from 205606 of the National List. It was made by myself and seconded by Mindee. We will start the vote with Emily.

MS. OAKLEY: Yes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott?

MR. RICE: Yes.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: Yes.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue?

MS. BAIRD: Yes.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

MR. D'MORE: Yes.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: Yes.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: And the Chair votes yes.

MR. BUIE: Fifteen yes, zero no. The motion fails -- I mean the motion passes. The motion passes.

CHAIRMAN ELA: We're trying to keep you nimble, Jesse. Thank you. All right. It is 12:06 so we went a little bit over lunch break. Well, we will come back at -- well, 12:06 my time, sorry, 2:06 Eastern. We will come back at 3 o'clock Eastern Time after a break here, and we will get back to colors. All right. Thank you all.

(Whereupon, the above-entitled matter went off the record at 2:06 p.m. and resumed at

3:03 p.m.)

MR. D'AMORE: I think we're starting at black purple carrot juice color, if I am correct.

CHAIRMAN ELA: You are correct.

MR. D'AMORE: Asa, may I?

CHAIRMAN ELA: Absolutely, be my guest.

MR. D'AMORE: Thank you very much. Black purple carrot juice color, the Handling Committee recommends relisting this color. During the period leading up to our public comments for fall, there were no new comments that came in. Based on the direct telephone conversations with stakeholders, I'm recommending that we relist this color for reasons of inadequate suitable supply of organic alternative.

CHAIRMAN ELA: Are there other comments or questions from the board on this one?

MR. TURNER: I would have a question and comment. Great work here. I just have a question that may be inappropriate for this forum, but I just wanted to know if you could give me any color on it.

MR. D'AMORE: Oh okay.

MR. TURNER: That was horrible. Some of these colors seem like they're probably similar in the way they look. I'm just curious if there's ever any consideration between say black carrot juice and black currant. We went through the black currant conversation. Are these colors similar? Did you learn anything through your outreach to the need and those kinds of factors?

MR. D'AMORE: I tell you what. If I don't address that in the following ones to your full satisfaction, ask that again, but functionality is a big thing. As Dave or somebody pointed out, there's also seasonality as to when some of it is available. So there's a switch back and forth between our 606 and organic that doesn't even get registered sometimes. If you're approved at 606 and you want to put in organic, people don't feel compelled to say whoops, this is now organic.

Yeah, and there are some things, I'm learning new terms all the time, like orphan crops where people actually go out and specifically plant to this. That's become an alternative in some of these cases, too.

MR. TURNER: Thank you --

MR. D'AMORE: Again, Wood, come back at me if you're not more satisfied by the end of the presentation.

MR. TURNER: -- for that one. It was great.

CHAIRMAN ELA: It's a good question, Wood, and I think that's one of the issues of all these is in some of them there's been questions that it's available, but it's the wrong hue or this hue is unstable. It's a pretty specialized industry, so it really is hard to suss out in a lot of ways. So we will move to the motion seeing no more comments.

The motion is to remove black purple carrot juice color from 205.606 of the national list. It was made by myself and seconded by Asa. We are starting with Nate. Nate are you out there?

MR. POWELL-PALM: Yes, I am. I vote no.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: I know we've all got the

post-lunch coma here. Some of you may not have eaten lunch. I did, but we'll get wound up again. A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue? Sue, you're on mute.

MS. BAIRD: No.

CHAIRMAN ELA: Thank you. Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFREY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: And the Chair votes no.

MR. BUIE: Zero yes, 15 no. Motion fails.

CHAIRMAN ELA: Jerry, next is blueberry juice color.

MR. D'AMORE: Yes, sir. The Handling Committee motion to remove blueberry juice color from the national list based upon commercial availability. Public comments put forth by participants in the spring and fall 2020 meetings offered no new challenges to the retention of this color. I'm recommending to remove blueberry juice color from the national list based upon commercial availability.

I'll take all the questions on this one you want because I've managed over 3,000 acres of blueberry production. It's one of the ones I'm qualified for.

CHAIRMAN ELA: Excellent. I know Wood

has some, as well. Questions, comments, statements?

You're safe, Jerry. So we will go to the vote, and the motion was to remove blueberry juice color from 205.606 of the national. We are going to start with Scott.

MR. RICE: Yes.

CHAIRMAN ELA: And then A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: Yes.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee?

MS. JEFFREY: Yes.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: And the Chair votes yes.

MR. BUIE: Thirteen yes, two no, the motion passed.

CHAIRMAN ELA: Thank you, Jesse. Now to Jerry again for carrot juice color.

MR. D'AMORE: Wood, this and two subsequent ones might come closer to being an example of what you asked. The Handling Subcommittee recommended that this color be delisted. I'll actually read what I wrote here. This color probably provoked more response than any of the colors. Unfortunately, the responses were themselves split along the lines of suitable

commercial availability.

The strongest case made to retain carrot juice color on the national list did not argue that there wasn't enough organic supply, but rather focused on specific aspects of suitability, i.e., batch to batch conformity, color, and the strength of color. There is enough organic supply. Any heavy lifting would most likely center around organizing supply sources to get desired characteristics.

Another solution would be or could be contract growing in the specific attributes, which could take several years to put into place. With that, I'm recommending to remove carrot juice color from 606 on the grounds of adequate commercial availability.

CHAIRMAN ELA: Is there discussion? Asa has a question or comment.

MR. BRADMAN: I just want to make a general comment perhaps that was best said earlier, but colors are an interesting component of food products and food processing. I'm right now involved in an evaluation of synthetic food

coloring and potential health implications of some of those synthetic materials. On this end, I think in general the plant-based colors have a better profile in terms of safety and use.

I understand the need for uniformity across products, that having consistency is probably good for marketing and good for sales, although colors themselves don't really affect flavor and quality, although they may affect perception of it. Colors in general, I think, are an interesting item. It sounds like with this one there's enough supply, but organic agriculture is not so uniform chemically compared to conventional in terms of materials used for production. That natural availability seems like a natural result of growing something in a more natural system.

MR. D'AMORE: Thank you, I agree.

CHAIRMAN ELA: Other comments or questions for Jerry? I do not see any, so we are going to move to the vote. The motion is to remove carrot juice color from 205.606 at the national list. The motion was made by Steve, it was seconded Scott. We are going to start with A-Dae.

MS. ROMERO-BRIONES: Yes.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue?

MS. BAIRD: Yes.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: Yes.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee?

MS. JEFFREY: Yes.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily? Are you there, Emily?

MS. OAKLEY: Sorry, yes. I thought I had it on.

CHAIRMAN ELA: No worries. Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott?

MR. RICE: Yes.

CHAIRMAN ELA: And the Chair votes yes.

MR. BUIE: Fifteen yes, zero no, the motion passed.

CHAIRMAN ELA: Jerry, next is cherry juice color.

MR. D'AMORE: Yes, sir. The Handling Subcommittee had an even vote, split on this one. The subcommittee's split vote did not provoke or generate any new information. Given a full review of the spring and 2020 stakeholder comments, and subsequent phone calls, I recommend removing cherry juice color from 205.606 on the grounds of adequate commercial supply availability of an organic alternative. Am I still connected?

MS. OAKLEY: Yes, I hear you.

MR. D'AMORE: Thank you.

DR. SEITZ: Yes, we can hear you, but

can't speak.

CHAIRMAN ELA: I had the mute on, my apologies. Again, I have to show you all that I'm human as well as the rest of us. I am not seeing any comments, so we will move to the vote. The motion is to remove cherry juice color from 205.606 at the national list. The motion was by Steve, seconded by Kim, and we will start with Dan.

DR. SEITZ: Dan.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue? Sue, are you there? Sue, we're not hearing you.

MS. ARSENAULT: It looks like Sue may have dropped off the call. I'm not seeing her.

MR. BOYCE: We will put her down as absent on this one then. Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: Yes.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee:

MS. JEFFREY: Yes.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott.

MR. RICE: Yes.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: Yes.

CHAIRMAN ELA: And the Chair votes yes.

MR. BUIE: Fourteen yes, one absent, the motion passed.

CHAIRMAN ELA: Next up we have chokeberry aronia juice color, Jerry?

MR. D'AMORE: Yes, sir. No new comments from the spring or fall public comment session. I'm emphasizing new. That's not to say there are

no comments. I see no reason to change the direction of the subcommittee's recommendation to relist, so I do recommend a relist in favor of inadequate commercial availability of an organic alternative.

CHAIRMAN ELA: Any questions or comments on chokeberry aronia juice? Seeing none, we will move to the vote. The motion is to remove chokeberry aronia juice color from 205.606 of the national list. A motion was made by Steve, it was seconded by Mindee, and we will start with Wood.

MR. TURNER: No.

CHAIRMAN ELA: Sue? Sue, are you back with us? Okay, we will go to Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFREY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: And the Chair votes no.

MR. BUIE: Zero yes, fourteen no, one absent, the motion fails.

CHAIRMAN ELA: We will move next on to elderberry juice color, Jerry?

MR. D'AMORE: Now on this particular color there were new comments, and the comments continued to support that this color is in limited organic supply and it should be relisted. Given

that and subsequent phone calls that I was able to make, I'm recommending that this color be relisted based on inadequate commercial availability of organic supply.

CHAIRMAN ELA: Are there comments? Seeing none, we will move to the motion to remove elderberry juice color from 205.606 of the national list. The motion was made by Steve, it was seconded by Asa, and we are going to start at the top again with Sue. We'll see if Sue got back on.

MS. ARSENAULT: No, I don't think she's on yet.

MR. D'AMORE: Sue has just texted that she's lost her electricity.

CHAIRMAN ELA: We'll get her back on with the --

MR. D'AMORE: Right, she's asked that we send her the phone number.

CHAIRMAN ELA: We will get that to her. So we will count Sue as absent. We're going to start with Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFREY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: The Chair votes no.

MR. BUIE: Zero yes, fourteen no, one absent, the motion fails.

CHAIRMAN ELA: On to grape juice color.

MR. D'AMORE: The Handling Subcommittee had an even split vote as to whether or not to relist. This particular color sort of follows the path of the carrot juice in that it is a coordination issue more than an organic availability issue. There appears to be great variety between the batches, making it hard to get a consistent batch. This appears to be more of an organizational issue around production and grower base. I recommend that we delist grape juice color.

CHAIRMAN ELA: Are there any questions or comments from the board? Dave has a question/comment?

MR. MORTENSEN: Yes, just a thought about Asa's comment about consistency. In the northeast, there are a number of different grapes grown. I've walked a number of these vineyards, and the color variation is huge, from all green

to almost black in color. I can imagine the color of the extracts must reflect, at least to some degree, that variation.

I just was curious, Jerry, like when you say it's a coordination problem I can imagine -- I'm just trying to think about the logistics of how you would get a certain grape color together in a way that it becomes part of a processing chain functionally. Is that like, California and Washington red grapes or dark plain grapes?

MR. D'AMORE: I appreciate that thought and question. It's one I wrestled with, and with time I asked myself what is the difference between the organic and non-organic grape production that we draw the distinction on how to answer that? It came up a lot in blueberries, and we actually got down to the genetic proposition, as well, and had a discussion on does conventional production actually alter the state of the product?

I'm the least of us on the board with a deep grasp of the science, but I can tell you that if you start with the same genetic proposition, let's say an Elliott blueberry, and

you grow it conventionally and you grow it organically, I have never seen a distinction in the properties. Obviously there are sprays and residues that we could talk about. I asked myself the same question, Dave, and I came up with the thought of okay, what is the overall organic supply?

In blueberries it's 30 percent, which is high, of course. Is it really that much difference in terms of the organization behind getting the batch that you want because of the distinction between conventional and organic? I came up with no. We obviously have a smaller supply base, but the organizational piece of that, I don't think is much different.

MR. MORTENSEN: Thanks, Jerry, that's helpful. So the variation within an organic grape industry and a conventional grape industry is likely to be somewhat similar is what you're arguing, and that makes a lot of sense, so thanks.

MR. D'AMORE: Thank you. I may get challenged on that at some point, but I went out and tried to get challenged on it. At the end of

the day, I didn't find a compelling argument there.

MR. MORTENSEN: Thanks.

MR. D'AMORE: Thank you.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Thank you, Jerry. I appreciate the work you've put into this. I'm looking at grape juice color, and then the very next one we're going to vote on is grape skin extract color. Are there opportunities for some of these to be used interchangeably?

MR. D'AMORE: Also a good question, also one that I wrestled with. If you would hold that thought to the end of the next one, let's have the conversation then.

MS. HUSEMAN: But we're going to vote on this one now.

MR. D'AMORE: Good point. On the next one, the distinction is it's the grape skin. To go organic is a tough one because your supply source primarily are the wineries. That makes it a whole different kettle of fish.

MS. HUSEMAN: So what you're saying is to treat them very specifically independently and

not cross over different -- you didn't find that any way in the industry anyway to be a compelling argument?

MR. D'AMORE: Yes.

MS. HUSEMAN: Okay.

MR. D'AMORE: I find them to be two different things entirely as I look at them. Just that they happen to share the same grape start, but that's about it.

MS. HUSEMAN: Okay, thank you.

MR. D'AMORE: Yes, ma'am.

CHAIRMAN ELA: Then Sue. Welcome back, Sue.

MS. BAIRD: Well, thanks. I totally had an electrical surge and everything went out for a bit. Again, I echo everybody else, Jerry, you did an incredible job. Your information is probably a lot more current than my memory. But in the past we've heard, and we're talking about past-past, we've heard a lot of constituents that state just because there's a lot of raw product out there, or maybe at least a medium amount of product out there, does not mean that there's

enough by-product left over to make these colors.

That was a compelling argument back when, that we put these colors on because in the organic world we're such a small percentage of the conventional anyway, that all their product is used up. Perhaps you could enlighten me on that.

MR. D'AMORE: I think that gets a bit back to the conversation that Dave and I had a second ago. The availability, from what I've looked into, is there. The mechanism of going after it to create the right batches that you want I don't see is a big difference. There's millions and millions in blueberries, I can quote you billions of pounds being grown, 30 percent organic.

What I get into, Sue, on this, and it's what challenged me a lot, and I think it's challenged the group a lot, is the notion that sometimes we just go with the flow and end up stifling innovation. If I've heard one thing that sort of has come to me directed to the group of us is that we may fall into that trap. These are judgment calls.

I can't be adamant about any of it, but I think this does fall very much into the carrot juice in that if you don't allow people the opportunity to go out and make their effort to do their sourcing side, maybe that accusation is correct. The raw product is there.

MS. BAIRD: Could I --

CHAIRMAN ELA: Other -- go ahead, Sue.

MS. BAIRD: Could I follow up with that? I don't mean to take too much time. The other argument that we've heard in the past is that even if there were that raw product there, because it's such a small -- again, a small percentage of market -- that the processors that do these colors won't stop a process and just do organic colors because it's such a huge process to clean all their equipment down.

I guess it's pretty specialized equipment to do the organic colors. I'm not trying to be argumentative. I'm just searching for answers here. I don't want to --

MR. D'AMORE: No, Sue, I don't hear you as being argumentative. I think there's a little

correction. There's not two different kinds of equipment that do that, but there's a great process of cleaning between various runs.

MS. BAIRD: Yes, yes.

MR. D'AMORE: I think that is a very legitimate concern. On some of these, Sue, part of what you had to start with is trying to determine how big an industry is this? You'll find that some of the things we're discussing that the entire volume of use is no greater than 10, 15 times per year. If you don't start from that base, you could get yourself, I think, into some interesting thinking that may not lead you to the right answer.

On this one, I have to tell you right up front, I couldn't get to that number. If I'm a little bit hesitant in being robust about my response, it's because of that. On others, you dig down far enough and you get people willing to talk to you, and you come up with that starting point. On some of these I'm very robust because I know that starting point, and on some of them I'm a lot less robust. I can't comment to this one. I don't know what the starting point is.

MS. BAIRD: I appreciate that.

CHAIRMAN ELA: Any other thoughts/comments? We're going to move on to the vote. The motion is to remove grape juice color from 205.606 of the national list. The motion was made by Steve, seconded by Asa. We will start with Asa?

MR. BRADMAN: I'm voting yes on this one.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: Yes.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee?

MS. JEFFREY: Yes.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott?

MR. RICE: Yes.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: Yes.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue?

MS. BAIRD: Yes.

CHAIRMAN ELA: And the Chair votes yes.

MR. BUIE: Fifteen yes, zero, the motion passed.

CHAIRMAN ELA: Thank you, Jesse. Moving on to grape skin extract color.

MR. D'AMORE: So there was a nice lead-in to this with all of your other questions, and I really appreciate that. On this one, I'm looking at the skin extract as a true by-product. You start with something that has already been utilized to a great extent. In digging, I have found that the source and supply seems to be really limited

to a tie-in with the wine industry, where organic inputs appear to be limited in any case.

I think we would be putting an undue hardship on this particular color were we to delist it. So I'm recommending that we actually relist it.

CHAIRMAN ELA: Questions and comments? I'm not seeing any, so we'll move to the vote. The motion is to remove grape skin extract color from 205.606 of the national list. We are going to start with Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFREY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: And the Chair votes no.

MR. BUIE: Zero yes, fifteen no, the motion fails.

CHAIRMAN ELA: Thank you, Jesse. Next up is paprika.

MS. JEFFREY: So starting with paprika, beyond telling you that the subcommittee recommends the listing of this color, I will tell

you that there were 21 different references to the category in our just-concluded fall comment period. Paprika holds the distinction of being one of two colors that were actually referenced as colors and further referenced with a lackluster enthusiasm for trying to defend relisting.

Given that, I am recommending that we do delist it based on adequate supply, and to a certain extent based on the use argument, the total volume argument that I put forth in answering to Dave a little while ago. So that's a recommendation that we vote to delist paprika.

CHAIRMAN ELA: Thank you. Let's move on to comments or thoughts. I'm not seeing any, so we will start the vote with the motion to remove paprika color from 205.606 of the national list. First voter is Jerry.

MR. D'AMORE: No. Oh yes, I'm voting yes to remove it.

CHAIRMAN ELA: No worries, Jerry.

MR. D'AMORE: Thank you.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee?

MS. JEFFREY: Yes.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott?

MR. RICE: Yes.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: Yes.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue?

MS. BAIRD: Yes.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Chair votes yes. Jerry, that was almost a hanging cat.

MR. BUIE: Fifteen yes, zero nos, the motion passed.

CHAIRMAN ELA: Thank you, Jesse. Pumpkin juice color next.

MR. D'AMORE: Pumpkin juice color, the Handling Subcommittee recommends delisting of this color. I'm going to use as part of my argument base for supporting that, as I did once before, is that when the community knows well in advance that we're not robust one way or the other, that we've got a true split vote on that and it provokes no reaction from the community, that tells me a lot.

Whether you all agree that that's a lot is something we can discuss. There truly was no enthusiasm in defense of relisting, and with that I'm recommending that we vote to delist.

CHAIRMAN ELA: Discussion, comments, questions? I'm not seeing any so we'll move to the motion. The motion is to remove pumpkin juice

color from 205.606 of the national list. The motion was made by myself, was seconded by Mindee. Somehow it seems like an appropriate time of year to be talking about pumpkins. We will start with Rick.

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee?

MS. JEFFREY: Yes.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott?

MR. RICE: Yes.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: Yes.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue?

MS. BAIRD: Yes.

CHAIRMAN ELA: Sue?

MS. BAIRD: Yes.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: Yes.

CHAIRMAN ELA: Chair votes yes. Did I get everybody on that one?

MR. BUIE: MS. MILLER:-hmm. Fifteen yes, zero nos, the motion passed.

CHAIRMAN ELA: Moving on to purple potato juice.

MR. D'AMORE: The Handling Subcommittee recommends that we do relist this color. I didn't get a whole lot of information, and I'm suspecting it's because of its overall use. But I could find nothing that told me that there's adequate supply, so I do recommend that the board vote to relist

this color.

CHAIRMAN ELA: Questions/comments? We will move to the vote. The motion is to remove purple sweet potato juice extract from 205.606 in the national list. The motion was made by Steve, seconded by Asa. We're going to start with Kim.

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFREY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Chair votes no.

MR. BUIE: Zero yes, fifteen nos, the motion fails.

CHAIRMAN ELA: Onward to red cabbage extract color.

MR. D'AMORE: I'll say to my team members, I suspect I'm not alone when you start this process you have a feeling for where you stand. On red cabbage I got turned around. We have a split vote as to whether this should be reconsidered. Again, part of my criteria for decision-making on this is that split vote really did provoke a lot of stakeholders to get out there

and make some strong statements regarding the commercial availability.

The little bit of digging that I could do beyond that does lead me to believe that we were not to relist this, that we would create some real barriers and undue hardship around the notion of suitable commercial availability. I believe it is an issue, so I recommend the board to actually relist this one.

CHAIRMAN ELA: Any other comments/questions on that one? I am not seeing any, so the motion is to remove cabbage extract color from 205.606 in the National List.

MR. TURNER: Asa has a question, Steve.

CHAIRMAN ELA: Thank you, Wood.

MR. BRADMAN: I just had a question, Jerry, in terms of the comments and the discussions in the subcommittee that there were 24 listings on the Organic Integrity Database. I guess I just wondered if you could comment on that?

MR. D'AMORE: Yes. I've got a stack of papers behind me, and I know exactly what you're referring to. There was a rebuttal to that, that

it's claim made of potential and not of actuality. I tried to get deeper into that and I didn't get return calls on it. I'm not saying that's a negative. Getting return calls are tough anyway.

On this one, it's a good call, Asa. On this one I think I'm pretty public with my teammates that stifling innovation is one thing, causing undue hardship is another. I'm leaning towards this one as creating undue hardship. It's a weak case.

CHAIRMAN ELA: All right, and Wood, thanks for pointing out that Asa had a question. I appreciate that.

MR. TURNER: Sure, happy to be the ad hoc parliamentarian. Jerry, I'm just going to ask another primer question here because I have an opening here. It's probably more general than just red cabbage. I'm actually curious if availability of organic color correlates at all to availability of the organic whole product at all, if there's any connection at all?

I'm just curious if there's anything

that we should glean from lack of the organic red cabbage color to lack of availability of organic red cabbage period. Maybe it's a little bit of a far-reaching question, but I'm actually curious. If the answer is no or you don't know, that's fine. I'm just curious if you have any input on that.

MR. D'AMORE: No, I appreciate the question. I think there was a previous commenter that got to the fringes of that. Matter of fact, may have said this. I think the entire category is one primarily around optics. How does it appear? It doesn't seem to be a big taste factor, if any at all.

The argument has been made throughout this entire category to me that I appeal it's by appeal, and that it's a strong force. Many of you that have been on the retail side of things I think might agree with me. I guess the answer to your question is no, in a single word.

MR. TURNER: Thanks. No questions from me.

MR. D'AMORE: Thank you.

CHAIRMAN ELA: Any other questions.

MR. MORTENSEN: Steve, I had a question. I didn't raise my hand.

CHAIRMAN ELA: Sure, go ahead, Dave.

MR. MORTENSEN: Just on that line of reasoning, that's a crop -- and I'm no expert on acres of vegetable crop grown under organic. That's an understatement, but that's a crop that you rarely see, I will say at least in an eastern/northeastern supermarket. You'll see lots of other things, but you won't see a lot of organic red cabbage in the supermarket. Now you would see it in smaller markets and specialty places.

I do wonder the degree to which there would be large sources of where there could be a link there. If there's so little coordinated growing of red cabbage organically, then it would constrain the opportunity to extract dye from it. Maybe I was not following the thread that you and Wood were just discussing.

But on the low end of production it seems like there would be a strong link between lack of the crop to extract from or residue from

the crop after it's been processed for some other purpose, like in the case of grapes.

MR. D'AMORE: Yeah, the way I understood Wood's question was a bit different than that. I understood him to be asking me whether or not there was any added value given by color than color itself. If that was the question, if I understood that correctly, it's still no.

To your point, I couldn't agree with you more, and that's one of the big things that we wrestle with. Red cabbage, I couldn't find a lot of organic production. In blueberries I'm going to tell you that it's such a hot commodity and there is such an organic premium for it that 30 percent of the acres that I've attended to have been organic, 30 percent or better.

Wood, you could jump in on that, too, if you'd like in a minute. I think what you've asked is a very valid point, and it's probably the single biggest reason that I'm advocating for a relist of the color.

MR. MORTENSEN: Yeah, thanks, Jerry. I might just have been not following the

discussion.

MR. D'AMORE: No, no, no, not at all. It is counterintuitive to the dirty dozen, by the way.

CHAIRMAN ELA: So just to be clear -- go ahead, Wood?

MR. TURNER: Nothing more for Jerry on that. He just mentioned my name.

CHAIRMAN ELA: Yeah, and just to be clear, Jerry, in my own head, you were recommending that this be relisted, is that right?

MR. D'AMORE: Yes, sir.

CHAIRMAN ELA: I will move on to the motion to remove red cabbage extract color from 205.606 of the National List. The motion was made by Steve, seconded by Mindee. We are going to start with Mindee.

MS. JEFFREY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No. (Dog barking)

CHAIRMAN ELA: The chair votes no. I'm not sure how to take that last vote.

MR. D'AMORE: That was a dissenting vote, I think.

MR. BUIE: Zero yes, fifteen no, the motion fails.

CHAIRMAN ELA: Next to red radish extract color.

MR. D'AMORE: Not much different than the last one. It's one of the ones where you can dig and dig and dig and some of the information just doesn't present itself. If I'm making a decision, I'm erring on the side of cautious and not being disruptive. I found no new information in the spring or the fall meetings that would give me a push in either direction.

With that as a backdrop, and not a very convincing one, I do recommend that we relist this color. I just wouldn't know how to go about directing somebody to a better alternative at this point.

CHAIRMAN ELA: Jerry, my only comment is I find it ironic that you talk about digging and digging and digging for radishes.

MR. D'AMORE: Hey look, I'm not the only

corny person on this board, though. I'll tell you that.

CHAIRMAN ELA: We're not to corn color yet, but -- are there questions and comments from the board? We will move to the vote. The motion is to remove red radish extract color from 205.606.

MR. D'AMORE: No, no, no, no, no. It's to relist it.

CHAIRMAN ELA: Yeah, the motion though, you want to relist it, but we have to read the motion.

MR. D'AMORE: Excuse me, sir.

CHAIRMAN ELA: The motion is to remove red radish extract color from 205.606 of the National List. It was made by myself, Steve, seconded by Kim. Just to remind people, a yes vote is to remove it, a no vote is to not remove it. We are going to start with Dave.

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan? Are you there, Dan?

DR. SEITZ: No, no.

CHAIRMAN ELA: Thank you. Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa? You there, Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFREY: No.

CHAIRMAN ELA: And the Chair votes no.

MR. BUIE: Zero yes, fifteen no, the motion fails.

CHAIRMAN ELA: We're going to move from the bottom of the plant up to the top with saffron extract color.

MR. D'AMORE: The Handling Committee recommends that this color be relisted, and I'm going to read what I put down because I want to get it right. This color would be easy to relist. They sort of go with the flow. However, there was no real effort to show increased support from the stakeholder community during the spring or the fall meetings. The spring 2020 comments, in fact, seem to be ambivalent at best. With that said, I could not confirm sufficient appropriate supply.

This is rhetorical to me. I think I know the answer. If we are tasked with assuring supply, I would recommend relisting. If the burden of assurance of supply falls on our stakeholders, I would recommend delisting. So I am actually recommending delisting.

CHAIRMAN ELA: Say that again, Jerry?

You are in favor of taking it off the list?

MR. D'AMORE: Yes, sir, I am.

CHAIRMAN ELA: And do you want to give your reasoning again on that?

MR. D'AMORE: Yeah. I guess this one is not me sitting back or us sitting back trying to figure it all out, which is appropriate and probably what we should do. I welcome any of that push-back. But when you can't get the stakeholder community to support something, or if they're actually lackluster or worse, I'm having a tough time with it.

At some point, a statement to good supply is something that should be made. I couldn't get it made by anybody. Anyway, given a very lackluster feeling from the community about helping me, at this point, come to a determination that it's worthy of staying on the list was a tough thing to come up with. But I deliberately read you everything to tell you that I am conflicted and you can ask me all the questions you want.

I'm not much smarter about it. The call we're going to make right here is which side

do we err on? Stifle innovation or do we go with a feeling of disrupting commerce with a vote? It's the first time I've done it to you, group. I'm asking for help.

CHAIRMAN ELA: Fair enough. Scott, go ahead.

MR. RICE: Just looking at what we voted on for red radish, if I'm not mistaken the rationale for keeping it on the list was that we hadn't heard from anybody. I just want to confirm the logic and hopefully apply it evenly across what we're doing. For something like saffron extract, I would think given that this is the most expensive spice in the world, it would be rarer to secure than a radish. But I'm just a little bit confused.

MR. D'AMORE: You should be. I think the distinction is that with the red radish, when I did the digging I got a response that I could sort of hang my hat on. And with the saffron, when I did my digging, it was sort of like how much is this even used? And as I stumble here trying to make my own case, I will tell you that I felt compelled to do a recommendation, but I'm sitting

on the fence. Your question to logic is a good one.

CHAIRMAN ELA: Other comments/questions? Okay, we will move to the vote. Oh, Dave I see you have your hand raised?

MR. MORTENSEN: Yeah, I guess I just do think that Scott's point is one that was going through my mind. That is, I've seen this grown. If it's the flowers that are being used for the color, which I'm guessing it is, but I don't know that for a fact, that's a lot, a lot of flowers to extract pigment from that you would use then in the food coloring.

I just would wonder if the production is there in a way that could -- where the supply would be there and all of that. That one strikes me as hard to picture that, actually.

CHAIRMAN ELA: Sue and then Nate.

MS. BAIRD: Just a comment. Somebody had to petition this that needed it. I'm wondering if that person just didn't realize they needed to come back and make comments. I would agree, this would appear to be a very short-supply product.

Whoever that was that needed this saffron, and I don't know who it is, I would think if they needed it then they still need it now.

MR. D'AMORE: And I agree and I appreciate all the push-back here. I guess the last thing I would say is it's my findings, accurate or not, that this does classify as a new term that I've learned, an orphan crop. I suspect that most of this is done, when saffron is grown, it's grown specifically for this purpose to a large extent.

Maybe what I'm doing is showing a little bit of irritation at not being able to get to the point of somebody helping me with this, and for that I would be wrong. So following logic, I would agree with my colleagues.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: I apologize if I missed this, but I think in the written comments there were two surveyed parties in the OTA comments that said they do need saffron. I didn't know if you had already mentioned that just as one data point of industry coming to us saying they want

it.

MR. D'AMORE: Yeah, you're right. I've got it right here in front of me. You're right.

CHAIRMAN ELA: We will move to the vote. The motion is to remove saffron extract color from 205.606 of the National List. The motion was made by Steve, seconded by Asa. We are going to start with Emily.

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: Well, you're good colleagues and I'm voting no, as well.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFREY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: The Chair is actually going to vote yes.

MR. BUIE: One yes, fourteen nos, the motion failed.

CHAIRMAN ELA: We are going to go to the last color, so we're going to go back down to the roots. Really this should be Jesse's, but we're going to turn it back to Jerry for turmeric.

MR. D'AMORE: I've concluded my list of 18 with the ones that troubled me the most. I'm

not going to be -- here's turmeric. We have recommended delisting it. My comment is the stakeholder response has been lackluster in efforts to support the relisting. As an individual color, turmeric has some specific naysayers citing sufficient organic supply.

Another stakeholder does not specifically refute that, but points out that the organic supply is predominantly offshore and perhaps suspect of fraud. With that, I am going to continue with the Board's feeling and recommend that we delist turmeric.

CHAIRMAN ELA: Thoughts or questions? I just want to be clear, Jerry, you're saying to delist it?

MR. D'AMORE: Yes, sir.

CHAIRMAN ELA: I'm not seeing any comments/questions, the motion to renew turmeric extract from 205.606 of the National List. Motion was made by Steve, it was seconded by Kim. We are going to start with Nate.

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: Yes.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee?

MS. JEFFREY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Chair votes yes.

MR. BUIE: Eleven yes, four no, the motion passed.

CHAIRMAN ELA: Thank you, Jesse. Thank you, Jerry. That was a lot, and thank you for taking it off my back. You did a much better job at it than I would have.

MR. D'AMORE: I'm not sure of that, but I was happy to be there.

MS. BAIRD: I would certainly be waving my hands if you could see me. Thank you, Jerry.

MR. D'AMORE: Sue, I thank you, too.

CHAIRMAN ELA: So Asa we're going to put it back to you and then we'll keep on going down the list with glycerin. You there, Asa?

MR. BRADMAN: Sorry. I think our next substance here is glycerin. Jerry, you are again on the hot seat for this one.

MR. D'AMORE: Okay, glycerin, produced from agricultural source materials and processing using biological methods as described under

205.270(a). During the April 2020 meeting, we had 18 public comments, nearly all of them written, with nearly all of them in favor to keep it on the list.

The just-concluded 2020 October written and oral comments total 11 responders, with again, most in written form and most in favor. We had a split vote on this at subcommittee, with three out of five voting to keep glycerin on the list. Again, when I initially looked at this, I thought I was going to go in a different direction. Digging a little bit deeper, I find that glycerin has a wider use than I knew.

I got a deep-dive into flavors and how glycerin interacts with flavors. I've come to the conclusion that taking off the National List would be a disruptive move, so I'm recommending that glycerin be kept on the National List of 205.606.

CHAIRMAN ELA: Discussion, questions, comments? Dan and then Asa.

DR. SEITZ: I'm curious to ask perhaps Jerry or other members of the subcommittee. It was asserted that there is a potential large

organic supply available, that at least one producer is producing organic at much less than capacity. I was wondering how you all were, or some of you looked at this question of is there a sufficient organic supply or not? Because there seems to be strong divergence of opinion on that.

MR. D'AMORE: Yes. When you go to a certain level and you look, in my experience now, you get a certain set of answers that lead you in one direction. Then you peel the onion back a little bit further and you get another set of answers when it comes to the term adequate or suitable commercial availability.

Again, I'm not 100 percent one way or another, but what I've taken away from this round of digging into how does it get used, what is it used for, what are its distinct properties that allow for its use, I'm of the opinion still that it would be disruptive. There's not enough organic supply to take this off at this time. Dan, I just can't be a whole lot more specific than that.

DR. SEITZ: Thank you.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Dan really asked the question I had.

MR. D'AMORE: Yeah, and folks, I knew this was going to come at me. I've been part of this subcommittee process. All of the questions that were asked at the subcommittee were good and certainly armed me to go forward and ask my questions. I won't find this as a naysay to my ability to get to the answers should you go the other way, but the digging that I did on glycerin really lead me to a broader category of uses than I had known originally.

I think it would be in jeopardy of being disruptive, but there definitely are substantial claims of adequate organic supply. I guess claims is the word that I underlined that you couldn't see.

CHAIRMAN ELA: Emily, go ahead.

MS. OAKLEY: Thanks, Jerry. I'm pulling a Steve. I'm still just a little confused. I wholeheartedly appreciate and understand the nuances in the uses for this that may not have been fully appreciated maybe even by the public

commenters. I'm still not totally clear how to reconcile that, the fact that the uses for glycerin can be unique, with this claim that it could be available. Is what could be available not going to meet the various different uses potentially for which manufacturers need glycerin?

MR. D'AMORE: Yeah, and again, the strongest pitch I got was from a group that did an effective job of showing me or assuring me or leading me down a path to assure myself that the utility of glycerin, and flavors is one of them, because flavors has just been certified organic within just this year, or within a year. Flavors is one of the ones where I was like, you probably don't have a good feel for how much of this stuff is needed.

CHAIRMAN ELA: Sue?

MS. BAIRD: My understanding also comes into play with glycerin and its functionality. Can you address that? Because some forms just do not function in some of the products. One form might work for one product and they would need another form of glycerin for others. Is that not

true, Jerry?

MR. D'AMORE: Actually you said that better than I did in my little comment. That is the driving piece of it. I hope I used the word functionality. One size does not fit all, and in order to give the broader community the availability that it does need to stay on the list -- and again, my method was just phone calls and piercing the veil and getting to manufacturers, and then going back up again and talking to associations and certifiers. It strikes me that at this point in time, we could be in jeopardy of being disruptive with a delisting.

MS. BAIRD: Functionality is one of those components of commercial availability, and the manufacturer does have to do that search for the certifier.

MR. D'AMORE: Correct. Are we still connected?

CHAIRMAN ELA: We are. I just wanted to show you I was human again. Sorry about that. Sounds like we're somewhat in agreement. Nate, one last comment and then we're going to go to the

vote because we're starting to get behind on our schedule here. Go ahead.

MR. POWELL-PALM: Very quick, I think this was said before, but just kind of remind me as a matter for us all that the cool thing about 606 is that it can be petitioned off at any time. If someone does bring evidence of sufficient organic supply, we can hear that petition and see it through to delist, as well. So I just like to remind myself that there's more opportunities as we get more information based on that organic availability.

MR. D'AMORE: Thank you, Nate. I agree and I appreciate the comment.

CHAIRMAN ELA: Asa, one last comment.

MR. BRADMAN: I just wanted to ask about the comments related to glycerin being produced as a fermentation product and not agricultural and its listing on 606.

MR. D'AMORE: Well, you've got me there because the part that I looked at was that it's specified biological and physical under 205.270(a). You may be catching a young member

-- not young, excuse me -- a new member a little short on answers with that one, Asa.

MS. BAIRD: I would bet that was back when Gwendolyn Wyard and some of them did the synthetic versus non-synthetic, and somebody determined this was still agricultural.

MR. BRADMAN: Oh it's definitely still listed as agricultural, no question.

MS. BAIRD: Right.

MR. D'AMORE: It looks like there was discussion about this in 2015.

CHAIRMAN ELA: I'm going to jump in here unless there are more comments that are going to change the vote. We're starting to run well behind time so I'm going to go to the vote. The motion is to remove glycerin from 205.606 of the National List. The motion was made by Jerry, it was seconded by Kim. We are going to start the voting with Scott.

MR. RICE: No.

CHAIRMAN ELA: A'Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Dan was that you that said no?

DR. SEITZ: It's yes.

MR. BUIE: Did Dan say yes or no?

DR. SEITZ: Yes.

CHAIRMAN ELA: Sorry, thank you, Jesse. Wood? Wood, are you there?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFREY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Chair votes no.

MR. BUIE: It's two yes, thirteen no, the motion failed.

CHAIRMAN ELA: Thank you, Jesse. Next up, Asa, is for you. Are you there, Asa?

MR. D'AMORE: I think he's just saying Jerry, it's yours.

MR. BRADMAN: Exactly.

CHAIRMAN ELA: This is going to be inulin oligofructose. Go ahead, Jerry.

MR. BRADMAN: Exactly, thank you. It's a mouthful.

MR. D'AMORE: Thank you. Non-organically produced agricultural product allowed as ingredients in or on products labeled as organic. It is a non-digestible carbohydrate, a soluble dietary fiber and a non-caloric

sweetener. Inulin oligofructose extract has distinct functionality with effects on texture and consistency of the food. During our April 2020 meeting, we had about 25 public comments, nearly all written, with a full 75 percent in favor of relisting.

Our October 2020 written and oral comments totaled 12 new comments, with about 30 percent against relisting. The Handling Subcommittee is in complete support of relisting inulin oligofructose. Again, from what I was able to dig, I am all in favor because of the distinct functionality with alternative products as the greatest driver towards that decision.

CHAIRMAN ELA: Comments? I'm not seeing any comments on this one, so we're going to go to the vote. The motion is to remove inulin oligofructose enriched from 205.606 on the National List. The motion was by Jerry, it was seconded by Scott. We are going to start with A-Dae.

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

MR. BUIE: What did Wood say?

CHAIRMAN ELA: Wood said no.

MR. BUIE: No? Okay.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFREY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: Chair says no.

MR. BUIE: Zero yes, fifteen no, the motion fails.

CHAIRMAN ELA: Asa, back to you for kelp.

MR. BRADMAN: So our next material is kelp. A-Dae, you're on deck.

MS. ROMERO-BRIONES: Great. So this is for 205.606 kelp and for use as a thickener and dietary supplement. Before I get into the description of the comments, there's a couple important considerations. One, kelp, as stated in the comments and as stated in our discussions, is a very ambiguous term because kelp can refer to many different kinds of algae and seaweed.

We have many listings of algae and seaweed based on their Latin terms listed in other

places. Also, it's kind of hard to aggregate how many comments were made about the 606 listing because we had many comments that cross-referenced the listing of kelp in other places, particularly crops, and also referenced the discussion document on marine algae.

So in general, and again, like I said, it's hard to aggregate exactly pros and cons because of so many cross-references in the comments. I'm like Nate, sorry, I feel like sometimes 606 is sort of a loophole. Just historically I think you see materials get listed at 606 and then remain on the list and get really hard to take off, even with petitions.

We see that with other materials, so I think there's a lot of consideration that should be had by the members in relisting kelp under 606. If you need more information, I think NOC, MOSA and Beyond Pesticides have very good comments that not only reference all the discussion points I've just made, but also have timelines about previous listings and cross-reference some of the discussion that still needs to be had around the

marine materials.

In general, I think just to summarize some of the comments that kelp in itself is not a well-defined term. There are more specific ways to list kelp, whether that be by its Latin name or even by common names, that kelp is a very generalized term, which causes confusion. We have a couple comments. MOSA did a particularly good job of listing all the different inputs and materials that include kelp.

Again, they're all listed by different Latin names and more specific terms, more specific references to algae. Again, this needs to be considered. So we did have a lot of comments in general. We had a lot of comments. Now were they specifically to the 606 listing? Yes, there are some that are very specific to the 606 listing, but there are far more comments about kelp in relation to other listings and the marine materials documents. I know we discussed this thoroughly in the subcommittee. Yeah, I'll leave it at that for now.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Thanks. Thank you, A-Dae. I just think we can't underscore enough the challenge of having a word like kelp on the National List when we are using it to mean every single class of kelp. I can't say that this is an accurate parallel, that it would almost be like saying ferns or something like that. It's just very broad and could mean anything.

Obviously the work that Dr. Jean Richardson tried to initiate to come up with Latin names for the National Listings is probably something that maybe there's more receptivity among the stakeholder community to start looking at. But this listing is just problematic in its generality, to say nothing of the fact that there are many of these macroalgae species that are available on the Organic Integrity Database.

Since we're not sure which ones are used when people use the term kelp, it's hard to even say what is available organically or not. Thanks.

CHAIRMAN ELA: Anybody else? Asa?

MR. BRADMAN: I just want to echo some of A-Dae's and Emily's comments, and also just to

highlight that kelp and seaweed in general, but kelp in particular is under a lot of stress. I think I pontificated at our last in-person meeting a little bit about how off the Northern California coast, the kelp populations are collapsing right now.

I've read that there are similar trends going on in kelp forests off of Tasmania, and that there seems to be a particular vulnerability to disruptions related to climate change or changes in biota or bacteria or things like that, or changes in the overall ecology. Here we're talking about I think they call it bull kelp, the big forest that we see.

I also know that seaweeds are very important to many cultural and culinary traditions. I do feel that we have this organic wild craft category, and it seems to me that that might be an appropriate place for this material as it's used for human food.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Just quickly, I agree with you, Asa. There are a lot of human use macroalgae

seaweeds that are being harvested according to the wild craft standard, as well as livestock feed that's being harvested according to the wild craft standard. If any of you go and purchase organic seaweed at your grocery store, that is being certified to the wild craft standard.

MS. ROMERO-BRIONES: I'm just going to add something here, Steve. I think they brought up an important comment from stakeholders, is that there are some discrepancies between how we list kelp under 606 and how there are listings under 205.237(a). I always get my provisions, but the livestock feed provision, which is required to be organic. So while we have it listed under 606, which is for human consumption, non-organic sources.

Under livestock we have a similar listing for animal feed, which is required to be organic. So there are discrepancies in the types of listings, but again, if people are confused, they should be because kelp is so general. It's hard to really categorize exactly where this belongs.

CHAIRMAN ELA: Great, thank you, A-Dae. We will move to the vote. The motion is to remove kelp from 205.606 from the National List. The motion was made by A-Dae, it was seconded by Steve, and we are going to start with Dan.

DR. SEITZ: Well, last time I had a very easy one and this is a very difficult one. I'll vote yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes for me.

CHAIRMAN ELA: Sue?

MS. BAIRD: Yes.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry? You there Jerry?

MR. D'AMORE: My vote is no, sir.

CHAIRMAN ELA: Thank you. Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Rick, could you say that again?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: Yes.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: Yes.

CHAIRMAN ELA: The Chair is going to vote no.

MR. BUIE: Eleven yes, four no, the motion passed.

CHAIRMAN ELA: Thank you, Jesse. Asa, back to you for orange shellac.

MR. BRADMAN: Thank you. So now we are on board for orange shellac, and Kim, I think you're on deck for this.

MS. HUSEMAN: Thank you, Asa. This will be the final product that we have that has one of the toolboxes for those who are using waxes. Actually orange shellac is an excretion from an insect, so many of the comments referenced around again, a sunset, so annotation at a later time if it stays on the list. It's a non-vegan form of a hard coating.

It's used in jelly bean coatings. One notation from MOC was to add that annotation. Additionally, with orange shellac, there are different suppliers of jelly beans that are supportive of relisting. Another aspect to orange shellac, when you look at annotations, is the trees where the insects reside, maybe we should look at a limited TR around pesticide use.

That was brought up in conversation here. Again, I go back to very similar to low acyl gellan gum. An alternative to capsules is orange shellac, given some of that history there if we should allow that. This is another alternative that people are currently using. I don't have enough data here to say that it should be removed.

It is essential and commercial availability of organic is not prevalent. Just to wrap it up, I support the relisting.

MR. BRADMAN: Sorry, Kim, could you repeat your last statement?

MS. HUSEMAN: Yeah, I would support relisting. Going back to just commercial availability, I don't even know what commercial availability looks like for organic shellac or how that would be deemed. But reading through the comments that were posed in front of us, it is used vitally in the industry without a lot of alternatives, especially for jelly bean coating. Oregon Tilth remarked that they have two operations that use non-organic shellac with none that use organic shellac.

CHAIRMAN ELA: Any other questions or comments? We are going to move to the vote. The motion is to remove orange shellac from 205.606 of the National List. The motion was made by Kim, it was seconded by Jerry. We are going to start with Wood.

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: I'm voting no, but I really do want to follow up on an annotation in regard to these types of materials.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Chair votes no.

MR. BUIE: Zero yes, fifteen no, the motion failed.

CHAIRMAN ELA: Thank you, Jesse. Just as a time check for everybody, we're definitely running behind here. We had the Materials Subcommittee scheduled at 4:30 Eastern. We're obviously over that time, so we're going to run late. I need to check with Dave in Materials, but one thing I'm thinking of is that as soon as we can wind up the Handling Subcommittee, we might go straight to the marine macroalgae proposal and then do the research priorities tomorrow morning.

We're still going to run over time either way, but I think we can put research priorities in the morning and be okay, whereas if we put marine macroalgae in the morning, it's going

to be a long day tomorrow, as well. Just to give people a heads up, we are going to go a little bit long, but I just wanted to check in on that. We are going to move on, Asa?

MR. BRADMAN: I'm on deck right now with cornstarch, or should I say corn, new word, starch. I'm hoping we can have actually some robust discussion about this material. Corn starch is used as a thickener in many foods. It's also used, as I learned, with baking powder, and also in many other products affecting texture and flow and things like that.

Really I think this is a classic discussion material for 606. There are many companies listed on the Organic Integrity Database that list corn starch. Depending on how you search, I get 55 and it seems like up to now 108 in terms of corn starch as one word or two words. Maybe it's where you put your apostrophes. The point is that there's a lot of providers and suppliers of organic corn starch.

There have been a lot of comments that it's time to take this off of 606, and questions

about what are the barriers with there being adequate material for processing and food production purposes. There is also a strong sentiment among some manufacturers that the organic alternatives are not sufficient. A lot of those concerns are based on supply.

Particularly for specific functionality and quality, that there are forms of corn starch that are different than others, and that a generic listing or supply of the material on the OID does not mean that there's functional material available for specific production purposes. In a way, that's kind of the crux of the issue here.

In terms of the debate or the discussion in the subcommittee, there was this tension -- not conflict, but just the questions that were addressed were what is available and what is not? If there are needs for special forms of corn starch, those should be petitioned and listed separately given the apparently abundant supply of material. Our vote was to delist the material, but we were a little bit split on it.

I voted to not delist it, and that was a basis that if there are specialized forms that are needed, maybe we can address this by annotation. The subcommittee was kind of unanimous in that there really needs to be a push to encourage more use of organically available corn starch.

If there are specialized forms that need to be available that are not organic, the debate was more about whether we should accomplish that move to use the organically sourced material by delisting it versus keeping it on and then just using an annotation to list the specialized forms for given purposes. I'm hoping that other folks can weigh in on this. Again, in general we were unanimous about wanting to encourage more use of organic corn starch. The question was how to go about that.

CHAIRMAN ELA: Questions, comments, thoughts? Mindee, go ahead.

MS. JEFFERY: Asa, this was a great educational discussion for me through the whole process as a new board member, and I'm super

grateful to all the commenters who pointed out the not-obvious uses in organic systems. I was passionate about delisting until, thank you, commenters for educating us, and now I feel more inclined to advocate for an annotation route.

I was looking at it more from the perspective of GMO risk and consumer optics, and now I see that there are some pretty important functionalities that are pretty specific. I hope that we find a way to reasonably annotate.

CHAIRMAN ELA: Other thoughts from board members? Scott?

MR. RICE: Yeah, I just echo given what we've learned and what we know and some of the examples we've heard, I think this is a good candidate. If we're looking to limit it and know that it's available in other forms or for other uses, that an annotation could address that. But until then I would support relisting.

CHAIRMAN ELA: Thanks, Scott. Dave, looks like you have a comment?

MR. MORTENSEN: Yeah, I guess I've been struggling with this one following the logic on

colors and other things, and Jerry's thoughtful logic model that he laid out, which I liked a lot. When we're talking about a crop where we grow about a million acres of this crop, it's hard for me. I understand the argument about differential forms, and I understand that having the crop alone doesn't mean you have the refined form of corn starch that is needed in the industry.

But I really worry with a case like this one that if we don't send a signal that we would like to see organic forms of this sort of thing from a crop that's hugely abundant and that our organic grain growers are arguing that they're having problems with price, it seems to me like a great solution is to incentivize more organic corn production of specialty cultivars that are used in corn starch extraction, among other things. So I'm just struggling with that.

CHAIRMAN ELA: Anyone else? We are going to move to the vote. There is a motion to remove starches, corn starch, from 205.606 of the National List. The motion was made by Asa and it was seconded by Scott. We are going to start with

Sue, is that correct?

MR. BUIE: Yes.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: That was a no, correct, Rick?

MR. GREENWOOD: Yes, it was a no.

CHAIRMAN ELA: Sorry about that. Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: Yes.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: And the Chair votes no.

MR. BUIE: Six yes, nine no, the motion failed.

CHAIRMAN ELA: Thank you, Jesse. We're not going to let you rest easy here. Asa, back to you for sweet potato starch.

MR. BRADMAN: So our next material is sweet potato starch, and there's perhaps some similarities with the discussion about corn starch. But there was almost no public comment on this and very little discussion in spring. I expected more this fall and did not see it. We were split when we voted about this proposal, four

to three on the subcommittee.

Again, this was kind of an issue about 606 and what's appropriate. In going through public comments this fall, there was very little, almost no information on use in terms of amount or where it's from or who's producing it. There was one comment -- I shouldn't say comment, but information from Oregon Tilth, and it looked like there that among their operations that are certified organic, 16 were using the organic form of it only.

There was really just very little other information of it. In another place, the use was listed but it wasn't clear whether it was organic or not organic. Our subcommittee discussions leaned towards removal from the National List. Based on the limited comment and among those who were listing it as using it and where there was information, it appeared that they were using the organic form of the material. Going forward on this material, I suggest that we do delist it. At least that's where my vote is going to fall.

CHAIRMAN ELA: Comments, thoughts,

questions? I'm not seeing any. We will move on to the vote. The motion is to remove starches, sweet potato starch, from 205.606 of the National List. The motion was made by Asa, it was seconded by Jerry, and we are going to start with Asa.

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry? Jerry, you there? Can you see Jerry on the list, Michelle or Devon or Jared?

MS. ARSENAULT: Looks like he may have dropped off.

CHAIRMAN ELA: We will put him as absent for right now. Rick? Are you there, Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: And that is a yes vote?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott?

MR. RICE: Yes.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood? Are you there, Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue?

MR. BUIE: What did Wood do?

CHAIRMAN ELA: He voted yes. Sue?

MR. TURNER: Yes. Can you hear me?

MS. BAIRD: Is it my turn?

CHAIRMAN ELA: It is your turn, Sue.

MS. BAIRD: So I'm going to say no.

CHAIRMAN ELA: The Chair is going to vote yes.

MR. BUIE: Eleven yes, three nos and one absent, so the motion passed.

CHAIRMAN ELA: Thank you, Jesse. Asa, back to you with Turkish bay leaves.

MR. BRADMAN: Thank you. Scott, you're on deck now for Turkish bay leaves.

MR. RICE: Thanks, Asa. Turkish bay leaves. We did not receive a whole lot of different comments than we had in the springtime. Comments overwhelmingly supported removing this from the National List. With suppliers looking like they are able to meet demand at this point, and from subcommittee we had five yes and one no coming out of subcommittee to remove this from the National List. So again, it looks like organic supply has met demand and it appears there are stable supplies.

CHAIRMAN ELA: Are there any thoughts from the board members? I am not seeing any, so we will go to the vote. The motion is to remove Turkish bay leaves from 205.606 in the National List. The motion is made by Scott, it was seconded by Steve, and we are going to start off with Jesse.

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry? Jerry, are you there? Jerry just texted a yes. He may be having some connection difficulties, so he is voting yes. Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: Yes.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott?

MR. RICE: As I drop leaves into a soup pot, yes.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: Yes.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue?

MS. BAIRD: Yes.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: And the Chair votes yes.

MR. BUIE: Fifteen yes, zero no, the motion passed.

CHAIRMAN ELA: One more for you, Asa. Well, two more, actually.

MR. BRADMAN: Now we're onto whey protein concentrate, one of our favorite and least time-consuming materials. A-Dae, I believe you're on deck for this.

CHAIRMAN ELA: A-Dae, do you want me to do this or do you want to do it?

MS. ROMERO-BRIONES: You go ahead and do it, Steve. I can do it. I'll do it and you can do the discussion document.

CHAIRMAN ELA: Either way, yeah.

MS. ROMERO-BRIONES: I'll do this and you can do the discussion document. Yes, as Asa

hinted, we discussed this thoroughly and constantly for quite a long time. You wouldn't be able to really tell that from the comments because there was almost, not quite, but almost a unanimous interest to delist this. It should be noted that NOSB voted unanimously in 2015 to remove whey protein concentrate from 606, but NOP kept it listed. We're going through the process again.

With that being said, there were a couple of compelling commenters. One was the Western Organic Dairy Producers, who did say that there was enough supply to delist this from 606. Also the CROPP cooperative, which is a conglomerate of dairy producers who say that they do have enough organic supply. If this should be taken off 606, they would have enough supply to meet demand with an organic product.

There are people who do use the current 606 listing, but again, I found that the CROPP cooperative and the Western Organic Dairy Producers' comments to be convincing in that there is enough organic supply of whey protein

concentrate.

CHAIRMAN ELA: Thank you, A-Dae. Is there any discussion from the Board? I am not seeing any. The motion is to remove whey protein concentrate from 205.606 of the National List. The motion was made by Steve, it was seconded by Jerry. We are going to start with Jerry. Jerry is still having some trouble. He is hearing, but he's not able to speak. We're going to call Jerry absent for this vote. Then we're going to go to Rick.

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: Yes.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott?

MR. RICE: Yes.

CHAIRMAN ELA: A-Dae?

MS. ROMERO-BRIONES: Yes.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue?

MS. BAIRD: Yes.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry texted in a yes, so we can count that, and the Chair is yes. Jerry's vote is not going to make a difference in the outcome either way.

MR. BUIE: Fifteen yes, zero no, the motion passed.

CHAIRMAN ELA: Thank you. I know Jerry has called in and is trying to get unmuted somehow. We'll work with him on that one. Asa, one last thing for Handling.

MR. BRADMAN: Yes. Now we have a discussion document related to whey protein concentrate related to a petition to remove it. It looks like Scott, your initials are first on this. Just an example of the time we're putting into this material.

CHAIRMAN ELA: Actually it's my initials, ASA.

MR. BRADMAN: Yeah.

MR. RICE: Thank you. You just really put the fear of God in me there for a second.

MR. BRADMAN: Sorry. Go ahead.

CHAIRMAN ELA: Better than a shot of coffee, Scott.

MR. BRADMAN: I've got to take my shot of coffee.

MR. RICE: I've got both, so I'll take the coffee.

CHAIRMAN ELA: Jared, I know you have an intro on this one, but I'm just going to cut to the chase. As we just saw, we voted to delist whey protein concentrate on the sunset. We could've had the whey protein concentrate

petition, we could've had it up for vote, as well. I'm pretty sure the vote would've gone the same way.

The only reason I, as Chair, put it up as a discussion document rather than a vote is, given the last time that whey protein concentrate went to rulemaking for sunset, and the rulemaking did not go through. It was not delisted as the Board had previously voted. I would like to keep the petition in our pocket so if for some reason the voting does not go through again on whey protein concentrate, we can bring up the petition and either vote on it yet again.

Or if there is some specific form that is not available that derails the rulemaking process, we could use the petition process to remove whey protein with a very strict annotation for that very small subset that might not be available. That is the quick round on the whey protein concentrate. My feeling is we'll let it sit, and it may be redundant if the delisting does go through on the sunset.

But just in case that delisting doesn't

go through, we'll have the petition to work from to continue to try and delist this product. Are there any questions? I am not seeing any. Asa, thank you so much. Whoever thought we'd spend a day on Handling? I haven't counted up the number of votes that we had on that, but it is a significant quantity. Thank you for your work as Chair on that and shepherding all of this through.

Thank you to all the Board members that contributed today. It is a little bit after 5:00 Eastern time, the time we were supposed to adjourn. We do have a pretty large schedule tomorrow with crops. What I'm going to do, unless Dave objects, I'm going to switch the two proposals in Materials Subcommittee and we will put research priorities to tomorrow. I don't think we can move marine macroalgae to tomorrow because that will then really put us behind the gun tomorrow, as well. We are going to run over time.

We are going to do the marine macroalgae if everybody needs to get up and run around their computer 20 times to get the blood flowing again, maybe we can just roll call everybody and say you're

in charge of it, and see if that wakes everybody up like we just woke Scott up. Dave is chairperson of Materials. I'm going to turn it over to you and ask that you readjust the schedule so that we cover marine macroalgae.

MR. MORTENSEN: Yes. Very good, Steve, and I agree with you that bumping researching priorities to tomorrow's start seems like a logical place to put that one.

So I also was struck with Scott's report back on the interest around education and certification and Nate's comments and such and I'm now thinking we need an education priorities document going forward.

But anyway, let's get to the Marine Macroalgae in Crop Fertility Inputs.

MS. OAKLEY: Thank you, Dave.

I hope everyone has a cup of coffee or a cup of tea that they can cozy up with because I typically try to have short presentations, but this is not a short one; I'll admit it. So get cozy, and please bear with me because there were quite a bit of comments compiled from the public

comments, so I just want to give that process justice.

All right. I will begin. As an overview the proposal recommends two annotations: one at 205.601(j)(1) and one at 205.602. The annotations provide harvest parameters for marine macroalgae regarding harvest areas, methods, timing and bycatch. The proposal outlines the Board's previous four documents related to this topic over the past five years, but comments raised a need for the proposal based on the potential environmental impacts of harvesting and the regulatory environment. The proposal also explains the process through which the annotation language was created.

The proposal recognizes that not all questions can be addressed through an annotation alone and calls for an NOP-appointed scientific task force to help elaborate additional guidance and instruction to certifiers with a particular focus on species-specific parameters. The proposal also calls for a lengthy phase-in period of five years.

Public comments this time were divided generally between those with reservations or disagreement with the proposal and those in support of it. Some commenters did not take a position either way, but were concerned about the impact on supply. With regard to the comments opposed, they cover both the substance of the proposal and the process, and I will address both.

One certifier was concerned that some manufacturers would be unable or unwilling to attest to the annotation parameters. Another asked if on-site verification of the harvesting company was required. And several others asked if an affidavit describing harvest parameters would be sufficient. On-site verification is not required in the annotation or the proposal. The NOP could describe in guidance what documentation would be needed and if an affidavit would be sufficient.

A certifier in Iceland provided helpful specific questions. They asked how would an inspector verify that all harvest sites have returned to the biomass and architecture similar

to pre-harvest? How would an inspector verify that there is no bycatch or that some bycatch is acceptable? These are good questions that should be taken up by the scientific task force.

On inspector expressed concern about the likelihood of the proposal being, quote, a feel-good measure and explained given what I know of the supply chains for these types of inputs I'm not sure how effective an affidavit signed by the input manufacturer is in the real world going to be in improving harvest practices.

We heard from a few farmers who were also concerned about impact on supply. We heard from companies that harvest macroalgae for crop fertility inputs and processors who purchase macroalgae from independent contractors. The companies were not in support of the proposal and recommended it be sent back to the Subcommittee for future work.

In terms of legal standing Section 6518 of OFPA, (k), Responsibilities of the Board, (2) National List, states, quote, the Board shall develop the proposed National List for proposed

amendments to the National List for submission to the Secretary in accordance with Section 6517 of this title. Neither in Section 6518 nor 6517 does it state that a petition is required for the Board to make a recommendation to either 601 or 602 as claimed by some stakeholders.

Regarding the four areas of the annotation the comments received focused on concern over species-specific interpretation and only two proposed wording changes to address their comments.

Regarding prohibited harvest areas several harvesters expressed support for harvesting in conservation areas. They said if harvest activities were allowed by local governments they should be permitted in the annotation. That is a point that could be addressed through the scientific task force.

Regarding prohibited harvest methods concern was raised over interpretation of the language prevent reproduction. The intention of the language is not to exclude species and if there are concerns over a particular species and how this

language should be applied to them, this also could be taken up by the scientific task force.

Regarding harvest timing the wording repeat harvesting was mentioned by one of the scientists who helped provide feedback on the annotation and suggested that undisturbed natural stands must be clarified to mean undisturbed by harvesting. That could be amended today to read, quote, natural stands undisturbed by harvesting.

Another key stakeholder suggested that the requirement should be that ecosystem function of the seaweed be maintained within an acceptable level. This could also be discussed by the scientific task force.

Regarding bycatch it was suggested that monitored and prevented should be replaced to say monitored and minimized. This was in fact the original language crafted, but was noted by some of the scientists as being too subjective. The proposed wording recognizes that some bycatch is impossible to avoid but harvesters should take steps to prevent it.

The suggestion was made for, quote, a

proposal for an annotation that aligns with existing government and private efforts such as harvest must have a third-party review to assure protection of the marine ecosystem. If a third party is considered to be an existing government effort, then this recommendation is for the status quo as harvesters are already obliged to follow the laws of the areas under which they harvest.

It's important to note that we only heard from one commenter who personally harvests, and this was a rockweed harvester in Maine. One commenter said he could support the proposal if the annotation in 602 were removed. The proposal includes a listing at 602 so as to create consistency between the synthetic forms of macroalgae used in 601 and the non-synthetic forms used.

With regards to comments in favor of the proposal there were several commenters who supported the proposal but were worried it didn't go far enough, and several also said that rockweed should be specifically prohibited.

Several certifiers wrote in support and one

stated we believe that this revision is but one of the many important steps to ensure the organic standards protect our planet's intricately linked biodiversity, marine habitats and climate. Several expressed support for the annotation process. Another emphasized that environmental impact is intended to cover not only the farm ecosystem, but the materials used in organic production as well.

A coalition commenter said they strongly support the annotation and urge the NOSB to vote in favor of the action, and they also said they believe that the annotation is the most effective way to introduce enforceable protective rules for marine algae.

A conservation fund wrote that the annotation would prohibit seaweeds removed for processing into crop inputs from being taken from conservation areas.

And a land trust with intertidal lands wrote that they supported the proposal, and in particular we agree that no harvesting of rockweed should occur on conserved lands without the

permission of the land owner.

A conservation organization and land trust referred to loss of habitat caused by commercial harvesting as well as reduction of detritus.

A lobster conservation organization wrote to explain the role of rockweed as important lobster habitat.

Coastwatch Ireland wrote we urge the full NOSB to vote yes for these proposed wise harvest and coastal management measures as an exemplary ecosystem protection initiative which can be highlighted in the organic label.

A retired U.S. Fish and Wildlife Service refuge manager wrote in support saying harvesting rockweed on a national wildlife refuge is not allowed without a special use permit, although I remain concerned that harvesters may not know this or may choose to ignore it.

A retire marine scientist wrote to say that the annotation represents a workable compromise between unrestricted wild seaweed harvest and eliminated wild seaweed harvest.

A scientist in Iceland wrote in support of this as a middle path.

A coastal ecologist working on science policy issues wrote the proposed annotation outline reasonable and achievable parameters for the harvest of marine macroalgae or seaweed for organic crop inputs. The proposal is mindfully improving resource and ecosystem longevity while sustainably supporting the use of seaweed in organic crop production.

Friday Harbor Laboratories at the University of Washington wrote the macroalgae that are the primary target of these regulations are key elements of intertidal and shallow subtitle habitats in the Northwest, Atlantic and elsewhere. Abundant solid scientific research has shown both how and why the macroalgae are important and how improper or excessive harvesting can do lasting damage to local ecological systems.

One of the scientists who helped provide feedback on the annotation wrote to say the guidelines set out in this proposal are thus by necessity of a general nature. They are

guidelines which will need to be adapted for the species that is to be harvested. As a set of general guidelines I believe them to be a useful guide to maintain a sustainable harvest.

A marine biologist at the University of Maine's said the proposal looks to me to be exactly the direction managers and policy makers should go.

And finally, another stakeholder noted we would encourage the NOP and NOSB to continue its work on this important issue and develop more comprehensive guidance and/or regulations concerning marine material harvesting of all kinds.

So obviously there were a lot of comments and this couldn't be a comprehensive list, but those are some of the highlights.

If the Board votes to approve this proposal, these would be the next steps.

First, the NOP would form the scientific task force to address areas of concern raised by harvesters and processors, provide recommendations for guidance for interpretation

and implementation, and if needed any suggestions for clarifying the annotation language. The proposal cover letter would spell out the specific areas raised in public comments that need attention.

Second, the NOP would take the recommendations from the scientific task force to draft guidance.

Third, the proposal would go through rulemaking.

And finally, if it made it through rulemaking, it would have a five-year phase-in period. This is an 8 to 10-year process at a minimum.

Contrary to some claims and public comment there are not thousands of species used in organic crop fertility inputs. There are perhaps a few dozen and only a few of these are the most widely used. As stated in the proposal the scientific task force could begin their work on those species.

Indigenous coastal communities have a long and important relationship with marine

macroalgae and some tribes prohibit or restrict seaweed harvests such as the prohibition of commercial rockweed harvesting on the Passamaquoddy Tribe's Pleasant Point Reservation Land in Maine.

This annotation wording is broad enough to cover the different species and geographic regions of harvest but specific enough to capture more than just biomass recovery as is the focus of most regulations.

Marine macroalgae play important roles in the broader functioning of the ecosystem such as nutrient cycling and retention, filtering of runoff, production of detritus, shore buffering from waves and storms, carbon storage, provision of food, habitat for year-round residents, foraging grounds, refugia from predators and breeding and nursery areas.

While the literature review in the proposal was provided to address the potential for environment harm from harvesting and to document the need for the annotation to ensure the inputs are consistent with the system of organic

agriculture, that is not to suggest that macroalgae can't be harvested in a manner that minimizes harm. That is precisely what the harvest parameters aim to do. Just as stakeholders requested data on environmental impacts, the Board should be provided with more than personal assurances that harvests are sustainable.

I know there have been voices lobbying to send this proposal back to Subcommittee to, quote, allow for organic stakeholders to have their feedback considered by NOSB and integrated into the final annotation. I would gladly send this back if constructive feedback had been provided that could be incorporated into the annotation, but in combing through the public comments I see general concerns over interpretation that can be addressed by the task force. Moreover, we have heard from a significant number of scientists and stakeholders in support of the annotation, so if we consider their feedback it would be to vote this forward now.

The Board must also take into account whether changing the annotation would risk losing

scientific support. I would ask my fellow board members who are considering sending this back to Subcommittee what specific changes do you gather from the public comments that need to be made?

We heard the blanket statement that harvesters can't harvest to these parameters, but scientists are telling us this is a moderate, not radical step for maintaining the resource and its community. I believe that ample input has been solicited from all sectors of the community, including harvesters, nor do I see that actual changes have been provided.

I believe sending it back is a delay strategy and that we have heard enough constructive and supportive comments to move this vote forward today. This is a move to maintain the process of continuous improvement in the organic industry.

And finally I want to thank NOP staff Jared, Devon and Shannon for reading and providing feedback on the proposal process as well as the scientists and stakeholders who gave generously of their time and expertise, and most of all to my fellow board members for their participation

in this process.

MR. MORTENSEN: Thank you, Emily. And as we've been doing as we go along it's important to point out that the Subcommittee had voted unanimously to support the proposal coming out of the Subcommittee's work.

So I don't know, Steve, you've been facilitating questions, but do we have questions from members of the Board about the proposal?

CHAIR ELA: Yes, we will -- thanks, Dave and Emily. We'll open it up.

Wood has a question/comment.

MR. TURNER: Thanks, Steve.

Thanks, Dave.

Thanks, Emily.

I just wanted to jump in. I supported this coming out of Subcommittee and I continue to support this proposal, and I just wanted to acknowledge that I do believe it is a middle road that is frankly overdue and needs to begin the process that is going to be protracted and take a while to get to a finish line.

So I think it's our responsibility as

the organic community to continue to advance the most conservation-oriented thinking around what organic stands for and I believe strongly that healthy oceans and healthy ecosystems is going to be essentially how we think about climate solutions over time, and frankly our long-term food supplies. So I continue to be supportive of the proposal.

CHAIR ELA: We have Asa, then Dave, then Dan, then Rick.

So, Asa, go ahead.

MR. BRADMAN: So I just want to make a few comments, but first just one to say thank you to Emily for all the incredibly work that you've put into this. I've just been so impressed at your thoroughness and thoughtfulness and your communication skills and I just really want to applaud all the work that you've done on this.

I think this is a really important document. I agree with you that we should vote on it today and not send it back to Subcommittee. I feel that it's really a special responsibility that we're going into another environment to extract resources and then put them on land to grow

food for ourselves. I understand that these have been used for a long time, marine materials, and that they're considered in many ways to be a ecological way of cycling resources out of one environment into the human cycle. That withstanding, I think that really imposes on us a special responsibility.

And given the changes that are occurring in the larger environment with respect to climate change we've seen on the West Coast; I mentioned Tasmania, changes in seaweed populations and also in marine environments in general, I feel like this kind of sets the stage for thinking about it. These are used a lot as fertility inputs and often in a foliar application, which is as an approach to really feed the plant and not the soil. And I feel like that kind of raises it to another level in our thinking about this.

So again, I think given that we're kind of almost invading or going into another environment in the same way we harvest fish for food, I think we should also really consider how

we harvest plants from the ocean. So I think this is a really important first step.

CHAIR ELA: All right. Thank you, Asa.

We're going to go Dave, then Dan and then Rick. And then A-dae wants to be in and then to Scott.

So, Dave?

MR. MORTENSEN: Yes, I just would -- I echo pretty much what -- almost verbatim what Asa said. I think that the whole issue that we've gotten into conversations about over the last three years, or I'm sure going back before that, about the boundaries that we place around sustainable organic production cannot end at the field or at the farm when we're relying on harvesting inputs from the ocean. And living near the ocean now it's I would say a daily subject in local newspapers about the depleted fishery and strained lobster industry, at least on the East Coast and the Northeast.

I think some of the -- quite a few of the quite specific critiques about how much biomass

and this, that and the other thing -- I think those points can be addressed by the task force. I'm confident of it. So those concerns to me really need to be taken up by another group that will be working on the details of implementing of this. But seeing us moving forward on ecosystem service thinking in the same way that we did on land being broken out of natural lands for use in agricultural production, for organic production, this is just to me a logical and very consistent next step that we be looking at the macroalgae.

So I, too, thank all the work that's gone in on Emily's part, but also in the Subcommittee's part in the reviews and the great deal of discussion that's taken place over this over the last several years.

CHAIR ELA: Let's see. I can't get to my list here. Just hold on.

Okay. Next we have Dan, then Rick, then A-dae, then Scott.

So, Dan, go ahead.

DR. SEITZ: Sure. First I too want to thank Emily for her incredible work and I

particularly appreciate the fact that she resides in a landlocked state, Oklahoma, and is looking out for those of us who live by the states that have seacoasts.

What I'd like to say is that having written regulations and policies for the last 30 years it's precisely the policies or regulations that pertain to the most complex inter-related subjects that are the most difficult to craft in a way that would satisfy everyone. And additionally because the very subject matter is complex inevitably there will be areas where someone can take issue with a word or a phrase or an approach.

And I want to say that because that's inherent in a situation like this, we have to accept that no matter what we draft, it will be open to that type of criticism. And I personally feel that this has reached the middle ground of being realistic. It certainly is something that would be open to strengthening or improvement over time, but you have to start somewhere, and inevitably with a complex subject like this you can't get it

absolutely perfect.

But certainly this has gone through an extensive process, back to Subcommittee a number of times, extensive input, and so I would support voting on this and urge people to support it.

CHAIR ELA: Thank you, Dan.

Next up is Rick, and then A-dae, then Scott.

MR. GREENWOOD: Thanks. And again, one of the things about being number four and five in line, everyone has already said all the things that I wanted to say. And again, I want to thank Emily.

And my thought is I -- somehow I know this is an overstatement, but I think of some of this as strip mining, and I don't want to be in the position looking back 20 years in the hence saying what we were doing when you look at some of the land that's been destroyed. So I think there's a certain amount of urgency for this, and so obviously I'm going to support it. Thank you.

CHAIR ELA: Thank you, Rick.

A-dae, are you out there? I know you

had to switch to your phone.

(No audible response.)

CHAIR ELA: Michelle, have we been able to get A-dae un-muted?

MS. ARSENAULT: Looks like she's not been able to so far. Oh, there we go.

MS. ROMERO-BRIONES: Hello? Can you hear me?

CHAIR ELA: Hey, there you are, A-dae. Go ahead. Yes, we can.

MS. ROMERO-BRIONES: Yes. That little pause was necessary because I -- I'm going to make some quick comments without getting emotional, but I'm first going to preface my comments in that I live in a family who relies on subsistence seaweed harvesting and we come from a community that relies on subsistence seaweed harvesting.

And what I can tell you is in the last couple years the tribal people where I live have been consistently ringing alarms about the over-harvesting of seaweed and the commodification of seaweed that's being sold in organic markets

and higher-end restaurants, and it's causing a lot of havoc. One, when COVID hit many of the tribal communities who rely on the seaweed harvesting found that their seaweed beds have been depleted. And I just want to stress how serious that is.

So the seaweed bed that my family harvested has been harvested for over, I don't know, probably 250 generations and to see it depleted in the course of two seasons is really, really alarming. And so I struggled with this proposal: one, because I think tribal communities don't want government agencies to regulate how they harvest their traditional foods. But on the other hand there is a great need right now to protect these resources, not only for the benefit of the tribal people who rely on them, but for the entire ocean ecosystem.

And so I'm in support of the proposal, but I do want to stress the need for an inclusion of tribal communities. Emily was so great and wonderful to mention the Passamaquoddy in Maine, but there are a great number of other tribes that

need to be involved because some of these beds that are being harvested in conservation areas or along public state parks are really traditional harvest beds that have been maintained for hundreds of years regardless of whether that's recognized by some of these state agencies, and there are numerous tribal authorities that are working on this issue.

So in moving this forward again I'm going to -- I'm in full support of the proposal and with just stressing the fact for the need for tribal inclusion on this very important issue. Thank you.

CHAIR ELA: Thank you, A-dae, for balancing. I know you're trying to take care of kids as well, so really appreciate your viewpoint on that.

We will go to Scott and then Sue.

VICE CHAIR RICE: Thanks. Yes, again as Rick said, with all the comments that came before me, just great thanks to Emily for her deep dive on this. It's clear that you've done just tons of research and super appreciate it. I remember

first working on the document with Jean. Feels like a century ago, but it's come a long way.

And I'm really torn on this because I share a lot of the sentiments that many of you have already expressed in terms of the need to really look at the marine environment in a lens that looks at issues of carbon sequestration and buffering against climate change activities such as greater storms and looking it as we're going to see a lot more on blue carbon, referring to a green environment.

So I am in full support of protecting those ecosystems. And as a swimmer in the ocean and a diver I've seen some beautiful stuff and feel fortunate to have done so.

And so I guess my comments touch more on that process side. And I recognize that that next step as Emily laid out would be a task force and rulemaking guidance. And it's -- relying on that guidance, as I've noted in other issues we talk about before the Board, gives me pause in that not -- it is helpful, but it not be regulation which is difficult from the certification end. And I

think there are examples where it's been very helpful and certainly in something that goes into such detail as this would be necessary, to say the least.

But I feel -- I have some deep hesitation when I look at the handbook from NOP and see that really we haven't seen anything added to it in the better part of four years with the exception of a few kind of statements on imports and things of this nature. I think it has a real potential to help our certifications and procedures themselves, but I feel like there are a lot of angles in this that would need to be really fleshed out since it -- we're -- been talking about almost a practice standard of harvest and whatnot.

And so I am in support in theory and hesitant in process. So I appreciate you hearing that.

CHAIR ELA: Thank you, Scott.

I see Sue and then Emily.

Go ahead, Sue.

MS. BAIRD: I think Scott just

articulated better than I could my hesitation with the process. I'm again very, very thankful for Emily for all the work she's done on this and I think we all want to protect our aquatic wildlife and that ecosystem because we all depend on it.

But the process from what I'm hearing perhaps, at least in perception, has not been quite followed. Normally we'd put forth a full proposal, then people have to have a discussion paper; in this case it's a proposal. We have time for the public to comment directly on that paper and then we go to vote later. And this is the first time this full paper has come out. I've heard from -- we public comment 20 different SB members. Past members have said wait a minute, this is not quite right. Please don't do this. We've heard from our harvesters that have said this is the first time we've seen this full proposal. Give us time to rally and make comments on this.

So I agree with Scott. In theory I love what we're doing and in -- not just in theory, but

in fact I love what we're doing, but I don't think -- I know that I cannot vote on this in this positive just because it appears that our process, at least by public perception, has not quite been followed correctly.

CHAIR ELA: All right. Thank you, Sue.

We have Emily and then Mindee.

MS. OAKLEY: Yes, thank you both to Scott and Sue for those comments. And I did want to, if it's okay, just quickly address Scott and Sue's points.

And I think what you said, Scott, is so true and it is exactly what I've struggled with in trying to think about this process over the past many years. Do you write this super long annotation that is going to need additional fleshing out? Do you -- we had looked at organic certification, as you well know, at one point. We got resistance on that front.

And ultimately, as I might have mentioned during the oral comments, the wild crop standard itself is just inherently broad and very

vague and interpretation of it is kind of based on guidance, some of which comes from the NOP, some of which certifiers -- the certifying community has taken upon itself to also help try to craft as in the case of harvesting marine macroalgae to the wild crop standards.

So I think that the fact that a lot of angles would need to be fleshed out does not necessarily preclude moving it forward because I think that is just the inherent nature of a process like this. It is -- we cannot possibly address every single point, nor are we really expected to or able to, and that is why something like this, of this nature really does need to have the scientific task force kind of take it from here before any other further steps.

And that scientific task force should include a huge range of stakeholder scientists from all different prospective harvesters that are also scientists, harvesters that aren't scientists that are key stakeholders in this. And as A-dae pointed out so articulately, tribal communities must also be a part of that conversation from the beginning.

So I think that that it is possible. Although perhaps not ideal, that given the complexity of the situation I do think it is possible to move this forward based on the understanding that guidance would be needed.

And then in terms of the process points that Sue brought up, I did try to address some of those points that were raised by the past NOSB members. In terms of providing a discussion document first versus a proposal that has varied at least quite a bit in my five years on the Board. Sometimes that happens; sometimes it doesn't.

And then in terms of harvester feedback I don't want to alienate people and I highly, highly appreciate the feedback and participation that I did receive from many different stakeholders, but I just want to assure you that I -- I actually combed through my emails last night also and I specifically requested on multiple occasions comments from harvesters beyond the harvester that was part of this process, Dr. Raul Ugarte, because he was one of the four panelists from the fall, and all of those panelists were involved in this

annotation process. And really they declined to provide comment.

So I really wish they had. I wish they had told me at the time I need more time or whatever their thoughts were. I wish it had been more constructive, or anything. And I think despite that they did give us substantial comments this time around, for which I am really grateful. And I truly pored through them and isolated them both sort of in general terms and those by certifier questions and then those that are questions related to the four different provisions within the annotation.

And so if we were to vote this forward today in the cover letter I would have maybe not the usual stuff, but have a very long cover letter that addresses these points and helps pinpoint both to the NOP and then to the scientific task force where these areas of concern are. And perhaps one of their first tasks would be to reach out to harvesters and to take some of those concerns as their first guiding point.

CHAIR ELA: All right. Thank you,

Emily.

We have Mindee up next.

MS. JEFFERY: Thank you. Emily, I'm in awe of your work. And I can't say enough about that, so thank you, and for everyone else who's contributed to this project.

Sort of as a follow-up to A-dae's question, I'm really interested in recognizing tribal sovereignty as stewards of place. And so I'm wondering about your perspective on the part of the non-commercial harvests for whole and unprocessed seaweed are exempt. Is that something that you could see to be a partial umbrella to including indigenous communities as exempt from the parameters? Is that something you think would need to be fleshed out in guidance? Could it be fleshed out in guidance?

MS. OAKLEY: Yes, that's a really great question, and I don't know if we have A-dae able to still answer questions. I know she mentioned subsistence harvesting, but I think that that would absolutely fall under that exclusion, which was a really good point that got brought up in public

comment several years ago, which is why this whole public comment process is so fruitful and so meaningful, because like I hadn't thought of that, and that was a really good point.

I actually -- you know, I live in Oklahoma and I live in the Cherokee Nation and the U.S. Supreme Court just upheld a ruling, finally after hundreds of years of not doing so, that where I live is a Cherokee Nation Reservation. So I agree with you and feel very strongly about the importance of recognizing and deferring to tribal sovereignty in these areas, in all areas. And I think that would also be something that could be a first step that the scientific task force and stakeholder task force at large should look at and make sure that that is clearly addressed and covered in the language.

MS. JEFFERY: Can I ask a follow-up?

CHAIR ELA: Go ahead, Mindee. And then we're going to go to Kim.

MS. JEFFERY: Just process-wise in the grand scheme of proposals, adding something like that would be the only reason why I would vote to

go back to Subcommittee, just so you know. I really support this work and I think that's a really important perspective.

And so, Steve, can you shed any light on the -- or anyone shed any light process-wise on if that's a sticking point?

CHAIR ELA: There's two ways to look at it: We often -- there are always like little -- and I don't mean to call this a little detail at all, but we can often add some details that come up at the last minute into our cover letter that we passed the motion, we sent it onto the NOSB. But we add a cover letter to it saying, well, here's our rationale and here's why the decision was made for example in a sunset. We looked and there was no commercial -- or there was plenty of commercial availability and we had comments from a number of people and there were no comments that this was not commercially available. And so we kind of provide our rationale in that cover letter.

Similarly some little tweaks saying we addressed somewhat Native communities in this, but

really would like to see that specifically addressed, that these Native areas are very important. And if it goes to rulemaking or guidance that that part be included more forcefully. So that is one way.

And then the other way is that we specifically include it in the proposal. It's a tough one because I find we -- I mean I can only use paper pots as an example because that's what I'm lead on, but we've gone around many times on that one with proposals and each time there's a tweak, and mostly where it goes tomorrow. It might get sent back to Subcommittee or it might get voted it on. But at some point some of those tweaks we'll put in the cover letter and move it on. So some of these things can go around in circles, back and forth with different things. So my long-winded answer is I can't tell you exactly, but it is certainly something that could be included in a cover letter encouraging the program to take that into consideration and such.

Jenny's just signed on.

Jenny, would you like to make a comment?

DR. TUCKER: Yes, I'm going to have to leave the building before the parking lot locks, but before I switch over to mobile I do want to say that as part of any kind of process we would do as USDA there is a tribal office and there are quarterly tribal consultations. And so that would certainly be -- a very, very active part of what a program would look into would be -- the standard part of our standards process in particular in this case would definitely be a very, very important consideration.

So you're going to see me fall off here, but I'm going to go mobile just so I can get out of the parking lot before it locks up. But I will continue to monitor. I can speak if need be.

CHAIR ELA: I thought we could have Night at the USDA Meeting here, but -- instead of Night at the Museum, but --

Okay. Who else do we have? Kim, I think you were -- had a comment that you wanted to make if I -- I may have missed it here.

MS. HUSEMAN: No, you're fine. I should lower my hand after further thought. I'm

just going to echo the difficulty in, lack of better terminology, weeding through this particular proposal.

So, Emily, thank you so much for your time and explanation.

And to my fellow board members for the discussion. I'm not going to say this is easier, but the time that we've taken on this is most helpful.

CHAIR ELA: Let's see. Who else? I'm not seeing hands raised, but I -- this is such an important topic I kind of want to -- I don't want to put anybody on the spot, but I do want to hear from -- not necessarily all the board members, but a good chunk of them.

Jesse, I see you on the video so I don't want to put you on the spot, but I think this is important enough that I really value all the board members' input on this. So I may go ahead and call on some people that may not want to be called on. So I apologize, but I'm curious.

MR. BUIE: Well, first of all, Emily has done an outstanding job in covering all of

the -- I think all of the appropriate areas. Procedurally I guess that's what -- we're kind of at that point. I would like to see it move forward, but if there are issues, procedure issues that we have to deal with, then I mean let's deal with them and see what it will take to get it corrected.

CHAIR ELA: Thank you, Jesse.

And I'll chime in. I mean, I guess I can't speak to broader procedural issues, but I think it is not uncommon for us to go to a proposal straight from -- without a discussion document in between. And in this case Emily has put a number of discussion documents out, not specifically with this annotation, but there has been a long process moving to this proposal. It's only been in the last couple of years, based on actually my cohorts' comments, that it was hard to discuss things that we went to discussion documents before it was -- there was often proposals coming out right away. And then if they weren't correct, they would get sent back to Subcommittee.

So I don't -- I guess I personally don't find the procedure of this being the first time

people have seen this unusual or different than things that have happened in the past. So I guess personally I'd like to take that off the table. I would like the decision to be made on substance and comfort, but I don't find the procedure any different than has often been used in the past.

But, Nate, you have your hand up.

MR. POWELL-PALM: More obligatorily since I didn't want to be called on. I wanted to beat you to the punch, Steve.

(Laughter.)

CHAIR ELA: Fair enough.

MR. POWELL-PALM: But I mean, I echo so much of what everyone's already said. I think my only hesitation -- so I won't repeat what everyone's already said, but rather that I think -- and I'm -- this is my first year on the board, so I'm really grateful for the perspective on what is procedurally appropriate.

What I'm running into is I do think that this is such an important issue. I think that all of the earlier comments made by Asa and Dave and

many other folks about the respective impact organic farming has on these marine ecosystems -- that I would like to see us proceed in a way that makes it so that this annotation actually goes to become a rule.

And I worry that the consistent signal -- not signal -- consistent information that we got during the oral comment period from the harvesters, basically none of the harvesters supporting it and feeling like it was a consistent break in procedure -- that leaves me worried that this, if we pass it, just ends up not having a lot of viability. And so I think I would like to see this be as viable as possible from a rules making point of view and go to the task force and carry on. And so that's my concern is that because at this point there wasn't a lot of buy-in from industry -- and whether or not it's correct to say that -- enough time wasn't allowed for comment and review. That's -- I guess apologies for the in-articulation. I am overwhelmed by the amount of work and the thought that has gone into this, and so I feel like I'm not contributing a

lot to the discussion other than I do hope that we could get to a point where it becomes something that has great impact on marine ecosystems and how organic impacts the greater world ecosystem by making sure that we do a procedure in the best way possible. So thank you.

CHAIR ELA: Thank you, Nate, and thank you for volunteering before I had to call on you. I appreciate that.

Emily, you had another comment?

MS. OAKLEY: Yes, thank you, Nate. And I just wanted to try to address some of that.

I think that I don't want to minimize your concerns or anyone else's regarding either process or adequate time, but I just want to spell out that I asked two different individuals to please pass onto the OTA Marine Materials Task Force, and specifically the harvesters, whether or not the initial round of this language was something that was feasible. I even asked the question does this actually cover what you're already doing, because I thought that might have been a possibility.

And I was told that someone was talking with harvesters and what came back was that there was a need to demonstrate an environmental need for this proposal. And then it was also requested that I solicit feedback from the five scientists that presented to the Marine Materials Task Force folks in the fall of 2019, which I did. They were all sent the draft language and several of them remained extremely engaged throughout the process and were very helpful in crafting particularly the final language.

And I tried to provide that environmental perspective buy-out literature review by spending -- sorry for everyone who did read it -- like a lot of time and a lot of pages, combing through the scientific literature. What are the impacts? When can it be minimized? What are the steps that need to be taken to make that happen?

The other question that was raised by the harvesters was the 602 comment, but the -- I think I've explained already why that is in there. And program no way said that that was not something

that we could do as a board. The program did comb through this with us and provided us with really constructive feedback.

So the thing that I would just caution is that if you want to see this proceed and you want to do like what we can as a board to ensure that it does go to a rule, then -- I hate to say this, but I feel like that is voting on it now. I feel like sending it back is actually going to have a greater increase that it will not go before the Board, that it could then be voted on, or that you'll retain enough broad stakeholder support, including the scientists.

Because the primary recommendation from the harvesters, aside from questions about interpretation of the language, which like I feel absolutely strongly and echo the comments of Dave, that those can and should and were intended to be dealt with by the scientific task force.

But besides that the primary suggestion is that the annotation be rewritten to just say review by existing third-party entities, which is really just the status quo. It's like that's what they're

already doing. Where if it were to include MSC, the MSC-ASC standard, that came fraught with lots of public comments who didn't want to see us try to require the whole other entity's third-party verification, and is much more complicated and much more involved than what these four provisions in this annotation include because it deals with social justice issues, economic issues, et cetera.

So I think that had there been something in the public comments that was like we want you to change x language, we want you to do A, B, C, and it was really constructively and clearly spelled out -- I think the argument for sending it back would be much stronger. But there is not that in the public comment. And in the absence of that I worry that sending it back will just lead to a different version of the same opposition that we're getting now.

And I don't mean to say that people won't provide constructive comment, because I think that they will, but I also think that this is the time to capture the greatest number of board members that were present for the fall task force

panel and have been involved in this for the longest amount of time. Sending it back is going to require a major re-invention of the wheel with the five new members coming on next year and the five new coming on after that. So just kind of begs the question if it would be able to continue.

And then I'll just say in closing let's just no forget how many stakeholders we did hear from, even if it was written form, saying that this is adequate. This is a middle ground. This is ready to go.

So I don't want to put you in the position of feeling like you have to choose between like scientists versus harvesters, because I don't think that that is at all the dynamic that we're looking for here. I think that this can get voted forward and I think all voices can be heard through that scientific panel process.

CHAIR ELA: Dave, and then I think we're -- we've had a great discussion. We might -- we'll move on.

But go ahead, Dave.

MR. MORTENSEN: Yes, I just -- this

point about sending it back, I feel also strongly about it. Of course everyone has the right to decide what we do here.

Pedaling in this morning I couldn't help -- I had this like word string going through my mind. Don't let perfection be the enemy of the good on this project. We could nickel and dime this for the next 10 years. We need more of this. We need a little bit more of that. Is it biomass? Is it the architecture? The panel will help resolve that kind of stuff.

I think that if we don't act on this now and support this we won't be coming back to this any time soon. And I think it's far too critical an issue for us not to act on it now and put this forward and say that we do support a sustainable organic system that respects all ecosystems that it draws on to grow the food to feed the people.

CHAIR ELA: Thank you, Dave.

I think we'll go to one last comment; Scott has his hand up, and then we'll move on.

Scott, go ahead.

(No audible response.)

CHAIR ELA: You're on mute, Scott.

VICE CHAIR RICE: Mute in two places.

From a sort of other process point; and sorry for being that person, but that's sort of the day-to-day, I'm -- Emily, I appreciate you sort of laying out what you thought are the next steps to kind of move this forward. And just thinking about -- we had another recommendation. There's been a host of recommendations that haven't been moved on by the program, but I -- what comes to mind is the biological diversity and natural resources. And that came -- that went through some time ago and we haven't seen any traction on that and I'm just curious how would we or you or the Board see that this actually moves somewhere and gets on a regulatory agenda?

Because that's -- I guess my other hesitation in that process point of -- I think it's great. This Board makes fantastic recommendations, but we also I think need some assurances that those things move forward.

CHAIR ELA: All right. Emily, we'll

let you give a short response and then we're -- we're well over time here, but I think it's been a great discussion. But go ahead, Emily.

MS. OAKLEY: Thanks, Scott. I wholeheartedly concur and I actually think voting on this increases the likelihood that the USDA will see that the Board is moving in this direction of continuous improvement, and that these issues of biodiversity and conversation and actual resources that you mentioned are critical to the Board and to the stakeholders. And so I think having another proposal on their desk increases the chance that they will start working on these issues and not see them as outliers or anomalies.

CHAIR ELA: All right. Wow. I can only say that it is such a pleasure to serve on this Board given the amount of thought and from everybody. It is -- it's really stunning. I certainly personally do not have the expertise on these things and I so value everybody's different takes on this, and also that a 15-person board -- the level of expertise that everybody brings to it is just so useful. It really makes me believe

in this process. So thank you to everybody.

Emily, thank you for -- I know the hours and hours you have put in on this. And I know other board members know that as well.

So I think we are going to move to a vote. There is a motion to adopt the proposal on marine macroalgae in crop fertility inputs. The motion was made by Emily. It was seconded by Dave. I believe we are going to start with Rick.

MR. GREENWOOD: Yes, I'd like to approve.

CHAIR ELA: Okay. Thank you, Rick.

Kim?

MS. HUSEMAN: Yes.

CHAIR ELA: Mindee?

MS. JEFFERY: Yes.

CHAIR ELA: Dave?

MR. MORTENSEN: Yes.

CHAIR ELA: Emily?

MS. OAKLEY: Yes.

CHAIR ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIR ELA: Scott?

VICE CHAIR RICE: With all due respect to the work and the intent, no.

CHAIR ELA: A-dae?

MS. ROMERO-BRIONES: Yes.

CHAIR ELA: Dan?

DR. SEITZ: Yes.

CHAIR ELA: Wood?

MR. TURNER: Yes.

CHAIR ELA: Sue?

MS. BAIRD: I can't. No.

CHAIR ELA: Asa?

MR. BRADMAN: Yes.

CHAIR ELA: Jesse?

MR. BUIE: Yes.

CHAIR ELA: Jerry?

MR. D'AMORE: Yes.

CHAIR ELA: Let's see. We started with Rick, so it is my vote. Chair votes yes.

Did I get everybody?

MR. D'AMORE: Yes.

MR. BUIE: Thirteen yes; two no. So the motion is adopted.

CHAIR ELA: All right. Wow. What a

thing to end on. I guess it kept us all awake. Nothing like a long list of sunsets to stand with really important topic that I know we're all passionate about. And I don't hear anybody objecting to the concept at all.

So with that, I know we went over time, but I'm glad we had plenty of time to discuss this.

We are going to go until tomorrow. We'll take a break and we'll again start at 12:00 noon tomorrow. We're going to start with the research priorities of materials.

Thank you, Dave, for being willing to put that off until tomorrow.

And then we will continue on with the Crops Subcommittee at that time. Crops fortunately does not have, I don't know, 40 sunsets to do, but they also have some good discussion topics.

So thank you, everybody. Thank you for hanging with us for a long day of Zooming, and we will see you tomorrow at 12 noon Eastern Time. Take care. Thank you so much.

(Whereupon, the above-entitled matter

went off the record at 6:10 p.m.)

UNITED STATES DEPARTMENT OF AGRICULTURE

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NATIONAL ORGANIC STANDARDS BOARD

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FALL 2020 MEETING

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FRIDAY
OCTOBER 30, 2020

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The Board met via videoconference at 12:00 p.m. Eastern Time, Steve Ela, Chair, presiding.

PRESENT
STEVE ELA, Chair
SCOTT RICE, Vice Chair
JESSE BUIE, Secretary
SUE BAIRD
ASA BRADMAN
JERRY D'Amore
RICK GREENWOOD
KIM HUSEMAN
MINDEE JEFFERY
DAVE MORTENSEN
EMILY OAKLEY
NATE POWELL-PALM
A-DAE ROMERO-BRIONES
DAN SEITZ
WOOD TURNER

ALSO PRESENT

DR. JENNIFER TUCKER, Deputy Administrator, National Organic Program; Designated Federal Official

DAVID GLASGOW, Associate Deputy Administrator, National Organic Program

MICHELLE ARSENAULT, Advisory Committee Specialist, Standards Division

JARED CLARK, National List Manager, Standards Division

SHANNON NALLY YANESSA, Director, Standards Division

DEVON PATTILLO, Agricultural Marketing Specialist, Standards Division

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

(12:01 p.m.)

CHAIRMAN ELA: Welcome back, everybody, to the last day of -- this is fall -- the fall NOSB meeting.

Thank you for hanging with us yesterday. I know we went considerably overtime, but I thought we had a great discussion and, as always, appreciate all the stakeholder input as well as the input from each Board member. So, I appreciate your staying late, but it was an important topic. And it is Friday, and I think we have a few more important topics today coming up.

One of the things we did not get to yesterday in Materials Subcommittee were the research priorities. So, I'm going to turn it over to Dave, as Chair of the Materials Subcommittee, to present the research priorities.

So, Dave, go ahead.

MR. MORTENSEN: Thank you, Steve.

The Materials Subcommittee worked hard on this. As is the case with any of the documents

that we work on, the proposal comes about by the Board members listening to the public comment, to the ideas shared with Committee members, and then, we meet to discuss as a subcommittee where is it that the research priorities really need to be sunsetted and where is it that new and emerging areas of need exist, as informed through that public comment process.

The subcommittees play a big role in channeling compelling areas of need for new insight that would inform their research priorities. For example, in the active discussion that unfolded over the past year and a half or so around the issue of parasites in poultry flocks, we refreshed and I think made more holistic the subject and the research needs around systems approaches to management of parasite loads in livestock and poultry, in particular.

I would say that in the years that I've been on the Board this represents maybe the last year a bigger overhaul. I think we had the feeling that we needed to collapse some things and restructure some of the priorities. And I'm happy

to report that I think we feel quite good about having captured those.

The public comments on the priorities generally were favorable. Some of the public comments indicated where research was underway under some of the priorities, which was very interesting to read about some projects funded by some of the NGOs that are stakeholders.

We were also very excited to learn that the U.S. Department of Agriculture's Competitive Grants Program, National Institute for Food and Agriculture, has embraced our priorities and they are helping inform the Request for Proposals for the next go-round of that program for things like transitions to organic and the agroecological bigger programs, some of these large, multimillion dollar projects.

So, a couple of comments for us to consider going forward, but I don't really envision that we need to be thinking that we need to do this in this draft right now. But it's a large document, and is there some way that we can run some sort of a mental sensitivity analysis and

weight the things that are more urgent in way of need than the document does?

And there were also a number of comments on BPA, and it's interesting in light of the discussion that we had yesterday about contact, Nate and Asa and others' contact, with food. We have that as a research priority. I think there was the feeling that we could maybe underscore its importance more strongly.

But, otherwise, I think the document was well-received and my sense is that the Subcommittee and the Board broadly is feeling quite good about the document.

That is the end of my report.

CHAIRMAN ELA: Thank you, Dave.

I cannot see hands up to see if there are questions. So, if people just want to, if there are questions or comments, if Board members want to jump in, or one of the staff members, NOP staff, can help me with hands up. Are there any comments or questions or thoughts about the research priorities?

MS. OAKLEY: This is Emily.

I just want to thank Dave and, also, Steve because I feel like this two-meeting process this year was just extremely helpful, and I think it gave stakeholders an opportunity to provide constructive feedback that we could incorporate in the year that we were voting on the proposal. So, thanks for that suggestion and for putting that process into action.

CHAIRMAN ELA: Thanks, Emily. That's good to hear. I know it was a little more confusing at first because it was a little out of what we had done in the past, but I agree, I think it does help us make a more refined research priority list to approve.

Any other comments?

MR. RICE: This is Scott.

Dave, I think you mentioned yesterday, or alluded to, about the big, wide topic that we brought up in the CACS Subcommittee on human capital. And I don't know if there's a space moving forward to consider that as maybe not in the research perspective, as we've looked at this list, but an area certainly for attention as we

look at opportunities, as we talked about, with partnering with universities and things like that, but just some space there to consider those things and put it out there that the Board is interested in research of some nature, social science perhaps.

MR. MORTENSEN: Yes, I think that's a really great point, Scott, and I was really struck by your report back and the very strong and thoughtful stakeholder input that you were summarizing for us.

And I do think we certainly could think about ways of repackaging research priorities and expand it to research in education/outreach. I do think, listening to you reporting back, that we could have a very thoughtful summary of what are the education needs in organic, and that could be in the same document or it could be its own standalone document.

CHAIRMAN ELA: Are there other comments and thoughts?

(No response.)

All right. With that, we will move to the vote to approve the research priorities.

I can't see who made the motion and who seconded. Can somebody help me out with that?

MR. POWELL-PALM: Motion by Dave, seconded by Emily.

CHAIRMAN ELA: Thank you, Nate.

All right. We'll move to the vote. And I think we are starting with Rick, is that correct, Jesse or Scott?

MR. BUIE: I think it's Kim.

CHAIRMAN ELA: Kim? Okay. I may not have marked that.

MR. BUIE: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes, I can kick it off.

So, I vote, yes, to adopt.

CHAIRMAN ELA: Okay. Mindee?

(No response.)

Mindee, are you there?

(No response.)

Mindee, we're not hearing you.

(No response.)

Michelle, can you see Mindee?

MS. ARSENAULT: Yes. I just asked her

to unmute.

CHAIRMAN ELA: Mindee just texted and said she votes yes. She said her whole system just shut down. Okay.

Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott?

MR. RICE: Yes.

CHAIRMAN ELA: A-dae?

MS. ROMERO-BRIONES: Yes.

CHAIRMAN ELA: Okay. Thanks.

Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue?

MS. BAIRD: Yes.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: Yes.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: And the Chair votes yes.

MR. BUIE: Fifteen, yes; zero, noes. The motion passed.

CHAIRMAN ELA: All right. Thank you very much.

Dave, is there anything else for Materials?

MR. MORTENSEN: No.

CHAIRMAN ELA: All right.

MR. MORTENSEN: Yes, nothing to report at this time. There will be more things coming for the spring. But, yes, for this meeting, that's it.

CHAIRMAN ELA: Great. Thank you so much. We do appreciate it.

Okay. We are going to move on to the Crops Subcommittee. And, Jesse, I'm going to turn

it over to you.

And I'm going to ask that we switch the paper pots and wild, native fish proposals, just while I'm still trying to get onto the visual part of the computer here.

So, Jesse, it is for you, and I know Jared has introductions for all the proposals to read off, just to give people the background of what's happened.

MR. BUIE: Okay. Welcome, everyone, and I'd like to take this opportunity to thank the Crops Subcommittee for all its hard work and cooperation in getting us to this point.

So, we are going to switch here. Emily, we want to start with the wild-native proposal.

MS. OAKLEY: Certainly.

MR. BUIE: Okay. And who's going to read?

CHAIRMAN ELA: Jared will give the introduction, and then, we can go from there.

MR. BUIE: Jared?

MR. CLARK: Thank you.

So, the work agenda item on wild, native fish for fertilizer production was initiated at the Board's request. During the previous sunset review for liquid fish products at 205.601 in spring 2018, testimony was received that some manufacturers are using wild, native fish which are harvested exclusively for fertilizer production.

In support of this work agenda item, a limited-scope technical report was written and published to the NOP website in September of 2019 and a discussion document presented at the spring 2020 meeting.

I will now hand it over to Emily Oakley to continue discussion on this proposal.

MS. OAKLEY: Thank you.

And now, I just had a snafu with my computer. Sorry. Just a second. All right.

Although we did originally receive testimony several years ago that some liquid fish products are made with fish that are harvested exclusively for that use, the TR provided more nuanced information on that.

And sorry if anyone just heard that feedback. I don't know what that came from.

So, the TR kind of gave us a breakdown of the wet reduction process and the production of fish for meal, oil, and solubles. I went over that at the spring meeting. So, I don't want to kind of take the time to do that now.

But what we determined after the spring meeting and after public comments was that we would explore the option, creating an annotation that specified that fish used for LFPs, or liquid fish products, must come as a byproduct from human use; and that, since there weren't necessarily fish being harvested exclusively just for fertilizer, that it was a fine line between that use, because the other uses are for livestock, oil, and meal; that the Board determined that we would try to see what possibility might exist for creating this annotation. So, that's how we kind of got to this point after the spring meeting.

So, I was going to go through the public comments briefly. But, to begin with, LFPs, or liquid fish products, are widely used by producers.

The majority of comments that we received this time were in support of the proposal, but not all certainly were. And even some that were in support felt that there was a caveat that it could be stronger, particularly with regards to verification and enforcement. There were also concerns about the environmental impact of fisheries on marine ecosystems and concerns that this proposal didn't go far enough.

One commenter opposed the proposal because they felt it does not do enough to protect marine ecosystems. For example, they said, specifically, that any proposal that allows the commercialization of bycatch disincentivizes the use of fishing methods that minimize it.

Additionally, although fish harvested for human consumption has ecological impacts as well, the parts used in fertilizer are considered waste products that would not otherwise have use. The fact that this waste does not have a human use does not mean that it does not serve an ecological purpose and begs the question of ecological impact associated with the demand.

And then, finally, given the importance of removing fish biomass is not well-understood, either from the perspective of energetic balance or from the perspective of food web dynamics, the organic industry should take a precautionary approach to protect the marine ecosystem.

So, they concluded by requesting that we explored annotation limiting fish products to those sourced from post-consumer waste only.

Then, there were some commenters who were opposed and suggested it should be sent back to the Subcommittee, one, for more time to review, and, also, in particular, because they noted that the language would exclude livestock use. So, they wanted to see language in the annotation for fish waste from livestock feed. But, actually, the primary use of the wet reduction process for meals and oils is livestock feed. So, that is actually part of the intention of this proposal, to exclude that use. It's the solubles from that process that are, then, used after the meal and oil have been extracted in the liquid fish products.

Other commenters did not necessarily take a position, but did express concern about the impacts this could have on the supply chain. We did hear from the company in India producing solubles from the wet reduction process who thought they may not be able to meet the annotation.

We also had a somewhat odd argument presented to us by those in favor of ammonia extract saying that sourcing liquid fish products from the wet reduction process is environmentally damaging and even amounts to modern-day slavery in some places, and may support the proposal as a means to limit organics impact on those issues. But they also, then, claimed that, while perhaps 40 percent of the liquid fish products listed by OMRI would be affected by this proposal, that 40 percent represents a significant portion of the total volume of supply. So, they argue we should support this proposal, and then, support ammonia extract. And I would just suggest that both those issues are unique and separate, and our vote on this proposal shouldn't have any bearing on the Board's future deliberations on ammonia extract.

A U.S. manufacturer of liquid fish products wrote to say that the annotation as written does reflect the materials used in their products.

Another manufacturer said there's enough fish waste from human consumption to meet the demand. They did suggest we add pet food manufacturing waste as the definition or into the definition and fish culled for quality problems, though they admit that the latter is likely already covered in the existing definition, which I think it is.

Several certifiers said that, if the proposal were adopted, the Board should request a two-year implementation period which was similar to that for the organic certification of kelp for livestock feed. I think that's a very good suggestion.

There were some questions as to what form of verification is considered adequate. And some of those commenters asked the NOP to clarify if any other documentation would be required beyond attestation.

An inspector shared that he felt that, quote, "A good many, I would venture to say greater than 40 percent, of the liquid fish manufacturers marketing products to organic growers are already inspected by an MRO because their product has an analysis of greater than 3 percent nitrogen. For this reason alone, I think verification of this supply chain will be easy."

One certifier exclaimed that they have reason to believe that some producers were under the impression that fish fertilizers were already produced exclusively from fish waste.

And then, there were some suggested edits to the definitions made by OMRI, as we discussed during oral comments, and a very minor one suggested by NOC. So, the CS sent those suggestions to the NOP and the program confirmed that they do not amount to substantive changes, but, rather, clarifying changes.

So, the proposed motion with the updated suggested language can be seen now on this slide. And if you see what is before you, the motion is for -- it's a listing at 205.601(j), and

what's in bold, "sourced only from fish waste, bycatch, or invasive species" is what would be added. And that's not being changed. But the suggestion for changes by OMRI and NOC are in the definition, the motion to add the following definitions to Action 2052, "Terms Defined," and they're highlighted in bold.

So, market food fish was a suggestion.

And then, under "for human consumption," explaining or elaborating examples, such as skins, frames, and viscera.

And then, under "bycatch," this was a good comment from NOC, "incidental or discarded catch that have low economic value," rather than "no economic value". And then, OMRI also suggested that we describe "or fish that are unintentionally killed by fishing gear (mortality)," to help elaborate that further.

So, those were the suggestions for clarifying the definitions, and I think they are good.

In terms of the pet food suggestion, that really was not a huge area that was discussed

in the TR and might be something that either the program or the Board could look into further. Whether that is material, coming from aftermarket food fish or not, was not really clear to me. If it's using things like skin, frames, and viscera, then I would assume it would follow under that, the current definition, and would be included. So, I guess we would just have to get more information to determine whether or not that falling under these existing definitions.

So, with that, I would like to open it up for Board discussion. Thank you.

Steve, would you like me to call, or Jesse? We can probably both see the hands.

Jesse, do you want to call on a hand?

MR. BUIE: Well, I can't see the hands.

MS. OAKLEY: You can't see the hands? Okay. I can see that Wood, Dave -- you guys want to call on them? I can just see those hands are up.

MR. TURNER: Do you want me to jump in?

MS. OAKLEY: Sure.

MR. TURNER: Thanks, Emily. This is

great and I'm still largely supportive.

I did find it was very educational and very important for me to spend a lot of time reading through the comments. It was just a lot of good perspective, I think, from the community.

And I think I agree with you; I feel very confused about the pet food comments, to be honest. And I love my dog. I just don't think the oceans should be fished for my dog's food. So, I would have some challenges with that. I mean, I would love to spend more time on that.

But the bigger question I have is, I find it really compelling to hear the comment or read the comment about species, or maybe I could hear the comment about species-specific, being more specific about what bycatch can be included. And I find that very compelling, that there is going to be bycatch that are going to be threatened species that really, you know, there should be other protections for those species. And again, I know there's a lot of complications in what happens to those species in a fishing context, but I was wondering if you found that compelling and

thought that adding species -- and I don't know exactly what would be involved in doing this, but somehow adding some kind of species definition or species information in the definition would be even remotely enforceable?

MS. OAKLEY: Yes, I mean, I think that's an excellent point. I mean, special status species like threatened and endangered species, like by law are not supposed to be bycatch. Now whether or not that happens unintentionally is, obviously, a more complicated situation. But they do have federal protection.

In terms of identifying species for bycatch, I think, you know, with the marine macroalgae proposal, there was a lot of species-specific research that was done. And when the CS was exploring this issue -- and you'll note that there is not a listing here for 602, as there was with marine macroalgae, because it would have required just a tremendous amount of research to try to determine exactly which fish are used, the impact, et cetera. And I would be concerned that to elaborate specific species under the bycatch

definition would require a similar amount of research that might be difficult to obtain or easy to contest.

So, while I philosophically wholeheartedly agree with that, pragmatically I'm not sure that it would be something we could easily do. That's not to say we shouldn't try it. Those are just my sort of thoughts on it. But I don't have a feeling, a position about what the Board should do one way or the other with regard to that.

CHAIRMAN ELA: All right. I think I'm unmuted finally. Oh, it just disappeared. I can't remember who just had their hand up. It just dropped --

MR. MORTENSEN: Sorry, Steve. I was the second half of that discussion. What Wood had spearheaded was what I was going to ask about. So, thank you, Wood and Emily.

CHAIRMAN ELA: Other comments?

Asa?

MR. BRADMAN: I just wanted to say a couple of things. One, just how important I think this is, and I think it's really great that, as

a Board, we're dealing with issues about moving nutrients from one environment to another.

I also just want to say, Emily, I'm in awe at the work that you've done, both with the marine materials and macroalgae and this evaluation. This reflects your in-depth evaluation, and I just really appreciate that. I just wanted to put that out there.

CHAIRMAN ELA: Emily, go ahead. And then, we'll go to Scott.

MS. OAKLEY: Just a quick one. I do have to say, like the TR authors did a ton of work, and they were also incredibly helpful and available. It's really they who deserve the recognition. So, I just want to throw that out there.

CHAIRMAN ELA: Scott?

MR. RICE: Yes, I echo the thanks on all the work, Emily.

Just a couple of comments. I think you mentioned, as far as the animal side of things, referencing the market food fish, but I think that, in terms of the definitions, that's where the human

shows up. So, I think there is still that concern that that was being left out. Maybe that's something that can be addressed during rulemaking. I'm not sure.

But I think there's another good point that was brought up on this issue. Just it kind of carried over to some other issues, and even with our discussion on EPA List 4s. It's just looking, as we move forward as a Board, how to work on similar or same issues across subcommittees. I think that was a really great point that folks made in public comment, again, on this issue and EPA List 4s.

Admittedly, Asa and I didn't connect earlier in our process used in our respective subcommittees on that List 4, but, in terms of this one, kind of looking at what those impacts are for listings that appear in livestock and potentially in handling, you know, looking at kelp, and whatnot.

So, just something for all of you to think about as we move forward into other issues and remembering that there's a lot of carryover between the subcommittees. And I think that's one

area of improvement for this Board that could be based in a little bit better. Just we're all fingers on the same hand.

CHAIRMAN ELA: Yes. Hopefully, we have two hands, but the fingers cooperate.

Emily?

MS. OAKLEY: Yes, I want to respond to both those points. Because I actually felt like the point you raised, Scott, in essence, like the supply chain issue is definitely something that deserves consideration. And the one person who -- or not the one person -- but the like primary comment around this came from folks in support of the ammonia extract, which makes it a little bit more complicated. And it was anecdotal information. It wasn't necessarily backed by any data.

But I know that, obviously, if this gets passed, and it went through rulemaking, economic impact is a part of the USDA's process in rulemaking. So, I know that would be considered there.

In terms of the livestock feed aspect,

you know, actually, that is kind of what this is restricting, just because the wet reduction process for the meal and oil is primarily used for livestock feed. So, it is something that could be, I think, addressed further in the rulemaking process or by the NOP, if there are other sources that are not being used from just the wet reduction process. But if we put in livestock feed, it would kind of defeat the other purpose of the annotation, or it would open it up so broadly as to almost negate the point of the annotation, if that makes sense.

CHAIRMAN ELA: Other comments?

(No response.)

I have one. Maybe you can comment on it or maybe it's just a comment from my part, and maybe I'm just confused, which is easy enough. But I'm kind of struck, when we first brought this work agenda item up, we were very concerned about the use of fish just being harvested for use on organic farms and not solely as waste products. And then, we almost dropped this based on testimony and the TR, that this wasn't really a problem, and that was the take of comments and

stakeholders, you know, why are we even dealing with this; it's not an issue.

And now, we get to this point where we go to pass this motion, and suddenly, there's all this economic impact. I'm confused. It seems like our stakeholders told us there wasn't a problem, and now, suddenly, there is a big problem. I feel a little jolted along the way, that we weren't getting full information from the parties. And it kind of bothers me that suddenly it's this big deal, when it wasn't a big deal at all, presumably.

And you don't have to respond, but it's just an observation that confuses me and worries me about the process we have.

MS. OAKLEY: Well, I won't fully respond to that, but I didn't bring up this point that was raised by several public commenters that felt like that the wording to say that fish aren't harvested exclusively for fertilizers -- like one commenter last round said that they felt that that was misleading. And that was also in the proposal.

And I don't want to get like in the

middle of that aspect necessarily, but it definitely gets complicated. And your interpretation of why they're being harvested and what the purpose is, it gets a little tricky.

But, yes, there were differing views on the TR results because, basically, fish harvested for the wet reduction process, both the meal, oil, and solubles can be used in the fertilizers. So, it's conceivable that all three products would be used, but they are not being harvested just for fish meal, oil, solubles, and fertilizers. They're also being harvested for meal and oil and livestock feed, and solubles are like a byproduct, if you want to call it that, although I don't think -- it's just another; it's a third product, a third tier of that process.

But I know, this gets like really complicated in that regard, but I probably didn't fully address what you were mentioning, but yes.

CHAIRMAN ELA: I just feel like we were actually really investigating this out of true concern for marine ecosystems. And I think if we hadn't gone back -- well, I'm just going to say

we had one commenter who is a certifier a couple of rounds ago that said, "Wait." I mean, we were about ready to drop it, and he commented and said, "Wait. No, I do know of specific companies that are harvesting only for this use," and kind of put it back on our plate. And now, suddenly, it's a big deal.

I think that it shows that we do need to be careful about -- as a whole, dig a little deeper on some of these topics and ask maybe more. And I agree that the TR was complicated, but it strikes me as, suddenly, the outcry kind of surprised me, and then, the economic impact.

It looks like Sue has a comment to make.

MS. BAIRD: Yes, I do. Again, Emily, you've done an incredible job.

I don't think, though, that we need or should discount livestock feed. I, in my previous 100-year-old life, worked for a feed company, and we formulated feeds. And many times, the fish meal was used. And, in fact, if you are formulating for fish, then you have to use fish oil and fish meal. So, that's just part of the process.

Because of their biological makeup, they have to have that. So, let's don't discount livestock feed.

You know, again, we're hearing comments, "Give us time to comment on this. Let's don't rush this thing." I'm a little concerned, and perhaps it's too paranoid of me, but I'm a little concerned that we're going to pass some of these things and say, "Oh, we'll let NOP take care of it in rulemaking." It's not totally NOP's job to take care of things that we passed in a hurry, that perhaps we haven't quite defined for them. That's just my comment.

CHAIRMAN ELA: Emily? And then, we will probably move on.

MS. OAKLEY: Yes. No, I mean, I think that's a really excellent point, Sue, and I really appreciate you bringing that up.

In terms of the livestock feed, I think -- and my Subcommittee members can correct me if I am misstating our intention in writing this proposal -- but I think our intention was to actually source only from fish, waste, bycatch,

and then, basis species, and defining fish as fish waste or byproduct left over after market food for human consumption.

Just as an effort to reduce our impact on the broader fishery ecosystem -- and now, whether or not there is enough from fish processed from human waste, as we heard one person say, or there isn't, as we heard another person say, I mean, that is, unfortunately, not something that I think even we can take back and ultimately determine because the supply chains for that are very complicated.

But I imagine, as I was saying earlier, that if stakeholders -- if there were to go through rulemaking, stakeholders would be active at that point. And that would probably be when we would really find out the most information. Unfortunately, I'm not sure there's another better way to do it or get it, at least in my knowledge, which is for sure limited.

Okay, I am done. Sorry.

CHAIRMAN ELA: You don't have to apologize.

I think we will go ahead and move to the vote.

We have a couple of votes on this. The first is a motion to amend Section 205.601(j)(8) as follows:

"Liquid fish products sourced only from fish, bycatch, or invasive species 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."

The motion was made by Emily. It was seconded by Dave.

And we are going to start with Mindee.

MS. JEFFERY: I'm sorry, I think I have a process question before I'm ready to vote. Can I do that?

CHAIRMAN ELA: Sure.

MS. JEFFERY: Because don't we need to consider the discomfort and whether or not we want to go back to the Subcommittee before we vote, because I think I'm stuck right there?

CHAIRMAN ELA: Since this is a little bit of a confusing process, it's a little out of

order to consider that, but I did not hear any motions to that effect.

MS. JEFFERY: So, the correct process would have been, before you called the vote, for us to say, "I want to go on going back to Subcommittee before you call the vote."?

CHAIRMAN ELA: Yes. I'll ask -- well, it is, I mean, according to Robert's Rules, we should have done that before. I understand the difficulties with process. So, I'm kind of in a quandary here. Maybe somebody who is more familiar -- I think at this point, yes, it should have been brought up before we went to the vote. And I think the motion has already been called. And so, as much as I sympathize with you, Mindee, I think the motion has already been called and we've started the vote.

MR. BUIE: Steve?

CHAIRMAN ELA: Yes, Jesse?

MR. BUIE: Steve, yes, I think many of those questions were answered because we have two motions, which kind of dealt with, I think, the concern that people have.

CHAIRMAN ELA: Yes.

MR. BUIE: And I don't know if people realize that.

MS. BAIRD: No, I don't understand.

CHAIRMAN ELA: Nate, one quick comment.

MR. BUIE: Yes, okay.

MR. POWELL-PALM: Mindee beat me to it, and I ended up putting it down. Sorry about that.

CHAIRMAN ELA: Okay. Okay. So, we're going to move ahead.

Mindee, your vote?

MS. JEFFERY: Yes.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily?

CHAIRMAN ELA: Yes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott?

MR. RICE: Yes.

CHAIRMAN ELA: A-dae? A-dae, are you there?

MS. ROMERO-BRIONES: Yes.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue?

MS. BAIRD: Yes. But I'll also echo Mindee's concern. I think we did not follow process.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

(No response.)

Jerry, are you there?

Did we lose Jerry, Michelle?

MR. D'AMORE: Yes. Yes. Thank you. Yes.

CHAIRMAN ELA: Okay. Thank you, Jerry.

Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim

MS. HUSEMAN: Yes.

CHAIRMAN ELA: And the Chair votes yes.

MR. BUIE: Fifteen, yes; zero, no. The motion passed.

CHAIRMAN ELA: Okay. Emily, you have a comment?

MS. OAKLEY: Yes, I just wanted to say that I sincerely apologize. I did not want someone who would have wanted to send this back to Subcommittee not to have been able to make that comment. And if I did not create the room for that, I want to apologize for that.

MS. BAIRD: Too late. It's done.

CHAIRMAN ELA: I'm just trying to think through this. I'm trying to follow correct Robert's Rules of Order. I do apologize that that space wasn't made.

I think you could at this point, before we go to the second motion, somebody could vote to send this back to the Subcommittee, and we could work on that. I think there could also be in Subcommittee a motion to amend the previous vote,

if need be.

MS. OAKLEY: Well, if folks feel like it -- you know, I just don't want people's voices to be stifled, I guess is what I'm trying to say. And I don't want to be like -- it is not at all my goal to push something, yes, without giving the space for that. So, anyway.

CHAIRMAN ELA: So, on the motion that we just made that past, we could put on the cover letter that we expect to amend it. And we could it back, move the next motion back to the Subcommittee. So, this is the chance before I call the vote.

MR. POWELL-PALM: Nate would motion to move this back to Subcommittee.

MS. BAIRD: I'd second that.

CHAIRMAN ELA: Okay. Okay. A motion was made by Nate, it was seconded by Sue, to move this back to Subcommittee.

We will start with Dave.

MR. BRADMAN: Sorry, this is Asa. I just want to clarify. The second motion is the motion to "add the following definitions"?

CHAIRMAN ELA: Correct. And I should ask if there's any discussion on this, on the move to go back to Subcommittee.

MR. TURNER: But, Steve, that's not the second motion. You're adding a motion now between the motions that have been published.

CHAIRMAN ELA: Correct.

MS. OAKLEY: Maybe we need the program to help us.

CHAIRMAN ELA: I think it's proper order. We have two motions. It is okay to have a motion in between. If somebody knows Robert's Rules, and it is incorrect on that, please let me know.

MS. OAKLEY: I don't know.

MS. JEFFERY: I'm sorry, can you clarify for me? With the motion to go back to Subcommittee on the second motion, does that send the whole proposal and invalidate the last vote, or does it just send this part of the proposal back to Subcommittee?

CHAIRMAN ELA: It sends this part back. It does not invalidate the last vote. But I think

on the last vote, we can put in the cover letter that the Subcommittee plans to amend it. It would have to come out of Subcommittee as an amendment to the first motion that we just made that was passed.

MR. BUIE: Okay. Now, Steve?

CHAIRMAN ELA: Yes?

MR. BUIE: If we are talking about the second motion, if we are going, if there is a motion to send it back, we're going to have to vote on whether we want to send it back.

CHAIRMAN ELA: Correct.

MR. BUIE: Vote it up or down, right?

CHAIRMAN ELA: There's the vote to go to Subcommittee is --

MR. BUIE: You've got to vote that up or down.

CHAIRMAN ELA: Correct, yes. And that's what I was asking for: any discussion on that subcommittee vote before we go to the vote on whether to send it back to Subcommittee?

MS. JEFFERY: I'm sorry, can you say that again, please, Jesse?

MR. BUIE: Okay. If we have a motion to send the second motion back, we're going to have to vote on it, vote it up or down to send it back. And if we decide, if the vote is not to send it back, then you go ahead on and vote on it.

CHAIRMAN ELA: Correct.

DR. TUCKER: A note from the program.

CHAIRMAN ELA: Yes, Jenny, uh-hum.

DR. TUCKER: So, Steve's process is correct. You can now do a motion to send it back to the Subcommittee, should you choose to do that. So, that is your -- but Steve is correct on process.

From a program perspective, we understand that you've just passed this proposal. It would be helpful to know if you want to keep on working on it, right? Because we don't want to move something forward to rulemaking if you guys want to keep still working on it. So, it would be kind of nice just process-wise where this went, whether you're going to take this -- whether you want to work on it more or whether you want to advance the proposal. I don't think we want you

working on it at the same time we're trying to do rulemaking on it, would be my general impression.

CHAIRMAN ELA: That is correct, Jenny. So, given that we already made the vote on the motion, which I think we had to do, given it was already moved, what's the best way to signal you that the group would like to continue to work on that motion?

DR. TUCKER: So, if you want to take a vote to see how many people want to send it back to Subcommittee, that would show the Board's preference to keep working on this.

CHAIRMAN ELA: Yes.

DR. TUCKER: Yes.

CHAIRMAN ELA: And there is a motion and a second on the floor to send it back to Subcommittee.

DR. TUCKER: Right. But I was reaffirming, right, I was just reaffirming that process --

CHAIRMAN ELA: Yes.

DR. TUCKER: -- since there seemed to be some question as to whether that was allowed.

And the answer is yes.

CHAIRMAN ELA: Thank you very much, Jenny. I appreciate that.

So, we still have a motion and a second on the floor to send it back to Subcommittee.

Emily?

MS. OAKLEY: Right. Okay, great. So, I'm glad that we're getting to talk about this. I'm glad that it's not getting stalled.

So, I guess my question would be, what would folks like the Subcommittee to work on, if they sent it back? And I actually that it would be the definitions. I don't think, actually, anything would necessarily change in what we just voted on because it would be whether or not fish waste would include livestock.

But I just do want to say that, as I think I tried to explain earlier, that we were actually trying to exclude livestock in this original motion. Now whether or not the Board wants to change its mind on that is a whole other matter. But I did just want to clarify that that wasn't like an oversight. That was actually the

intention of the proposal as it was written and the definitions as they were written, just to make that point clear in case there was any confusion.

CHAIRMAN ELA: Any other discussion before we go to the vote of whether to send it back to Subcommittee?

Mindee? Mindee, do you have a comment?

MS. JEFFERY: Yes, I'm sorry. How does that work process-wise? Because if we're asking the program to hold on one piece while we work on the definitions, will, then, we be able to dovetail the work together when it goes to rulemaking?

CHAIRMAN ELA: Yes, I don't see any problem with that.

DR. TUCKER: I think the program wants to -- sorry -- the program is going to wait and see how this plays out. Whatever you all decide, make it very clear in your cover letter what you're asking the program to do and what you want to do as a Board.

CHAIRMAN ELA: Yes.

Dave, one last comment?

MR. MORTENSEN: Yes. Since I'm starting out with the vote, yes, I just want to get clear that we're effectively questioning the vote we just took by doing this, right? I mean, that's what we're doing.

CHAIRMAN ELA: Well, we --

MR. MORTENSEN: I'm not criticizing that. I'm just trying to be clear on what we're actually doing here.

CHAIRMAN ELA: That is one possibility, yes. I mean, we could leave, you know, the Subcommittee could just work on the next motion, but they could also work on the vote we just took and ask for an amendment.

MR. MORTENSEN: Yes. Okay.

CHAIRMAN ELA: Okay.

MS. OAKLEY: May I just -- I don't think necessarily that we're questioning the vote we just did, because you could argue that we would keep the vote we just did and just change the definitions. Or you could argue that it is to question the first one, yes --

CHAIRMAN ELA: It could go either --

MS. OAKLEY: -- air it out.

CHAIRMAN ELA: It could go either way, but we are certainly questioning the next vote.

MS. OAKLEY: Right.

CHAIRMAN ELA: Yes, the Subcommittee, when it goes back to the Subcommittee, the vote we just took could be let stand or the Subcommittee could offer an amendment to that vote, and a future Board would vote on that amendment to the motion we just made.

MR. MORTENSEN: Okay. Thank you.

CHAIRMAN ELA: So, right now, we have a motion and a second on the floor to send this back to Subcommittee.

Dave, you are voting first on whether to send it back to Subcommittee or not.

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott?

MR. RICE: Yes.

CHAIRMAN ELA: A-dae?

MS. ROMERO-BRIONES: Yes.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: Yes.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: I'm here and struggling.

MR. TURNER: It doesn't make any difference.

(Laughter.)

CHAIRMAN ELA: Well, we can't say that. Sorry. That is a point of order.

MS. JEFFERY: No, I mean, it's a simple majority, and I'm going to vote yes.

CHAIRMAN ELA: Okay. The Chair votes no.

And this is a vote taken as a simple majority because it is a vote of process.

So, Jesse?

MR. BUIE: Okay. It's 10 noes, and it must be -- and 5 yeses. So, the motion, let's see, the motion fails.

CHAIRMAN ELA: Correct. So, we will continue.

MR. BUIE: Correct.

CHAIRMAN ELA: Jesse, I'm sorry, I should have asked Scott. I know, Scott, since you're Chair of the subcommittee, Scott's going to do the vote. So, I apologize to put you on the spot there.

We will move on to the next motion.

Motion to add the following definitions to Section 2052, "Terms Defined." "Fish waste or

product left over after market food fish are processed for human consumption, such as skins, frames, and viscera. Bycatch, incidental or discarded catch that has low economic value; fish that must be discarded because of management regulations, or fish that are unintentionally killed by fishing gear (mortality)."

The motion was made by Emily. It was seconded by Steve.

We will start the vote with Emily.

MS. OAKLEY: Yes.

CHAIRMAN ELA: Nate? Nate, are you there?

MR. POWELL-PALM: Can you hear me? Hello?

CHAIRMAN ELA: Yes. Go ahead.

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: That was no?

MR. POWELL-PALM: It was a yes.

CHAIRMAN ELA: A yes. Okay. Just to clarify --

MR. RICE: Can I get a clarification?

(Laughter.)

CHAIRMAN ELA: Yes. This is a vote on the motion to add the definition of fish waste.

So, Nate, I want to make sure I heard your vote --

MS. OAKLEY: And bycatch.

MR. POWELL-PALM: And bycatch. Yes.

CHAIRMAN ELA: And bycatch, yes.

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Nate, which way did you vote?

MR. BUIE: He voted yes.

CHAIRMAN ELA: Okay. It wasn't clear to me.

So, okay. Scott?

MR. RICE: Yes.

CHAIRMAN ELA: A-dae?

MS. ROMERO-BRIONES: I'm confused. So, I'm abstaining.

CHAIRMAN ELA: Okay. Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: Yes.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: Yes.

CHAIRMAN ELA: And the Chair votes yes.

Scott?

MR. MORTENSEN: I don't think I voted, Steve.

CHAIRMAN ELA: Okay. I thought you were the first vote. Sorry.

Dave? Excuse me.

MR. MORTENSEN: Yes. Yes.

CHAIRMAN ELA: Okay. I apologize.

Okay. Oh, yes, I did get that wrong.

Okay. Scott, could you give the vote totals, please?

MR. RICE: I have 13 yes, 1 no, 1 abstention. The motion passes.

CHAIRMAN ELA: All right. Thank you.

Thank you very much, Emily.

Back to you, Jesse.

MR. BUIE: Okay. Do we want to go back now to you, Steve?

CHAIRMAN ELA: Yes, please.

MR. BUIE: Okay. So, we're going to turn it over now to Steve for paper-based plant aids. Okay?

CHAIRMAN ELA: Yes.

Jared, I know you have an introduction for this.

MR. CLARK: I do. I'm having trouble unmuting today, too.

CHAIRMAN ELA: You're just trying to make me feel better.

(Laughter.)

MR. CLARK: So, paper pots has been petitioned for addition to 205.601 for use a crop

production aid. This petition was submitted by Small Farm Works in August 2018.

In support of the NOSB's review of this petition, a technical report was written and published on the NOP website in August 2019. The Board posted a discussion document for the fall 2019 meeting and considered a proposal at the spring 2020 meeting.

I will now pass this back to the lead, Steve Ela, for discussion.

CHAIRMAN ELA: All right. And I want everybody to notice I'm wearing my fruit shirt today in honor of crops. I don't know that it applies to paper pots, since we don't use paper pots to plant fruit trees out, but at least I want to honor the crops theme here.

Paper pots, of course, there's been a hot discussion. We've received a lot of testimony in the past about the necessity of paper pots for small growers, and that if we don't allow them in some form, that those growers will likely switch from organic to something else.

I guess, with all the other comments

in this fall Board meeting, maybe it took the pressure off paper planting aids, and we didn't receive as many comments today, but we certainly honor the comments we've made in the past.

The main number of comments received this time were I thought very thoughtful and continued to try and refine the listing for paper pots. In some cases, things that were asked for in the spring, that we included, now are being asked to be excluded. So, that's a little bit awkward as we get on the pendulum of back-and-forth.

But, just quickly going over paper planting aids. And as I noted, we did expand it to paper planting needs from paper pots, and for the most part, that is accepted by our stakeholders, with a few concerns on that.

So, one of the things is that, on the cover sheet, it was asked that the Board acknowledge that this listing is known to have deficiencies that need to be looked at during Board reviews. These include moving towards 100 percent biobased, biodegradable fiber content, as well as examining the adhesives to address

biodegradability.

We originally on this did have a biodegradable standard, and we had a lot of comments about how that was going to be enforced and how it was going to be looked at. So, we did remove it, although I tend to agree that biodegradation is an issue, it's just not in the annotation at this point.

There were also comments that it is cumbersome to spell which specific additives will be allowed, but we remind the Board that failing to do at the beginning can lead to being overwhelmed later on, as with inert ingredients and ancillary substances. So, this commenter is in favor of specifically specifying which adhesives would be allowed.

The ACA also submitted some very specific comments that were echoed by a number of other stakeholders.

The first was that, based on stakeholder input in the spring, we had included references that only nutrients and pesticides allowed on the National List could be incorporated

into paper planting aids. ACA pointed out that the reference to pesticidal ingredients really was probably incorrect, since if there were pesticides incorporated in the paper planting aids, they, themselves, would become a pesticide, and that is subject to a completely different rule.

So, they're advocating for that reference to pesticides to be removed. And I agree with that. I think that probably is one of those technical details that is correct. I'm not sure but what we could put that in the cover sheet to the program, that they remove that, and it would probably be removed anyhow because of the way pesticides work and the way they have to be dealt with.

Another concern was that, with the 60 percent cellulose-based fiber and the 80 percent biobased, that somehow somebody that was creative might be able to put biodegradable mulch film under this. I think it's a long shot, but I understand the concern, since, with our knowledge base, the highest biobased content of biodegradable mulches at this point is around 30 percent. And Asa can

correct me later if I'm wrong in that. So, they would not fall into this category at this time, but, presumably, if plastic mulches get better, maybe they could somehow work themselves into this listing. So, I'm not opposed to adding that in where we take the existing listing, but exclude biodegradable biobased mulch film specifically.

Moving on, there were also some technical corrections at the top of the list that would include paper planting aids that we would need to specifically allow these types of things to be used, and that was just that we would have to -- well, I'm stumbling here -- that that would be a technical correction at the top of the list. And certainly, I think that's a valid point, but I feel like that one easily could go to the program because it really is them changing the list verbiage to make sure that what we put on the list is included at the top section.

The other issues that came up are inclusion of using the ASTM D6866 test. In the previous spring, we did have comments that, when we used that only, that people were worried. And

so, they encouraged us to put in verbiage by a qualified third-party assessment. When we did include that this time, now we have a number of comments questioning what that is and whether that that should be included, several people advocating for just using the ASTM standard and not including anything else.

MOSA and OMRI both said, we considered our various options for determining a product's acceptability. Qualified third parties could include certifiers, material review organizations, or other organizations that verify products. And they were kind of questioning what that was. OMRI put in even more substantial questions about third-party verification, and really, their preference is just to use the ASTM standard.

There was concern about synthetic fungicides in the materials, just similar to what was with the nutrients and pesticides. And they wanted to make sure that we are prohibiting the use of synthetic fungicides in the cellulose fibers.

And then, moving on down, there was -- I'm just trying to find the comment -- the issue, in addition to the biobased plastic mulch, that we really specify what else in that 40 percent -- so, we say 60 percent cellulose-based fibers -- in that other 40 percent, what could be included. I'm not finding the exact language right now in a hurry. Oh, here it is. That that other 40 percent be more spelled out and that those permitted synthetic ingredients in that 40 percent could only be strengtheners, reinforcement fibers, adhesives, and binders.

So, I don't object to that language, although I do think in public comment, when they asked and they said, "Well, what about coatings?", and I think coatings could probably be -- somebody could lump that under as a strengthener or reinforcement fiber, saying that the coating helps keep the integrity of the pot. But I'm not against including that.

So, I think the real question is, everybody is in favor -- well, not everybody, but a majority of the people, a significant majority,

are in favor of including paper planting aids on the National List. We're getting down to the details. And the question today is whether we want to take it back to Subcommittee and make these other tweaks in terms of describing that 40 percent, in terms of removing the pesticides, in terms of being specific that biobased mulch films can't be used, or whether we just want to put that in a cover letter and ask the program to make those changes as they go forward to rulemaking.

I should say there was one other question brought up by a stakeholder questioning the ASTM test due to -- it doesn't work well on wood products due to radioactive testing back in the sixties. With that, you confound the carbon content. They make a somewhat compelling argument, but I haven't heard of anyone coming up with a standard that we could test to that is different.

And I also would suggest that probably a majority of the wood products being used at this point in 2020 are going to be from trees that are probably less than 30 years old. That's a

speculation on my part and I don't have data, but I know it's much rarer to have old-growth stands at this point.

So, I will open it up to comment from the Board and be willing to try to answer questions. And I also would like to hear people's thoughts of whether we should send it back to Subcommittee or go ahead and pass it and put in the cover sheet these comments that I think do have validity.

I guess I truly sit on the fence myself. I like to send things to the program that are very spelled-out. On the other hand, I would like to give people in planting aids some feeling that, yes, we are moving forward on this. And I know they think we are, but it's also been several years since we received this petition. And, you know, I think it's valuable to also move it on down the road.

Dave, you have a comment?

MR. MORTENSEN: Steve, the last phrase, "I think we could put it in a cover letter and move it on down the road," is my strong leanings. I think that it's quite clear that the

intent is not to have pesticides incorporated in the paper pot, and I think we can spell that out in the letter.

I think the uncertainty around the use of this in the grand scheme of things, like tiny introduction of a little paper into the soil, in my way of seeing it, the use of it is enabling for small farmers in a way that we heard testimony after testimony that, without it, they wouldn't be able to actually transplant vegetables on a small scale at cost. So, I would love to see us move this forward now with a cover letter.

CHAIRMAN ELA: Okay. Wood?

MR. TURNER: Thanks, Steve. I appreciate the summary.

I am so enthusiastic about the use of this product as a planting aid for small farmers. I just couldn't be more enthusiastic. But I raised this issue in Subcommittee, and I'll raise it again, and it kind of goes to one of your comments. I would love to hear you speak to it.

I am still deeply concerned that there's language in what we're voting on to allow

for virgin paper in these products. I think the absence of any certification or any kind of drive toward some kind of post-consumer content or any kind of recycle, I think it's disincentivizing innovation. I think because there's a reference to virgin paper in the language, it's going to be a virgin paper product.

And I understand all the issues functionally. I totally get it. And at the same time, I feel like it's just something that I'm stumbling on, and I brought it up in Subcommittee and it= still bothers me.

CHAIRMAN ELA: Sure. I guess I should give credit to a number of our stakeholders. Certainly not a majority did bring that similar point up, Wood. So, you're not alone in your thoughts by any means.

I think part of the problem with this listing, and one of the reasons the NOP flagged it back and said, well, it's not going to be allowed, one of them was the use of virgin paper, which was not allowed under the newspaper listing, and the other was adhesives in part. So, your

comment I think certainly has validity.

The feedback from manufacturers at this point is that these products cannot be made without at least a portion of virgin paper. Just the integrity of the fibers and the ability to make certain fiber lengths that are very difficult to source from post-consumer content is, it really is the viability of the pot.

We've certainly had one manufacturer do the analysis. They're only sourcing paper from sustainably-farmed trees and they're very proud of that. That's certainly not a requirement in this annotation. So, in the way they're proud of that, somebody else could potentially do something very different.

I know there's a strong move towards using hemp, but at this point, even where hemp is used, there's still tree-based cellulose fibers. But, you know, I think manufacturers are hoping for other sources. But, at this point, for a viable product to be used, it does have to include some virgin paper. And I know that manufacturers have really in their testimony have said how little

paper they are harvesting for that use. But I do have sensitivity to your comment. But I think to not include that would, essentially, kick any product on the market out right now. So, I agree with you, but, also, I think that's something that's necessary.

Scott? Then, Mindee. Then, Rick. Then, Asa.

MR. RICE: Yes. Thank you.

A couple of things on this. I think I share your sitting on the fence process-wise, Steve. I would caution the Board in moving items to the program with sort of direction of, okay, close enough; you figure it out. And I think it's really important in our deliberative process to really get it right or at least as close to right as we can, but be mindful of not letting perfect be our enemy.

And I think that certain things of listing clarification there's, I guess you could say, precedent for doing that in the past, but I guess that's just a general term or general caution for all, as we move forward, as you move forward.

It's good to take our time and get it right.

And I guess, specific to this, we do have an allowance from the program for operations to use this, and I think we do have the latitude to correct things, should we care to do so. So, it's something to consider.

My other question I think was answered by Wood's comment, and that was why somebody voted no. So, I think I just heard that.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: Yes, I'm echoing some of, a lot of what Scott was just referring to. I think it behooves the NOSB to own the language of our recommendations as much as we can. I like that we are making space for producers to use this while we're getting it right, so we can produce consistency.

I think that the consideration of consumer perception around local and organic is really important in this context. I think that we need this. Small local producers need to be able to use the planting aids, and I think that we need to figure out in some ways how organic can

be a great cause for gaining traction in smaller producers. Because I think consumers tend to equate local and organic equally, and I think that some way in which we can make things easier for local producers to become organic, like paper-based planting aids, is a really good idea.

But I'm not comfortable with lab testing as a reference in the regulations because I think we also have to continue to educate the consumer around the notion that organic is a process-based evaluation system, because I don't think we can afford the perception that testing is going to help us. I see it a lot in consumer demands for (audio interference) comfortable with those kinds of tests. And I think I'd way rather refer to composition review than rely on a test.

And I think the virgin paper issue is uncomfortable for me, but I think I could be okay with virgin paper in the short term and amend that as the technology comes online.

CHAIRMAN ELA: Okay. I'll respond to one thing on yours, but I'm going to let Rick and Asa go first.

So, Rick, go ahead.

MR. GREENWOOD: Okay. Yes, I was thinking back to Dave's comments. I think this is necessary for small organic farmers, and my concern is that, when we fell into the paper world, I don't think any of us knew how complicated it was. And I just don't know where we will go if we don't -- you know, we can debate it forever, and I think it gets more complicated. I don't like the virgin paper, obviously, but I don't know in the mass balance of paper that's used for other items if it's really a major obstacle.

So, I like it. I think it should go forward.

CHAIRMAN ELA: Thanks, Rick.

Asa?

MR. BRADMAN: I just want to comment on a few things related to the biobased content and the remaining 20 percent that does not have to be biobased. And I just want to remind everyone that we're, essentially, allowing the purposeful introduction of plastics into soil here. And I think we were all surprised at the high proportion

of synthetic fibers in some earlier versions of the paper pots. I know personally, from what we've heard and seen from small farmers, this seems like really an essential tool and a way to support people who are working hard and working on a smaller scale, which reflects some of the core values of the organic community.

At the same time, I think we should all just take note of that. You know, we're allowing plastic to be introduced into the environment very heavily with polyethylene in films and other settings. We also allow the intentional addition of petroleum-derived products into soil with the use of horticultural oils as a pest control tool. But this is kind of another step forward.

And I know that the philosophy here, well, the goal down the road would be 100 percent biobased, but that 20 percent is all something we should ponder. I know, for me, it wouldn't make me vote against it, but I think it's important that we recognize that. And in some ways, as it stands here, we are, by default, setting a standard for biodegradable mulch films, plastic mulch films.

And if we don't want to do that, we should make that explicit, although I think this does inform that discussion which we'll be having later this morning.

CHAIRMAN ELA: Thank you, Asa. Those are good thoughts. Those are thoughts for thinking, I will say that.

(Laughter.)

Jesse?

MR. BUIE: Yes. Does the third motion deal with the -- it doesn't satisfactorily deal with the virgin paper issue or attempt to deal with that?

CHAIRMAN ELA: It doesn't. It doesn't specifically deal with virgin paper.

And I do want to respond to the comment on testing. I guess I agree with the process-based mantra of organic. I think that is a very important thing to remember. However, we already allow testing on a number of products in terms of their purity. So, I think this is just one way of making sure that the product is actually what it says it is and confirming that. So, I don't

know that it conflicts with the process-based per se.

We did have a number of people last time that did comment on wanting to have something besides the testing. So, I will say that I'm going to have to ponder if we don't pass this a little bit, because we're getting hit on both sides of this question.

OMRI submitted fairly lengthy comments, along with several other stakeholders, about being worried about having qualified third parties and how that would actually work. And I guess, when I hear OMRI say, "How can we evaluate this and move forward?", I think it does provide -- it makes me worry that a third-party assessment may be more difficult than it seems on the surface. And OMRI really kind of fell down on the side of just use testing.

I guess I need, if we do send it back to Subcommittee, I need to look at that, and I'd like to reach out to some of these groups and really see if we can find a middle ground on it or be able to define qualified third parties better. But

that's one where stakeholders now are splitting, and we're doing a little bit of a pendulum effect of one way or the other. And whichever way we say it, some people are going to disagree, I'm afraid.

Emily?

MS. OAKLEY: Thank you.

Definitely hear and understand the paper concerns. And I don't think it's all a question that the Board should look at the newspaper and the recycled harvesting when it comes up for a sunset in a few years and just give that additional thought.

I will say that paper mulch that is allowed is also made from virgin. I think what we've heard is that the fibers break down so much in the recycling process as to make them more difficult to use and construct in the products.

But I did just want to put out there that, if I had my druthers, I would love for the listing to say 100 percent biobased content, since we've heard that that is now possible, as we've gone through this process.

And I also, if I had my druthers, would

love to see that the added pesticides or nutrients be stricken, but you already know that. I will defer to your leadership on this, Steve, and the program's leadership on this. I know we did ask the program, but I will defer to your leadership on this.

CHAIRMAN ELA: Yes, I think the nutrients, we just had a number of stakeholders that wanted to make sure there wasn't -- to be explicit and not have a loophole in that. I tend to think that it would be covered regardless, but I don't mind being explicit, as we found out.

I think one of the difficulties -- well, first of all, on the biobased content, part of the problem of biobased content is cellulose or biobased materials can be made to make non-biodegradable plastics. And so, just saying cellulose-based or biobased does not limit it to being biodegradable, and that's one of the really hard issues on this. And when we tried to put the biodegradable standard in it, we got clobbered, rightly so. I'm not against that. But it's a very difficult issue. And who would have thought?

I think these are the things that we all deal with in organics as we go further into things. We probably really don't want to know how the sausage is made sometimes. But, yet, if we want to be true to our beliefs, we do have to know how the sausage is made.

The other factor we have is that there aren't natural fibers. The process of separating fibers from wood or hemp, or anything else, is inherently a synthetic process due to that process. So, even if we're using wood fibers or paper fibers or hemp fibers, it's a synthetic process to extract them. And so, they are, then, synthetic.

So, just saying natural fibers is a no-go because there aren't natural fibers that can be used in these materials. They're inherently synthetic. So, that makes it much more difficult to define. You know, if we could just say natural cellulose-based fibers, bingo, we'd be down the road.

Emily, to your point, with John Hendrickson's testimony that those paper products are moving to hemp, maybe that's a good reason to

delay a little bit longer and keep talking about this. Maybe in a year two these manufacturers will be using these hemp fibers and we can specify that, and not have to worry about trying to come back to it in sunset. It's been really difficult to define how we might look at this in the future and narrow down the parameters because that wording alone is problematic.

So, I think, in terms of time, we probably need to move on. I'm not seeing any other hands raised.

So, taking a note of thoughts from the last vote, I will leave time to see if anybody wants to make the motion to go back to Subcommittee.

Nate? And then, Mindee. Very short because we're getting behind in time.

MR. POWELL-PALM: All right. I was just going to make a motion that we move it back to Subcommittee.

MS. JEFFERY: So was I. So, I'll second.

CHAIRMAN ELA: Okay. So, we have a motion and a second to move this back to

Subcommittee. Is there any further discussion on that?

(No response.)

All right. We will move on that, starting with -- I believe we start with Nate.

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott?

MR. RICE: Yes.

CHAIRMAN ELA: A-dae?

MS. ROMERO-BRIONES: Yes.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue? Sue, are you there?

MS. BAIRD: I am. I'm sorry. Yes.

CHAIRMAN ELA: I do want to note you've gotten much better.

MS. BAIRD: Well, thank you for that. I am.

(Laughter.)

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: Yes.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Abstain.

CHAIRMAN ELA: The Chair is going to vote yes, even though it makes more work for the Chair.

Scott?

MR. RICE: Yes, bear with me. I copied cells without formula.

MR. BUIE: Okay. It's 9 yes, I'd say, 9 yes and 4 noes.

MR. RICE: I got 10.

MR. BUIE: Ten? Let's see.

MR. RICE: There's one abstention and we're all here. So, it has to add up to 14.

MR. BUIE: You're correct. It's 10 -- that's right, it's 10 yeses, right?

MR. RICE: Yes.

MS. JEFFERY: I have 10 yes, 1 no --

MR. RICE: Four --

MR. BUIE: And 4 noes. And 4 noes and 1 abstention, right?

MR. RICE: One abstention.

MR. BUIE: Yes.

MR. RICE: Yes, I think we're square on that.

MR. BUIE: So, that will do it.

MR. RICE: Okay.

MR. BUIE: 10 yes; 4 noes, 1 abstention.

CHAIRMAN ELA: So, the motion to send this back to Subcommittee passes.

MR. BUIE: It passes. It passed.

CHAIRMAN ELA: Yes. So, we will move

on to -- I'll send it back to you, Jesse.

MR. BUIE: Okay. Okay. Our next proposal is sodium carbonate lignin.

Rick, you ready?

MR. GREENWOOD: Yes, I am.

MR. BUIE: Okay.

MR. GREENWOOD: Is Jared going to read that or do you want me to just go ahead?

CHAIRMAN ELA: Yes, yes, yes. Jared does have an introduction.

MR. CLARK: This is the last one. So, you're on your own after this.

(Laughter.)

Sodium carbonate lignin has been petitioned for addition to 205.601 for use as a dust suppressant and chelating agent in crop production. This petition was submitted by LegnoChem in June 2019.

In support of the NOSB's review of this petition, a technical report was written and published on the NOP in June 2020.

I will now pass it to the lead on this proposal, Rick Greenwood, for the discussion.

MR. GREENWOOD: Okay. Thank you very much.

So, this is a chelating agent and dust suppressant. It's a byproduct of paper and the process. There is another lignin already on the National List that's also up for sunset, which is lignin sulfonate.

The process, when we first came out, there hadn't been any public comment on it. There were comments for this from the written comments. There have been a handful in favor and a couple against it.

It is, obviously, a synthetic product. The sodium carbonate, or lignin sulfonate is, as I mentioned, on the list, a very similar compound and had a lot of support, which I'll talk about in the sunset part of it.

One of the issues from the technical review is, basically, they're non-toxic compounds. So, it's a safe compound, and it's used, also, for fertilizer to join together, so it doesn't create dust. So, it can help workers' exposure to dust.

The issue that the Subcommittee came up with that was troubling was that there's already an item on the National List, another lignin, and the question is, do we add one more synthetic substance to the National List, where there's already something there?

In the verbal comments, the individual who wrote the petition mentioned that there's a lack of production and this would add more material for use, and would bring in a couple more processing plants. Interesting to note that, for the lignin sulfonate, there were no public comments about lack of material. So, I don't know if that's really an issue or not. So, the question is, do we add another synthetic to the National List, when we already have one that's there?

So, I think I'll stop there and see if we can get some questions.

MR. BUIE: Okay. Are there questions?

(No response.)

Okay. I had one. Rick, would you recommend adding this?

MR. GREENWOOD: Well, I think, as a

Subcommittee, we all voted against adding it, and I was one of those people who voted against it. It doesn't seem, based on what we've seen and really no public comments saying we need another lignin, so I wouldn't.

MR. BUIE: Okay. Are there any other questions?

MR. RICE: Yes, I have one.

MR. GREENWOOD: I was going to say, how come paper pots gets all the questions and I don't?

(Laughter.)

MR. RICE: Rick, can you speak to the comment from the Organic Product Wholesalers Coalition about just feeling that there was a misunderstanding of a petition versus a clarification of use? And apologies if I missed that in your summary there.

MR. GREENWOOD: So, can you clarify your question? I mean, basically, if I understand, I mean, there are two lignin compounds. One's already on the National List that's slightly different and has a lot of support for relisting. This is just a new petition to add a slightly

different one, which is apparently to get more material into the market.

CHAIRMAN ELA: Do you have a follow up, Scott?

MR. RICE: Maybe I just misunderstood the comment. That's okay. I'll take a look again.

MR. GREENWOOD: Oh, okay.

CHAIRMAN ELA: Are there any other comments/questions from the Board?

(No response.)

Rick, I will just say that, if you want paper pots, so you get lots of comments, it's all yours. I don't have a problem with hanging it up.

(Laughter.)

MR. GREENWOOD: No, I like stealth compounds.

(Laughter.)

CHAIRMAN ELA: I will just make the comment that I tend to agree with your assessment, Rick. I don't worry about the safety or use of this, but I also tend to side with our stakeholders on the side, if there is no reason to add a material

to the list, then why do it? There are plenty of alternatives already on the list or that are natural. So, I tend to fall on the side of, you know, unless there's compelling evidence that it's something we really need, why add it?

If there are no comments, we will move to the vote.

The motion is to classify sodium carbonate lignin as synthetic. So, this is a classification motion. It was made by Rick. It was seconded by Dave.

We will start the voting with Scott.

MR. RICE: No. Excuse me. Yes.

(Laughter.)

I'll get it together here.

CHAIRMAN ELA: Yes. So, this is a classification motion to classify it as synthetic.

So, Scott voted yes.

A-dae?

MS. ROMERO-BRIONES: Yes.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes. I'm about to show this hand.

(Laughter.)

CHAIRMAN ELA: Sue?

MS. BAIRD: Yes.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: Yes.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: Yes.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: And the Chair votes yes.

Scott?

MR. RICE: Yes. It's 15 yes, zero no. The motion passes.

CHAIRMAN ELA: Okay. We will move on to the motion to add sodium carbonate lignin at 205.601(j)(4).

The motion was made by Rick. It was seconded by Steve.

We will start the voting with A-dae.

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: And Scott?

MR. RICE: No.

CHAIRMAN ELA: And the Chair votes no.

MR. RICE: That's 15 -- zero yes; 15 no, and the motion failed.

CHAIRMAN ELA: All right. Back to you, Jesse, for sunsets.

MR. BUIE: Okay. Thank you for that, Rick.

And we're going to move into the sunsets, starting off with soap-based algicide.

Rick, it's your ball game.

Soap-based algicide, reference 205.601, algicide disinfectant/sanitizer, including irrigation system cleaning.

Rick?

MR. GREENWOOD: Yes, thank you. And I'm glad you mentioned it's my ball game because of the Dodgers. So, thank you.

First of all, in terms of the written comments, they're overwhelmingly positive on relisting. There was one that didn't want it relisted, but, overall, there's a lot of support for it.

It's a soap-based salt that's used around greenhouses, walkways, and other surfaces to kill algae, very nontoxic, approved, a lot of international acceptance to it. And essentially, no environmental or human health issues if it's used properly.

So, comments?

CHAIRMAN ELA: Are there comments?

(No response.)

I do not see any. So, we will move to

the motion.

The motion is to remove soap-based algicide/demossers from 205.601(a)(7) of the National List. The motion was made by Rick and it was seconded by Steve.

We are going to start with Dan.

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: And the Chair votes no. Scott, do you want to give us the total?

MR. RICE: Yes. At zero yes, 15 no, the motion fails.

CHAIRMAN ELA: Back to you, Jesse.

MR. BUIE: Okay. Our next substance is ammonium carbonate, reference 205.601(e), insecticide -- I pronounced that -- and mite control, ammonium carbonate for use in bait and insect traps only.

That's you, Dave.

MR. MORTENSEN: Thank you, Jesse.

So, ammonium carbonate is used in baits

for insect management, flies, and a variety of kinds, predominantly, but not exclusively, in livestock, poultry, as well as nut and fruit orchards. It's used in a very targeted way since it's in a bait. It is something that's an integral part, its use is an integral part of organic integrated pest management programs for pest management.

Because it's in a bait, it addresses concerns about introducing ammonium into the environment. That might otherwise be a bigger concern in the sense that it's a caustic material, but that it's in a bait.

This, as was the case with the one Rick just reviewed, received very strong support for relisting, overwhelmingly strong support for relisting.

There were some comments made that systems/plans would enhance parasitoid populations and really careful manure management could help keep the pests that the bait targets down, but the truth is I think there's compelling evidence that these insect pests are there, even

in the best systems planned, and that they're an integral part of management.

And so, this received very strong support, and I don't see any issues that were raised we would be particularly concerned about, I would say.

When we took a vote on this in the Subcommittee, it was a vote of 8 not to relist. And so, the support was to relist, unanimous.

CHAIRMAN ELA: All right. Are there comments/thoughts from the Board?

(No response.)

I am not seeing any. So, we will move to the vote.

The motion is to remove ammonium carbonate from 205.601 of the National List based on the following criteria in the Organic Foods Production Act. The motion was made by Dave and seconded by Emily.

We will start the voting with Wood.

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: And the Chair votes no.

Scott?

MR. RICE: Zero yes; 15 no. The motion failed.

CHAIRMAN ELA: Thanks, Scott. We just want to make sure we keep you on your toes before you go off the Board here.

MR. RICE: Well, you know, you'd think I should be after two years of doing this.

(Laughter.)

CHAIRMAN ELA: Yes. Well, we've been keeping Jesse on his toes. So, it's your turn to be in the hot seat.

But, Jesse, back to you.

MR. BUIE: Okay. Thank you, Dave.

Okay. The next one is soaps, insecticidal. It's going to be Rick. 205.601. Okay.

MR. GREENWOOD: Yes. Thanks, Jesse.

Again, insecticidal soaps, very popular, no negative comments and a number of positive ones that say it's important for insect

control.

It's basically a fatty acid that's, through either sodium or potassium hydroxide, gets turned into a soap, which is useful for insect control.

Interesting thing, we did a 2010 TR for this because it had been quite a while. And there's little, as they say, little to suggest that they pose a threat to the environment when used as approved. The turnover, the half-life is less than a day. So, it really is not -- there's no residual. And again, there's been overwhelming support every time it comes up.

Also, which is interesting, too, it doesn't seem to have any effect on the beneficial insects, which I think is pretty positive, such as lady bugs.

So, the Subcommittee voted unanimously to relist it.

Comments?

CHAIRMAN ELA: All right. Other questions or comments?

(No response.)

I am not seeing. So, we will move to the vote.

The motion is to remove insecticidal soaps from 205.601(e)(8) of the National List. It was made by Rick. It was seconded by Dave.

And we will start the voting back at Sue.

MS. BAIRD: No.

CHAIRMAN ELA: Okay. Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: And the Chair votes no.

MR. RICE: That's zero yes, 15 no. The motion fails.

CHAIRMAN ELA: Back to you, Jesse.

MR. BUIE: Okay. Thank you for that, Rick.

We've moving on to vitamin D3, reference 205.601(g).

Wood?

MR. TURNER: Thanks, Jesse.

This is a material that we often commonly think of an addition to food, but it is

also used as aid, used in (audio interference) and pellet baits for rodents, particularly used in and around facilities and in fruit and nut orchards.

It had some strong support from most of the community, I think for organizations that represent multiple growers. All say that the growers can use it.

There has been some comment over time about its lack of effectiveness, but the strong support from the community is that it continues to provide kind of an important almost last resort for rodent control.

There were some comments that suggested some of the issues related to safety in dairy production and in orchards. In particular, it could be significant if this material were not available to control rodents. It's also really compelling to see comments from the community to show examples of what happens when this material is not available and not used in certain contexts, the damage that can be done to crops.

So, again, in the past we talked about concern about that it sort of cruelly affects,

cruelly kills rodents, but I did not see any of those comments in this particular cycle, and recommend that we keep it on the list.

CHAIRMAN ELA: All right. Are there questions or comments?

(No response.)

I am not seeing any. So, we will go on to the vote.

The motion is to remove vitamin D3 from 205.601 of the National List.

MR. TURNER: I think Dave has a question.

Oh, thank you. Go ahead, Dave.

MR. MORTENSEN: Yes. Sorry. I just was curious about one point that I missed before now. There's a line in there on environmental issues, Wood, that says it has to do with non-target effects. Since its use is restricted by the EPA to bait stations, the risk of accidental poisonings of non-target species has been addressed. I just was curious what species they were referring to do. Is it --

MR. TURNER: I think there have been

some comments in the past about impacts to small mammals, but it's typically not of a concern to birds, in particular. So, I don't have any specificity beyond some concern about small mammals.

MR. MORTENSEN: Okay. Okay. Thanks.

CHAIRMAN ELA: Any further comments?

(No response.)

All right. Thanks, Wood, for pointing that out. I have to close my screen to look at raised hands in order to read the Subcommittee vote. So, it's good to have another set of eyes.

MR. TURNER: I'm here for you.

CHAIRMAN ELA: All right. I like that.

The motion is to remove vitamin D3 from 205.601 of the National List. The motion is made by Wood and seconded by Jerry.

And we will start with Asa.

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: And the Chair votes no.

MR. RICE: That's zero yes, 15 no. The motion fails.

CHAIRMAN ELA: All right. Jesse, back to you.

MR. BUIE: Okay. Thank you for that, Wood.

And now, we go on to aquatic plant extracts, reference 205.601.

Emily?

MS. OAKLEY: Thank you.

Synthetic substances allowed for use in organic crop production. So, farmers and farmer groups support the relisting of this as they are used extensively by growers for foliar and solar applications. Trade organizations also support aquatic plant extracts as important materials. An organic fertilizer manufacturer also raised support, and a number of certifiers wrote in to report significant numbers of growers using aquatic plant extracts.

One commenter repeated a concern they raised during the spring meeting stating, "Some

certifying agencies allow only the hydroxides for extraction while others assume the hydrolized extracts are non-synthetic, making them included as well. Interpreting the parenthetical clause `other than hydrolized' is confusing, making it unclear as to what is allowed and what is not. We request that the NOP National List manager clarify what is meant by `other than hydrolized' to clarify this issue."

And I know this has been raised to the NOP and hope and assume the conversation has continued from there.

So, to explain the vote in the Subcommittee, one member voted no, based on environmental concerns; two abstained, and waiting to see what transpired with the marine materials -- sorry -- the Materials Subcommittee's marine macroalgae proposal.

Are there any other questions about it or any questions?

CHAIRMAN ELA: Are there any comments or questions?

Dave has one.

MR. MORTENSEN: So, Emily, in light of our vote last night, could you walk us through the logic model here, as our vote last night informs our thinking about this?

MS. OAKLEY: Well, I can only, I guess, answer for myself, but I see that our vote last night would certainly make me vote for this listing because I hope that our vote last night will go through rulemaking. But I don't know if you are wanting to ask, in particular, about the environmental concerns raised. I don't want to put anybody on the spot, but if there's anybody that wants to answer that from their point of view, they'd be welcome to. But I will be voting to relist it myself.

MR. MORTENSEN: Thank you.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Hi. I think I was the one who voted against relisting in Subcommittee. And again, this was part of this general concern I have about mining or extracting nutrients and resources from one environment and moving them to another, and just overall, a sense that we need

to think of the full cycle and that it's important to scrutinize the materials where they originate.

And I feel like the macroalgae proposal addresses some of those concerns and begins to point us in the direction that will keep us thinking about and, hopefully, have rules that address, in this case particularly, seaweeds, both domestically and internationally.

So, I think I'm going to reverse my vote here, but that was my original concern.

CHAIRMAN ELA: Okay. We have Emily, and then, Dave.

MS. OAKLEY: Yes, I just wanted to echo Asa's comments. I think that the concerns are real, and I hope that we will, as a Board, continue to realize that. Especially when we're taking a wild, native species out of a wild, native ecosystem, there are just particular responsibilities, I think, incumbent upon us to assess that they are meeting all of the criteria of not harmful to the environment.

So, thanks.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Yes, and thank you. This thread is helpful.

I mean, we're assuming that, since we're voting to relist or not, we're assuming if we vote to relist, that the vote that we took last night would, hopefully, kick in sometime soon, since part of the logic by some of our Board members that was made last night is the urgency of us doing this right, harvesting seaweed right. Because if we relist this and we don't do it right, then we are kicking the can down the road five years. Is that right?

CHAIRMAN ELA: Yes.

MS. OAKLEY: Yes. Sorry.

CHAIRMAN ELA: I would agree with you. Dave.

MS. OAKLEY: Yes. I mean, it will take a long time for what we passed yesterday to finally come into effect. But, yes, I mean I think you're right that those of us who are voting, some of us at least who are voting to relist it now are doing so with the full understanding that the NOP would, hopefully, take up what we passed yesterday for

the marine macroalgae proposal.

MR. MORTENSEN: Thank you.

CHAIRMAN ELA: Jesse has a comment.

MR. BUIE: And our stakeholders have expressed the need for this, is that correct?

MS. OAKLEY: Yes, it is one of the most widely used products, along with liquid fish.

MR. BUIE: Okay.

MS. OAKLEY: It is a very commonly used material.

MR. BUIE: Thank you.

CHAIRMAN ELA: Other comments?

(No response.)

I just want to throw in that I will vote for relisting on this because I think it is a very important product. But I am concerned that we preface our votes on the vote last night on marine algae because, I mean, rulemaking is a very lengthy process, as we have seen on several other topics that are priorities at this point. And so, I guess, personally, I don't want to be pessimistic, except that it's going to take a while.

I mean, I think, by our vote last night,

we certainly signaled that we are concerned about marine environments and want to follow up on that, but I think it will be a significant amount of time before that, in terms of rulemaking, comes to pass. So, that is one of my concerns. Like I say, I'll vote to relist, but I want to be cautious about saying that we have solved the problem.

Wood?

MR. TURNER: I think I've been clear in other comments that I feel like part of our job is to regenerate ecosystems broadly. And I appreciate what Asa said. It's very helpful for me to hear Asa's thinking on his reversing his vote from the Subcommittee.

I just want to point out I find Dave's comments to be very compelling, and the comments you just added, Steve, very compelling. And I am concerned that the process here is going to leave some ecosystems exposed for a period of time without the benefit of some stronger rules. So, I'm really struggling. I fully understand the need the community has for the material. I just want to be on the record as saying this is a really

tough one in terms of timing for me.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes, I mean, I just hope that the program is listening, because I think that the angst that some of us may feel about this just drives more need for the program to take this, or take yesterday's vote on marine macroalgae to rulemaking. And it just underscores, I think, the Board's hope that that happens soon, rather than later.

CHAIRMAN ELA: All right. I am not seeing further comments. So, we will go to the vote.

The vote is to remove aquatic plant extracts from 205.601(j), based on the following criteria.

Motion was made by Emily. It was seconded by Wood.

We will start with Jesse.

MR. BUIE: No.

CHAIRMAN ELA: Jerry? Are you there, Jerry?

MR. D'AMORE: My answer is no.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: Abstain.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-dae?

MS. ROMERO-BRIONES: Abstain.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: I'm going to abstain on this one.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: And the Chair votes no.

MR. RICE: That's zero yes, 12 no, 3 abstentions. The motion fails.

CHAIRMAN ELA: Okay. Jesse, back to you.

MR. BUIE: Okay. Thank you, Emily.

Lignin sulfonate.

Rick, are you ready to go?

205.601(j).

MR. GREENWOOD: Yes. So, we've already discussed the other lignin compound that was a proposal. Lignin sulfonate has been on the National list.

Tremendous support from the stakeholders. Saw 25 positive written comments, one negative.

Again, it's used as a chelating agent/dust suppressant. It's a byproduct of the paper manufacturing process. It has low toxicity and has been approved by others, such as the Canadian General Standards and IFOAM have used

lignins on their list.

So, a lot of support. The Subcommittee voted -- there were only seven members at the time of the vote, and it was all positive for relisting.

CHAIRMAN ELA: Are there other comments?

Scott?

MR. RICE: Yes, this was the one I was not able to think through it clearly earlier, and it related to our petition material. We did have a comment sort of getting a little more at how lignin sulfonate is listed on the National List, and looking to get some clarity on that listing and just questioning whether an annotation could be revisited to help out in that clarification. And that's kind of where I was looking at, if there's any discussion about that in relation to that comment or if anybody has any thoughts on it.

MR. GREENWOOD: Unless I missed it, I really didn't see anything in terms of all the broad support for annotations. What would you think would be an appropriate annotation?

MR. RICE: I don't think I'm in a

position to offer that, but I would just say -- and obviously, we can't change this at sunset -- but perhaps in Crops take a look at that and see if there's a need for addressing a second look at the annotation; that's all.

MR. GREENWOOD: Okay. Fair enough.

CHAIRMAN ELA: Other thoughts, comments, questions?

(No response.)

Okay. We will move on to the vote.

The motion is to remove lignin sulfonate at 205.601(j). That's plant or soil amendments for lignin sulfonate, a chelating agent that's present on the National List.

Motion was made by Rick. It was seconded by Emily.

And we will start with Jerry.

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: The Chair votes no.

MR. RICE: That is zero yes, 15 noes.

The motion fails.

CHAIRMAN ELA: Back to you, Jesse.

MR. BUIE: Okay. Thank you, Rick.

Our next one is sodium silicate, 205.601, and that is you, Steve.

CHAIRMAN ELA: Yes. So, I just want to address sodium silicate is primarily used to help pack pears. Pears are heavier than water. So, if you add the sodium silicate to the water, it changes the density of the water and the pears will float, making them much easier to move onto a packing line.

There's also a reference for fiber processing. I will say that we received, essentially, no comments on fiber processing, and there's a question whether the annotation should be changed to exclude fiber processing, but, of course, that is not our step right now.

Basically, I heard from the Pacific Northwest Fruit Council, and several others up in that neck of the woods, that this is still essential for small processors who do not have the economic wherewithal to put in different types of packing

lines that are able to extricate pears from those dump tanks.

We did hear a couple of negative comments saying that this is essentially a glass product, that another name for it is water glass, and that that in itself provides potentially a health problem.

But I guess this is a product that's not widely used at all. This has a very specific use, but that specific use does benefit smaller growers and small packing operations. So, given that, I'm in favor of relisting.

Others have questions or comments?

(No response.)

All right. I am not seeing any.

See, Rick, I hand these things to you that people don't respond to. So, don't feel bad.

We are going to start with Rick, speaking of Rick.

(No response.)

Are you there, Rick? Rick, are you out there?

MR. RICE: We can see him.

MS. ARSENAULT: Looks like he's muted.

CHAIRMAN ELA: Rick, we're not hearing you.

(No response.)

Okay. We will move on and count Rick as an abstention, or as an absent. Excuse me.

All right. Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-dae?

MR. GREENWOOD: Steve?

CHAIRMAN ELA: Hey, Rick.

MR. BUIE: There Rick is.

MR. GREENWOOD: Yes. No.

CHAIRMAN ELA: Go ahead, Rick. What's your vote?

MR. BUIE: Okay. We got you.

MR. GREENWOOD: Yes, I'm having trouble unmuting.

CHAIRMAN ELA: Okay. Yes, we noticed. So, that's fine.

A-dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry? Jerry, are you out there?

MR. D'AMORE: Yes, I'm here. No.

CHAIRMAN ELA: The Chair votes no.

MR. RICE: That's zero yes, 15 no. The motion fails.

CHAIRMAN ELA: All right. Jesse, back to you.

MR. BUIE: Okay. Thank you, Steve, for that.

Okay. EPA List 4. And be reminded we're going to have two votes on -- well, we're supposed to have two votes on this. We'll have the livestock after this one, based on how things progress.

So, Asa, your ball game.

MR. BRADMAN: Okay. Thank you.

And this is going to be one of the more challenging votes this morning.

Can everyone hear me okay?

CHAIRMAN ELA: You're good, Asa.

MR. BRADMAN: Thanks.

Just to provide a little context here, and without repeating too much of what we talked about earlier in the week.

We have a system for pesticide formulations that permits, quote-unquote, "inert

ingredients" that are on the current EPA List 4. Just a reminder that I'm going to be using the word "inert," and we've heard in many places, and I've expressed that really "inert" is the inappropriate term for these substances. They're not necessarily chemically or biologically inert. And I'd like to change that.

But we have a situation here where the National List references EPA List 4, and the EPA List 4 was produced as part of the evaluation of, quote-unquote, "inert ingredients" resulting from a view initiated by the Food Quality Protection Act of 1996. And that list became incorporated into the National List, but was later -- I'm not sure the word is "abandoned" -- but no longer maintained or evaluated by EPA after their FQPA review was over. And that occurred back around 2006-2009, around there.

There are some concerns about the material we have. You know, we have a 4A and a 4B. Just a reminder that we have a number of food-grade 25(b) materials that are on the list, and those are kind of excluded. Really, the

discussion we have and the issues we have are over the synthetics on List 4, and that's really where we have, I think, the biggest gnashing of teeth about how to deal with that.

There are concerns that these materials from the Synthetic List 4 were incorporated into the National List without thorough review, and that, over time, understanding of these materials has changed and there may be some materials that would no longer meet OFPA or other criteria, or whether they ever met them; and that there's also a need for room for more other materials that could be used for new pesticide formulations.

And I'm going to reiterate some of my comments earlier in the week. I think the need for softer and less toxic materials is important, both in the context of organic agriculture, but also materials that bridge and find markets in conventional production as well. Any movement towards less toxic materials that are more specific and less disruptive is important. So, I think, in general, this is an industry that is important and that we want to support.

I also want to note that written into OFPA is the requirement that substances, synthetic substances, quote, "are not classified by the Administrator of EPA as inerts of toxicological concern". So, that is written into OFPA separate from the List 4 reference in the National List.

So, I just want to make sure we keep that in mind as background for this discussion.

MS. JEFFERY: I'm sorry, Asa, could you say that one more time for me? Just that last sentence.

MR. BRADMAN: So, in OFPA, Section 2118, it's in the write up that non-synthetics used in production and containing synthetic inert ingredients are not classed by the administration of the Environmental Protection Agency as inerts of toxicological concern. In other words, to put the flip side of this, we're saying that we can only use materials that are not of toxicological concern.

So, in a way, this is written a little backwards, but it still makes the point that EPA is intrinsically involved in the review that would

go into these materials, and that is separate from our reference to List 4 in the National List.

So, as we've heard, there's been a lot of concern about the reference to the EPA List 4, which is explicitly not supported by EPA anymore. And in general, this reflects a feeling that we have a broken system, not a feeling, a reality that we have a broken system and that there hasn't been a way for there to be continuous review, and the potential for improvement, in the materials used for pest control in the Organic Center.

And I guess I want to reiterate, in conversations I've had with folks and comments, the idea of OFPA and the organic program is one of continuous improvement. And that means ongoing and continuing review of materials we allow, and this review of List 4 is -- you know, we're on a five-year schedule, and it's really part of the process. And I don't think it's something that should be seen as a threat to the organic community or different sectors of the organic community.

This has been going on for 10 years or more. Back in 2015, there were recommendations

made to the NOP by the NOSB at that time, and those are kind of referenced in the write up. The basic summary there was, one, the minimal risk compounds, like food-graded materials, those are good. And then, there's a reference to the EPA safer Design for the Environment at that time, Safer Choice Program, and that we should work with the EPA and this program to develop an organic-specific list of inerts.

And there's been proposals to evaluate the current List 4 materials and any new materials in that context. And again, that I think reflects the foundational law which states collaboration with EPA is really a basis for developing inert lists. And again, we have this expired list and even suggestions by EPA that USDA no longer use these as a reference material.

So, the idea that's been laid out in previous recommendations does provide a roadmap for dealing with this challenge working with EPA. One session, the Design for the Environment, and now the Safer Choice Program, are natural partners in that system. And I think that we have a

situation where we have a path to make sure that all sectors of the community can review these materials and review the process, and come up with a system that addresses concerns raised by OFPA and concerns about the environment; and also, needs of the pesticide industry.

I've said, both last year at the spring meeting and this year, that I think there's been some incredible comments by stakeholders in the public comments. And in particular, I've called out the recommendations by the National Organic Coalition last spring, and repeated this year. They've really outlined some specific steps in terms of taking concrete and ordered steps to request for public comment, develop an MOU with EPA, and then, again, to create an organic-specific list with the EPA and the Safer Choice Program to address the needs of the organic sector.

This is not, I want to reiterate, not the idea that we're just going to use the existing Safer Chemical Ingredient List as a replacement for the current inerts. That was never the intent. And we're not talking about products that were

being evaluated for detergents or cleaning or skin products. Rather, we're talking about a program that would include the Design for the Environment or Safer Choice Program, and to the extent necessary, the Office of Pesticide Programs pesticides, EPA, to really refine the materials that are available.

You know, I've heard loud and clear, and we've heard loud and clear, that this is a controversial issue, that there's a lot of concern. Well, one extreme would be if the lists weren't allowed, materials weren't allowed. The pest control products would not be available, and then, that would lead to chaos and the lack of materials to actually produce food organically. We've heard numbers like 60 percent, 90 percent.

And the intent is not to create that kind of uncertainty if we delisted. Rather, it's to set up an orderly process to review what we have and come up with a system that reflects input from all of the community, and I guess reiterate the feeling that we do have a broken system. We refer to a list of materials that EPA has explicitly said

they are no longer supported.

So, I guess I also want to step back a little bit from a philosophical point of view. One thing that's clear in this discussion is that pesticides are extremely important for organic production. And we have developed a system to identify materials that meet the standards of organic and are less toxic than many conventional pesticides. Of course, some materials like sulphur are used in all different settings, but, in general, the materials used in the organic setting are less toxic from a both human health and environmental basis.

As we've heard earlier, one of the really foundational concerns that led to the origin of organic just is the use of pesticides. Given how important pesticides are to organic, I think, as a community, we have to really think carefully about what's going into those materials. And this is an attempt to continue our process or move ahead our process of continuous improvement and come up with a system that unbreaks the system we have and ensures that all sectors of the environment, of

the organic community, are represented, and also, to preserve the integrity of organic.

I think we have to be really careful when we talk about pesticides and organic. We need a transparent and thoughtful process of how we maintain our system of continuous improvement.

And I acknowledge for me this is a hard vote, one way or the other. I have doubts in both directions, and I am concerned about creating a view, make a decision that would be perceived as undermining the logic of our regulatory oversight and recommendation process. And these are all challenges I think we need to think about and talk about and individually make that decision as we vote on these two sunset reviews.

So, I guess that leaves it open for discussion.

CHAIRMAN ELA: It does. Thank you, Asa, for very thorough laying out of the points. I appreciate your thoughtfulness on this.

We will open it up for discussion. And I know this is a complicated topic. I have some comments of my own, but I will let other Board

members go first, if they so choose.

Go ahead, anybody. Okay. Scott, go ahead.

MR. RICE: Thanks. And thanks, Asa, for covering those points, and I appreciate your deep knowledge on that.

I think we, through what we heard during Livestock and what we've heard through today, and certainly a few discussions we're going to have, I think we are very much in agreement, and the community is very much in agreement, that there needs to be a change and we need to get beyond this sticky EPA List 4 issue. It really does get down to just, what is that approach?

I appreciate Dr. Tucker's mentioning that a deadline is what gets things done and a deadline also strikes fear. But I think, in terms of our process, I really have a hard time with using this vote as sending a message, especially when we know that the road of regulation and making it is a long one. And we heard from Jenny, if in two years there isn't anything to replace this, this will just go back onto the list.

I realize you could argue that both ways. We could vote either way and it will just be there. But I would say we hear strong voicing from the community that we still need these materials, with all due recognition that we need to shift away from some of them and find a different way to review.

I think much of our work is nuanced and detailed, and we can see that from this discussion. But politics doesn't see that, and the outside folks that don't hold our industry in such high regard aren't going to take that nuance. They're going to take this message that we're talking about sending and potentially point to it as our crazy Board and an unwise decision, and they're just kind of not in touch with what is needed.

And I just really want to caution how we take this approach. I personally can't support -- as much as I really would love this issue to progress, I think we can get this to progress with other ways of pressure, through other ways of lobbying, through other ways of moving forward with NOP, with a vote to keep this for now and move

the issue forward as well.

So, thanks for listening.

MR. BRADMAN: Yes, and thank you. I totally appreciate what you're saying. In fact, I hold both of those, your argument and perhaps the other side, to act quickly through the sunset review. I hold both of those places in my thinking and heart about this. And I appreciate the comments.

CHAIRMAN ELA: Nate has a comment.

MR. POWELL-PALM: Thank you so much for that introduction, Asa, and, Scott, for your comment just now.

Just a quick comment. When I first got into the world of NOSB, it was starting in about 2016, but I started really kind of understanding the process in 2017. And I remember having to go into constituent meetings and defend the National Organic Standards Board, that we shouldn't be putting language into the 2018 farm bill. It was, I think, Senator Roberts who was proposing some pretty strong language that could have compromised and changed the NOSB a lot.

And so, in that lobbying effort when we were storming the Hill as farmers to say, "Leave the NOSB the way it is," at that time -- I was trying to remember -- I don't even think that there was really are reason that they were coming after the NOSB.

And my worry would be that, given such strong and consistent messaging from our constituents, especially farmers, that we need to relist List 4 and not let it go away without a proper replacement in place, I think given that, there would be an easy argument to make that the NOSB doesn't pay attention to our constituents and that we're not reflecting the input that we're getting.

And I think that this is the most fantastic democratic institution, and I really want us to move forward, as everyone is in agreement on. But I think there's, like Scott said, other paths to do that without risking destabilizing so much of the industry.

CHAIRMAN ELA: Sue?

MS. BAIRD: Yes, and again, I echo everyone's thanks to Asa for all this work.

And I've probably said this several times now, and I guess I'll say it again: farmers are going to panic. As far as they can see, NOSB for some reason has taken the very tools that they need to survive away from them. And just because we have assurances from Jenny, and I believe Jenny with all of her heart believes that this is the way to go, doesn't mean that some of the other legislators and things would not see this as an opportunity to perhaps even destroy organics.

We've heard from so many of our stakeholders that say, "Please don't do this," including from Zea Sonnabend and Emily Brown Rosen. We revere those as leaders in the world, and they're saying, "Don't go this route."

I'm just going to have to say I won't support this.

CHAIRMAN ELA: Wood, and then, I'll make my comments.

MR. TURNER: I just want to ask a question of maybe others, maybe not Asa, maybe Nate. Look, I said yesterday, or the last time we discussed this, that I am still inclined to

strongly support the process that Asa has laid out for us here, and getting this moving in a different direction.

I find it unbelievably uncomfortable to think that we're still existing in a world where this outdated list is somehow in reference in what's guiding organic. It seems I cannot believe there's not more of a sense of urgency from the community as a whole to just get this done, to just move this along, to move this forward. To have an outdated list on the record like this just makes no sense to me.

At the same time, I hear everything that Scott is saying, everything that Sue is saying, everything that Asa is saying, and it's sitting very hard for me. So, I guess I would ask maybe Nate, because of Nate's eloquent words on this, if we don't do something here, do you really believe -- like show me what, tell me what's going to happen next. Tell me how we're going to move this forward. Tell me how this is really going to change. I just don't see another proposal that really has convinced me that we're going to

actually get this moving in the direction that I think it needs to be moving.

MR. POWELL-PALM: Thank you for that, Wood.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes, can I respond or should we keep going?

CHAIRMAN ELA: I'm going to take the unusual step and say, yes, you may respond. Then, I jump in. Then, Mindee has a comment.

MR. POWELL-PALM: I'll try to be quick, yes.

First, the 2015 recommendation I think was hard work that the Board has already done in trying to guide the program. And there is a lot of work that we can be doing. The work is not predicated on us delisting List 4. It can happen while List 4 is still up.

And so, I'd say -- and it's not my analogy -- but it's similar to getting and repealing Obamacare without a replacement. There's no reason you can't draft the replacement and have it ready. And the same for the program,

there's no reason that we can't -- I realize it's an incentive to get moving, but I think that, on one hand, it is the opportunity do good work and get moving along. On the other hand, I don't think the risk is worth it; that if it goes poorly, we risk panicking farmers when the country's nerves are just raw right now. We risk signaling that we don't listen to our farmers; we don't listen to our stakeholders. And I think that is much more concerning because the trust that the Board has right now is something special and something not seen in other federal advisory boards.

And so, I'd say I would work and I would take smarter people than me opinions on the best way to incentivize the program, to make a transition from List 4, but I don't think leaving us with no clear alternative, while taking away, technically, delisting and taking away the tools, is the right path forward. I think there are other ways to do it without that risk.

CHAIRMAN ELA: Thanks, Nate.

Okay. I'll jump in, and then, Mindee, we'll come to you.

I so appreciate the comments from everybody in this discussion. It is obviously not an easy discussion for anybody. And I have heard people saying, well, why is Steve pushing this through so hard? You know, if you had asked me a year ago would I really be involved deeply in this issue, I would have said no. And I sincerely sympathize with the concerns for a missed step helping cause the demise of the organic program. That touched very deeply to me, and I worry about that as well.

On the other hand, and as I said, I am a pesticide user and a user of these materials, and it would take me out of business if they were delisted as well. So, there's a very visceral response there as well as a farmer and in the farmer's seat. And I respect all the comments we got from farmers.

I have a couple of things, and I guess one is, I know you all, as Board members, have gotten lots of emails and calls, especially since the Livestock discussion. I'm going to say to the stakeholders, I got a few of those, but not many.

And I would really appreciate, people, if you have issues with my thoughts and my comments, that you reach out to me directly. I am willing to engage in constructive debate, and I take other people's thoughts in mind. I do not believe that my thoughts are perfect. And so, I would encourage in the future stakeholders not work behind, but contact me directly as well. I'm very willing to engage.

In fact, a few people have contacted me, and they have said very different things than what they have told other Board members. So, that really disappoints me and frustrates me in terms of due process and being able to make educated choices.

What I have heard a lot is this really comes -- and Sue mentioned Zea and others -- this comes down to a basic distrust of the National Organic Program. And I apologize, Jenny and Devon and Jared and Michelle, our stakeholders are deeply skeptical of the intent and process here. And I recognize that in the past there have been issues with that. And I will say that that will probably

be an issue in the future at some point. So, I don't disregard those comments as valid.

On the other hand, we have had since 2015 to put this into place, as the NOSB and the NOP, and nothing has happened. And in that time, we have had comments every Board meeting asking us to do something to fix this broken system, and that has not happened.

So, I truly believe that in the future, if we relist this, that nothing will happen by the time this comes up by the next sunset. I don't believe the NOSB has the power to tackle this issue. We certainly don't have the power to reach out to EPA and form collaborative agreements. I don't think we have the time to work on this as a Board without putting everything else to the side.

And also, in all the stakeholder comments that we've heard about delisting and the worry about that, I did not hear anything that says what kind of system we should use to replace this. And I think, as a group, we need to come up with these constructive ways to replace List 4s, and that has not happened in the five years that we

have worked on this. So, that really bothers me.

I accept criticism. I accept the worry about delisting. I am one of those people. But I also haven't seen constructive thoughts of how do we replace this system, even when we had all those choices. And I have heard from stakeholders on the other side consistently that this is a broken system and they are very worried about it.

So, I would caution the Board in this last flurry of emails and calls that there is another side to this that did not engage in this attempted lobbying effort. And in a sense of fairness -- my dad was a judge -- I really believe in the democratic process and giving equal access to all sides to Board members. I know that doesn't always happen, but I know one former Board member accused us of backroom deals, and I really take affront at that because I think we have tried to be as transparent as possible on this topic.

I always said that I felt like we did fail in the write up to adequately address where our movement was and how we wanted to move forward. I apologize to our stakeholders who are really

deeply concerned about their livelihoods and removing these materials. I will admit failure to trying to address that in the write up, but that doesn't mean there's failure to actually adequately think about these things.

I agree, is this a process where we should vote to delist without adequate program in place? But I guess I truly believe, also, that there will not be an adequate program in place in five years if we do not move on this now.

Jenny has said this will be a program priority. She selects her program priorities very judiciously. I did not serve under Miles, so I do not know how he progressed with those things. But I accept Jenny's integrity to say this is a priority and it will be worked on.

If that was the only thing, you know, trusting her word, that would move this forward, I would hesitate. I like Jenny a lot and I trust her word, but if that was the only thing, I probably wouldn't recommend that we delist.

However, I do feel that there are failsafes in this system. The first is, in two

years, if nothing happens, this is automatically relisted. And I think that's a really strong failsafe.

If this is moved to delisting, the industry is going to derail that delisting based on economic impact. And if there's some nefarious hand at work, OFPA in itself says that we can't use, that our industry can't use synthetics unless they are on the National List. So, if there's some way to suddenly delist these and go to like the European model, where inerts are not looked at, OFPA itself says that that won't work.

I worry about nefarious things, and I worry about the National Organic Program and I worry about organic growers. Whichever way this vote goes, it's fine, but I really believe we have a window here to move this broken system forward. And I think this window will only be open for a little bit.

If we vote to relist this, I'll go with that. I'll do my best, just as Chair, to make that work, but I really don't think we're going to be any different than we are in five years, and I just

hate to see this broken system propagate.

So, those are my thoughts. I hate to be the person going against stakeholder thoughts and comments, but I have heard these stakeholder comments in other years as well on the opposite side, and I think we need to find a way to move forward. And so, it puts me in the awkward position of pushing something that many people don't agree with and are scared about.

And with that, if the vote goes the other way, I'm all behind it, but I just don't see -- this is the way I see forward at this moment in time, that there's a window, and I don't think that will exist in the future. So, those are my two cents.

Mindee, and then, Emily. Then, Nate.

MS. JEFFERY: That's a rough follow up, Steve.

CHAIRMAN ELA: Sorry.

MS. JEFFERY: I wouldn't want to play after you.

(Laughter.)

So, thank you, Steve. The combination

of great leadership and great partnerships, they're rare in business and in governance. And it's thus far been my experience as a Board member that we're in that bubble. And I'd like to express my gratitude for the work and the partnership and the willingness to tackle this difficult issue. I have a lot of faith in the program, and I really see the great choices and awesome staff people that we're working with. And I think this is a really great time for us to work on this issue.

I want organic to be understood as a leading example of democracy, of functional compromise in a partnership with a willing federal agency. It's my experience that we, as an organic community, are succeeding at this radical notion in these radical times.

Given the political climate and the uncertainty in Washington, I'm uncomfortable with going against our constituency in a process that isn't as transparent as they want it to be. And I am really comfortable with your leadership, Steve, and I am really grateful that we have expertise on this Board right now. And I think

that, in the sense of consensus, we have to come along this path together, and if that means that we have to take a steady and metered approach to something to make consensus, I think it's wise for us to do that.

And I'm more comfortable with Steve and the program spending a year outlining a transparent process. And whether that's a Memorandum of Understanding or the formation of a working group, I'm okay with taking more time on this issue because I think we have to be together. I don't think 2020 is a year to risk destabilizing our producers, and I hear loud and clear that our community wants the NOSB to be involved in transparent processes. And I think that's a radical notion at the federal level. I think that's a radical notion for the way that the next generation is calling for transparent democracy, and that we can presence ourselves as leading that movement, as a successful example. I don't think the path forward is for us to delist inerts. I think the path forward is for us to take this issue seriously and work on it in a transparent process.

CHAIRMAN ELA: Thank you, Mindee.

Emily, and then, Nate.

MS. OAKLEY: Yes, thank you. This is just a really great dialog that everyone is having. And I always appreciate collegial and frank conversations that this Board has.

I just wanted to point out that, although we did hear from a lot of folks in opposition to delisting, we did hear from folks supportive of this move this time around as well. So, it's not as if there wasn't support from some stakeholders for this move. So, I just wanted to point that out.

CHAIRMAN ELA: Okay. Nate again, and then, Dan.

MR. POWELL-PALM: All right. I'll try to be brief.

I do want to reiterate that I feel really lucky to have landed on the Board at this time for the pure reason that I get to see Steve's leadership, and I trust Steve immensely with this topic. I trust Steve immensely with everything. I think it's incredible leadership.

I think that I'm coming from a position very, very close to the farmer right now. 2020 was a havoc-wreaking year, and farms and the system are very fragile right now.

And it is something to see rural communities, and especially rural communities based on the economic possibilities that organic provides -- seeing them challenged further by the potential destabilizing nature of this action is something I can't support and I really hope that we understand that we all want to move forward together, but I think, as Mindee said, can't we spend -- I mean, I think it's worthy of my entire tenure on the Board to figure this out over years and put a lot of work into it, not that that's not already been done. But I think it's something that, from the farmers' perspective, destabilizing, the potential for destabilizing is too great in this instance.

And I guess I would just, if it's possible to pose a question to Jenny, why can't we move forward with the 2015 recommendation and not delist and not put ourselves in this position

where we're left without a safety net? Well, left with basically giving up what we currently have in place of something that we have no idea what it's going to be. We don't have any path forward right now. Is that possible for Jenny to speak to that, or inappropriate timing?

CHAIRMAN ELA: That is up to her.

DR. TUCKER: I was going to say that's up to Steve. If it's okay with Steve, I'm happy to comment.

(Laughter.)

Steve, do you want me to say something or do you want me hold off?

CHAIRMAN ELA: No, go ahead.

DR. TUCKER: Okay. I will say the same thing I said when I opened this topic. There's nothing as inspiring as a deadline. There's nothing as scary as a deadline. And that's true inside the building, too, right?

A vote to delist would certainly be a very, very strong signal to the program. I think I said towards the end of the last discussion that, based upon the public comments that have come in,

and based upon sort of the discussion that has been had here, we do have the 2015 recommendation.

We have a couple of legal problems with that the Safer Choice was just a framework and not an actual list. And we have a little bit of a problem in sort of how this referring to non-codified lists -- again, we would move forward with an Advance Notice of Proposed Rulemaking.

So, I think another way to ask the question is, can I sell an Advance Notice of Proposed Rulemaking in the building without a vote to delist? And my answer to that would be I will try my darndest.

CHAIRMAN ELA: Thank you.

DR. TUCKER: I'm going to try to move this forward in any way I possibly can, regardless of how you vote.

MR. POWELL-PALM: Thank you, Jenny.

CHAIRMAN ELA: Thank you, Jenny.

Dan, then Asa, then Dave.

DR. SEITZ: So, from my perspective as a consumer representative, I think there are probably two issues that are uppermost in the

minds, at least from my experience, in the minds of consumers. And that would be pesticide residue, pesticide use, especially in organic and, also, genetically-modified organisms, genetic engineering.

Having listened to this conversation, I have gone back and forth already several times. It's partly because, on the one hand, I do believe that consumers would want to see movement here, and I appreciate the political concerns that have been raised here, this being a particularly difficult year.

So, I just want to say that I think both are very real issues. I probably will not make up my mind until I actually vote, but I appreciate the difficult and detailed conversation.

Thank you.

CHAIRMAN ELA: Thanks, Dan.

Asa? Then Dave.

MR. BRADMAN: Just very briefly to follow up on one of Nate's comments, I mean, I had expected, when I joined the Board, that this was going to be my issue for the five years here, and

four years are gone now.

But I'm definitely interested in working on these issues. We have a pretty full agenda, but, still, I think this is important. And I would volunteer to help work on these issues, and I'll even volunteer -- and this is getting recorded right now -- that, after I'm off the Board, I would be happy to participate in some role that could help move this forward.

CHAIRMAN ELA: Here, here.

Dave.

MR. MORTENSEN: Yes, I just wanted to thank Nate and Mindee. Those perspectives were ones I hadn't been thinking about.

When I came onto the Board, I think the very first meeting four years ago we talked about this at length, actually. In fact, I think it's probably the time that Asa's referring to, at least in the first year. And it's gone largely unaddressed.

There's no question there has been, and there continues to be, difficulty with -- and this is from past experience; I've seen it play

out -- USDA and EPA working together to solve problems where you have to sit down together and work through the problem. But I also did see where the Secretary of Agriculture, basically, mandated that they sit down and work through a problem together having to do with genetically-modified crops and pesticide use.

So, I believe that it can happen. I believe that it's something that a board needs some clout to make that happen. That will not happen by members of a board saying that we need to have EPA and USDA sit down together. But I agree that that is exactly what I think everyone is saying needs to happen. It's just a matter of in what order and how do you bring that about.

But the anxiety and the unsettled nature of things, and how that's affecting folks on the ground across the country, that perspective was helpful for me to hear. Thank you.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Thanks.

Dave actually just reminded me, and Asa as well, that when you guys first got on the Board,

and Zea Sonnabend had just rotated off, we set up a meeting with the program and number of members of the Crops Subcommittee and Asa, to try to figure out how we could continue to push this issue forward and what would that roadmap be.

And, I mean, I can tell you exactly at the time what we were told is that the program would need to get in touch with folks at the EPA, and it wasn't exactly clear who that would be. And, I mean, we were basically told that it was probably just like kind of on the back burner. And other subsequent meetings were held.

So, I do just want to give that historical context, that even when the Board has tried to work on this issue with the program, it has been very difficult. So, while I fully appreciate all the comments that are being made, I don't think, you know, a vote to delist this is based on any assurances from the program. It's more a question I think we each have to ask, is this still an appropriate listing and does it reflect, you know, the values of organics? And does it meet the criteria that we are supposed to

be following? So, I think that's, as much as anything else, what we're looking when we place our votes.

CHAIRMAN ELA: All right. I am just going to make one final comment, as I have had several people wonder why I'm pushing this. If I had really wanted to push it, we could have called for a vote at the end of Livestock. And I suspect that I can guess which way the vote would have come and gone.

And in deference to the Board, and trying to unite discussion on this in both Livestock and Crops, we have deferred it until today. And I suspect the vote will be different.

So, if anybody wants to accuse me of trying to manipulate the system, they can, but I would point out that we are really trying to do this in a transparent and open way, where everybody gets discussion time, and where both committees get their discussion time. And I do worry about backroom deals and lobbying, but I chose to not call the vote at that time, so that the Board could truly consider this.

I still worry about fairness and the people that don't have access to the Board. It does really eat on me, but that is for each Board member to consider as to what last-minute information has affected them. Everybody has their right to talk to whoever they want, and they should, but I really want all stakeholders to have access to our ears. Again, like I said, my dad was a judge, and that's very important to my basic nature.

So, one last comment, Mindee, and then, I think we will go to the vote.

MS. JEFFERY: We have only ever experienced you to be exceedingly neutral in your leadership, and I really appreciate the tenor of how you conduct yourself, even inside of our disagreements or agreement.

CHAIRMAN ELA: Thank you, Mindee.

Okay. We will move on to the vote.

The motion is to remove List 4 inerts of minimal concern from 205.601 of the National List. The motion was made by Asa. It was seconded by Wood.

And we are going to start with Kim.

And again, I'm just going to say a vote of yes is to remove it; a vote of no is to keep it on the list.

So, Kim?

MS. HUSEMAN: I'm the first one, huh? Gosh.

(Laughter.)

I've during this conversation gone back -- I didn't raise my hand earlier, so I get a moment, please.

CHAIRMAN ELA: Sure.

MS. HUSEMAN: I went back and forth a hundred times on each person's comments and can relate and concur.

And my classmates on the Board are in the long haul for the next four years with me. And Asa made a compelling statement. So, I am going to vote no.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: No, with a the same concern.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: The Chair votes yes.

Scott?

MR. RICE: That is 6 yes, 9 no. The motion fails.

CHAIRMAN ELA: All right. I think we're a little bit past -- quote-unquote, "little bit" -- we are past our lunch break. Or for those of you on the East Coast -- I don't know -- your soda or pop break.

So, we will take our -- I'm just looking at the clock here -- we have a few things after the break, but we have some extra time before we're supposed to adjourn, which we did work in. So, let's take 45 minutes and come back at, if I can do my math here, 10:30.

MR. BUIE: Steve?

CHAIRMAN ELA: Yes?

MR. BUIE: What about the livestock --

MR. RICE: We have a livestock EPA vote.

CHAIRMAN ELA: Oh, thank you.

MR. RICE: Did you want to do that --

CHAIRMAN ELA: Yes.

MR. RICE: -- within earshot of this one or after the break.

CHAIRMAN ELA: No, let's go ahead and do it. I'm sorry, I forgot about that. So, we'll do the livestock. Thank you for that reminder.

So, the motion is to remove EPA List 4 inerts of minimal concern from 205.603 of the National List. And that was a motion by Scott, seconded by Sue.

We will start with Mindee.

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Okay. Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: No, with the same concerns.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: And the Chair votes yes.

MR. RICE: That is 6 yes, 9 no. The motion fails.

CHAIRMAN ELA: All right. Thank you for that reminder.

So, we will go to a break and we will come back, so we can spend a little more time, we'll come back at 10 'til Eastern Time, 3:50, and we

will move on with a couple more sunsets and a couple of discussion documents, and then, the final wrap-up of the meeting.

All right. We'll see you all at 10 'til.

(Whereupon, the above-entitled matter went off the record at 3:06 p.m. and resumed at 3:52 p.m.)

CHAIRMAN ELA: We'll go ahead and get started.

I know we went a little over our break before lunch, but that was a great discussion. I appreciate everybody's thoughts.

I know the Board has talked about passing a resolution, which I would like to go ahead and bring up. So, I would like to make a motion to pass this resolution to the Board, and I'll read it here:

"In voting to relist EPA List 4 inerts of minimal concern, the NOSB recognizes the vital importance of the substances included in this listing to the organic industry.

"However, in referencing a list that

is no longer maintained, using a list on which no new substances can be added, and not allowing for a review of individual or groups of materials, the use of List 4 ingredients on the National List is problematic and outdated.

"The NOSB recognizes that a viable program allowing for the review and use of these substances must be create before this listing can be removed.

"Therefore, the NOSB asks that the National Organic Program do the following:

"Work with the NOSB to develop a viable alternative process that allows for the review of many of the substances presently on EPA List 4 and has minimal disruption to the organic industry;

"Two, for substances that do not meet OFPA criteria for listing, work to provide a sufficient period for industry to change formulation and receive regulatory approval for the new formulation;

"And three, coordinate regularly with the NOSB on progress to develop an alternative to the EPA List 4 inerts of minimal concern that allows

for stakeholder input and the removal of the reference to EPA List 4 inerts on the National List."

I would make that motion. Is there a second for this?

MR. D'AMORE: I second. Jerry.

CHAIRMAN ELA: Thank you, Jerry.

Is there any discussion?

(No response.)

All right. With that, I will just go through a vote of the Board about the resolution, and we will start with you, Dave, I believe.

MR. MORTENSEN: So here, we're saying, yes, we support the resolution, right?

CHAIRMAN ELA: That is correct, yes. Thanks.

MR. MORTENSEN: Yes.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: Yes.

CHAIRMAN ELA: Scott?

MR. RICE: Yes.

CHAIRMAN ELA: A-dae?

And I think you said she wasn't on, Michelle?

MS. ARSENAULT: A-dae has joined us.

CHAIRMAN ELA: Okay.

MS. ROMERO-BRIONES: Yes.

CHAIRMAN ELA: Thanks, A-dae.

Dan?

DR. SEITZ: Yes.

CHAIRMAN ELA: Wood?

MR. TURNER: Yes.

CHAIRMAN ELA: Sue?

MS. BAIRD: Yes.

CHAIRMAN ELA: Asa?

MR. BRADMAN: Yes.

CHAIRMAN ELA: Jesse?

MR. BUIE: Yes.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: Yes.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: Yes.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: Yes.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: Yes.

CHAIRMAN ELA: And the Chair votes yes.

Scott, I think that's --

MR. RICE: Is that still on me?

It's 15 yes, zero no. The motion passes.

CHAIRMAN ELA: Okay. All right. So, we will pass that on to the program, encouraging work on this very important topic.

Okay. Jesse, I'm going to pass it back to you to continue on with the sunsets with arsenic.

MR. BUIE: Okay. Arsenic is next, and that's me. Reference 205.602.

Again, the public comment that -- well, arsenic has been on the National List since 1995. Public comments were overwhelmingly in support of arsenic remaining a prohibited substance.

The Crops Subcommittee sees no reason to recommend removing it from its prohibited status on the National List.

Are there any questions?

CHAIRMAN ELA: Are there any comments

from the Board?

(No response.)

Okay. I am not seeing any.

The motion is to remove arsenic from 205.602 of the National List. It was made by Jesse and seconded by Emily.

And we will start the vote at Emily.

MS. OAKLEY: Sorry, remind me? I had a brain fart.

CHAIRMAN ELA: That's fine. A yes vote is to delist; a no vote is to relist. And this is 602, so it is keeping arsenic on the prohibited list.

MS. OAKLEY: No.

CHAIRMAN ELA: Nate?

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: No.

CHAIRMAN ELA: A-dae?

MS. ROMERO-BRIONES: I say no.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: And the Chair votes no.

Scott, we'll throw it back to you to keep you on your toes.

MR. RICE: Okey-doke. That is zero yes, 15 noes. The motion fails.

CHAIRMAN ELA: All right. Jesse, back

to you.

MR. MORTENSEN: Steve, I had a funny thought. If we have a moment of levity here?

CHAIRMAN ELA: Sure.

MR. MORTENSEN: Imagine Emily Oakley's legacy being the only person to vote arsenic to the allowed list. There you go.

(Laughter.)

MS. OAKLEY: Well, and it was right in front of me, but I had actually just started to take a bite of lunch, and then, I look. Oh, no, I'm the first one up. And then, that made me (audio interference). And then, here we are.

MR. MORTENSEN: Come on, Oakley.

(Laughter.)

CHAIRMAN ELA: Okay. We appreciate that levity. Thank you for that.

MR. BUIE: Okay. Our last sunset is strychnine. And again, it's been on the list since about 1995 again.

Public comments were overwhelmingly in support of strychnine remaining a prohibited substance.

Again, the Crops Committee sees no reason to recommend removing it from its prohibited status on the National List.

Question? Comment?

CHAIRMAN ELA: Yes, is there any discussion?

(No response.)

I am not seeing any. So, the motion to remove strychnine from 205.602 of the National List was made by Jesse. It was seconded by Rick.

And we get to start with Nate.

MR. POWELL-PALM: No.

CHAIRMAN ELA: Scott?

MR. RICE: Well, as my last vote, this is a fairly easy one. No.

CHAIRMAN ELA: You know you still get a vote for (audio interference).

MR. RICE: Oh, that will be (audio interference).

CHAIRMAN ELA: Sorry.

A-dae?

MS. ROMERO-BRIONES: No.

CHAIRMAN ELA: Dan?

DR. SEITZ: No.

CHAIRMAN ELA: Wood?

MR. TURNER: No.

CHAIRMAN ELA: Sue?

MS. BAIRD: No.

CHAIRMAN ELA: Asa?

MR. BRADMAN: No.

CHAIRMAN ELA: Jesse?

MR. BUIE: No.

CHAIRMAN ELA: Jerry?

MR. D'AMORE: No.

CHAIRMAN ELA: Rick?

MR. GREENWOOD: No.

CHAIRMAN ELA: Kim?

MS. HUSEMAN: No.

CHAIRMAN ELA: Mindee?

MS. JEFFERY: No.

CHAIRMAN ELA: Dave?

MR. MORTENSEN: No.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Okay, I have this one now.

No.

(Laughter.)

CHAIRMAN ELA: The Chair votes no.

MR. RICE: It is Zero yes, 15 no. The motion fails.

CHAIRMAN ELA: There's nothing like throwing a resolution where the votes are the opposite in the middle to confuse us after lunch.

All right. Jesse, back to you for the discussion document.

MR. BUIE: Okay. All right. First up is Rick and it's ammonia extract.

MR. GREENWOOD: Okay. I don't think that's mine.

MR. MORTENSEN: Yes, I think that's mine, Jesse. I think that's a typo.

MR. BUIE: Oh, okay.

MR. MORTENSEN: Yes. No, that's how it's listed, but yes. Good.

CHAIRMAN ELA: Are you awake Rick? Did we do the same thing to you as Scott?

(Laughter.)

Go ahead, Dave.

MR. GREENWOOD: I can talk about it, but it probably would be gibberish.

MR. MORTENSEN: Yes. So, a discussion document was drafted by the Crops Subcommittee. The intent of that discussion document was to pose questions to the community for which we sought feedback to inform our thinking about prohibiting, a petition to prohibit ammonia extract or -- yes, extract, yes, ammonia extract -- for use as a fertilizer in organic systems.

So, the petition was to prohibit such use and to inform the Subcommittee and the Board, certainly the Board as a whole, on this issue. We posed a series of questions to try to get at some uncertainties that we believed input on which would help clarify our path forward in considering this petition to prohibit the use of ammonia extracts.

There were four questions posed. And by the way, we had a lot of feedback on addressing the questions. Or, actually, a lot of the feedback, perhaps half of it, was that we should allow it, not addressing the questions specifically, or that we should disallow it. But we did also get some very thoughtful feedback on

the questions that were posed as well.

One of the reasons why this would be considered in the first place, a prohibition, is that, way back when, the NOSB and the NOP, or the NOP -- now that I've been on the Board four years, I understand what goes into actually making a rule -- the NOP, in December of 2000, a final rule prohibited the use of substances of high solubility.

New materials of high solubility would be prohibited or restricted, for example, like sodium nitrate, where some upper limit of its use might be approved, or it would be prohibited, substances of high solubility. Certainly, ammonia extract is a substance of high solubility, and that kind of is the basis of the argument in the petition.

The other part of the argument in the petition is, the very important part of the argument in the petition is that -- and ammonia is used a lot in conventional ag. I started out my work as a young science person working on farmers' fields in Nebraska, where the principal

form of nitrogen application for corn, which is the principal crop in the State, is anhydrous ammonia. So, that's where farmers are knifing in with a tillage implement gaseous forms of ammonia.

When you walk behind an anhydrous rig, the farmers would talk about watching that you don't get knocked down by the anhydrous gas that's sometimes leaking out of the knives when they're not fully inserted in the soil on uneven ground. And they also talk about the kill zone of the anhydrous injection, where the anhydrous ammonia kind of kills anything in a certain distance from the knifed-in anhydrous.

Ammonia is obviously a caustic fertility implement. And when I said earlier about the ammonium in the insect baits, I was quite specific when I said it's used as a bait, and therefore, not widely applied. It's contained in a very concentrated application.

So, on the first question that we posed, "Can ammonia extract" -- and ammonia extract, by the way, an important point, is ammonia that's derived from manure, and the ammonia is

concentrated in the process of its extraction. And then, you apply the concentrated liquid form.

In the so-called carbonized form, as a number of the public commenters spoke last week, in a concentration, a carbon and nitrogen ratio concentration, that's something along the lines of three units of carbon to one unit of nitrogen.

I had asked a number of questions during the course of those presentations about how does that compare to plant-based nitrogen supplementation in the soil through things like cover crops, a very common foundational practice in organic farming, and the concentration is very high, right? It's 3-to-1 for this kind of ammonia application versus something like 30- or 40-to-1 in the form of cover crop dry mass. So, it's a high-concentration nitrogen application, and it's largely intended, from all that we can tell from reading through the application and its use, as a side dress application mid-season for a row crop, where it's placed over the soil or injected in the soil.

So, we asked the question, can you

discern the difference between a synthetic ammonia manufactured at a low cost that would be commonly used in conventional agriculture from this manure-derived, high-concentration ammonia extract, if it was to be used in organic production?

And we asked, could you discern those two forms of ammonia? One, could you chemically discern the difference in a laboratory? And we determined that you could do that. So, that's an answer that we were able to answer.

And the second part of the question was, could you easily determine whether or not non-manure-derived ammonia that was being blended in a fertilizer blending plant, could you discern that ammonia form from conventionally-produced ammonia? And the answer, from all that we can tell, is that it would be very difficult to do that in a working field setting, but that you would have to do some sort of a more elaborate laboratory practice.

The second question was addressing, what are the potential effects? And we were looking specifically at downside effects of

ammonia extract on soil, the life of the soil, the health of the soil. And we didn't get a lot of information there.

But I would say that what we did get -- and I did some reading on the side -- you would be pretty strongly, not pretty, strongly affecting the soil microbiome, so the microorganisms that are a key component to the life of the soil and the nutrient absorption and release dynamics of the soil.

It would have adverse effects on soil fungal diversity strongly, so where the ammonia would be placed, in the zone of effect of the ammonia application, and would result in an increased turnover rate of carbon in the soil, which is kind of antithetical to a number of the public comments we heard last week about trying to figure out ways to increase soil organic carbon storage as a climate-mitigating practice.

Is it the case that we could use more data on this? Definitely we could, but I would say, generally, this is not an application that's going to be favoring biodiversity or carbon

accumulation.

Let's see, what else? Are there other things that we should aware of in organic production in using this? And I guess my take on it is that this is a problematic application for use in soil systems.

Early on, one of the certifiers that I got to know in Pennsylvania, Lyn Garling, explained to me in great detail how organic is not about input substitution, but, rather, about systems design and building a system through which much of the fertility for the crop is met by soil health, by crop rotation, cover cropping, et cetera.

And certainly, it has been a consistent practice of the Board to not allow compounds of high solubility being basically dripped onto or into the soil for direct uptake by the crop, but, rather, we would be enhancing the soil health to provide the nitrogen needs of the crop.

So, I would say that we have -- a lot of the questions, there's been great input. And I would say that the input is about split, although

I guess if you counted the number of responses, we had a lot of fertilizer dealers in Iowa, in California, in different places, Nebraska, that said that they would like to have more forms of fertilizer for use in organic farming and organic production. But, of course, at least to me, that's not surprising at all because that's what they sell, and that's what they work with their clients to use in a system.

We also had a number of very thoughtful, well-argued points pointing to the fact that this kind of use was inconsistent with OFPA, and this kind of use was of great concern with regard to soil health and biodiversity.

And I will end there for questions and comments.

CHAIRMAN ELA: Okay. Are there comments, questions, discussion, et cetera, from the Board?

Dave, I'm just going to -- oh, Wood's got a comment.

MR. TURNER: Just a comment. I just wanted to thank Dave for those comments and that

summary. And I really want to just point out the value of having someone with Dave's background and Dave's expertise able to express that kind of well-rounded view of what we're looking at here. So, I just wanted to appreciate, actually, what Dave just did.

CHAIRMAN ELA: Emily?

MS. OAKLEY: Yes, Wood just said exactly what I was going to say. And your voice is such an important one, and thank you for diving through those many, many comments and presenting them in such a succinct and approachable manner.

CHAIRMAN ELA: Other Board members?

All right. Mindee?

MS. JEFFERY: Thank you.

I think the California Department of Food and Agriculture has a state organic program, and they both function as a material review organization and as an enforcement and inspection body for organic. I know that they have been looking at how this is handled and whether and how fraud occurs. So, as we move through looking at this material, I can help us talk to them about

their experience, if that is helpful to the Crops Subcommittee.

MR. MORTENSEN: I think that would be helpful, Mindee. Yes, I think that would be very helpful.

CHAIRMAN ELA: Other questions and comments from the Board?

(No response.)

All right. I don't see any.

Thank you, Dave. That was a great summary. I don't know if you took notes on that, but, for my own use, I would love to get your thoughts on that just to help organize my own thoughts. So, much appreciated.

Jesse, I'll turn it back over to you to go to biodegradable mulch.

MR. BUIE: Okay. Our final discussion document is biodegradable biobased mulch annotation, and that's Asa.

MR. BRADMAN: Thank you.

I'm envious, David, of your organization. I'll try to reproduce that as best I can.

So, the issue of biodegradable mulch has been an ongoing one among the Board. We had talked about a possible proposal document to vote on, which we decided to delay until the spring, in part because there seemed to be more information out there than we had yet, and we wanted to compile that and continue to think through what the implications are. And personally, I also wanted to see where the paper pot voting went.

So, just to summarize, plastic -- this is based mainly on the comments in our discussion -- but just the use of plastic in organic is, you know, my sense is that it's exploding. It's increasing dramatically. And some of the comments, written comments and others, are essentially saying that plastic is essential and that prices for organic produce would soar if plastic were taken out of organic.

In California, I tend to think of strawberries as a kind of a dominant use, but, based on comments, plastic mulch is used almost universally -- and this is one comment -- on tomatoes, peppers, egg plants, melons, sweet

potatoes, winter squash, zucchini, some cucumbers, and on many farms the list doesn't stop there. There's also heavy use in livestock operations to protect feed or silage.

Here's one quote: "Take a walk on the majority of organic vegetable and fruit farms, and you will find small pieces of ripped plastic from years and years of plastic use."

We absolutely have a problem with residual plastics on organic farms. And livestock also uses plastic for wrapping and storing feed. The use of plastic in agriculture is omnipresent. The majority of farms will have residual plastic pieces in their fields or field edges.

So, here we're talking about existing permitted use of films, despite requirements to remove them each year. And just the overall I think concern, and I would even say almost revulsion among many in the organic community over this heavy use and the fact that so much of it is discarded in landfills and not recycled. So, we've also seen this addressed in the popular press.

In the discussion document, we provide some links to new information and, also, ask some questions, re-ask some older questions, and then, updated those with new information and some possible ideas for what an annotation or guideline would make.

And I'm still not sure where we are. I mean, there's really a sense that the current listing where we require 100 percent biobased material is not practical on two sides. One, if that's going to be the requirement, then we should delist it because it's not achievable right now. So, it's kind of a tease that doesn't reflect reality. Or the counterpart would be, if it's really biodegradable, we should consider reducing the 100 percent biobased content.

And the opinions are all over the map on it. Some of the larger certifying organizations, PCO, MOSES, others, really feel that there should be -- I shouldn't say this is organizations, but they report that many of their farmers are interested in a less than 100 percent biobased requirement, and that we should move

forward on it. And this, in many cases, is an essential tool.

On the other side, there are many people very concerned about purposely introducing a petroleum-derived plastic material into soil. And there's lots of concerns about biodegradability in real environments outside of a laboratory, differences in climate and soil conditions, perhaps the inadvertent introduction of microplastics, if they don't fully biodegrade.

So, my sense here is that we're kind of talking in circles a little bit on this information and there's the sense that we're repeating things that we've been saying for the last couple of years. But I do get a sense that there's increasing interest, and given the use of plastic, there's a real desire to move somewhere on this.

Again, many groups are interested in changing the biobase requirement and, hopefully, allowing some materials to be developed that would be feasible and would at least take us in a direction where there was a viable product.

And several comments noted that the votes around paper products kind of point us in that direction where we have an 80 percent biobased requirement, and maybe that could be a standard. Now we know, also, that you can have biobased products that are not biodegradable, you know, don't biodegrade and don't compost well, and that really compostability and biodegradability are still key concepts here, but perhaps we have a guideline there to follow.

Right now, we're looking at most of these materials have over 50 percent petroleum-derived plastics in them. There's some suggestion, though, it could get down to 20 to 50 percent. There's also some recommendations or some suggestions that we be careful about coordinating with international rules. For example, I guess the EU is developing rules about this.

All of this kind of reflects, though, kind of circling back to when I started, this idea of risk-benefit of these materials when comparing them to other systems. We've had people assert,

which I fully respect and agree with in some ways, the idea that, given the heavy use of plastic, that's one system, but we don't necessarily need to do a risk-benefit analysis or comparative risk assessment and argue one is better, the lesser of two evils in a way, and that we have to evaluate biodegradable mulch on its merits.

I respect that view, but, then, I also can't just not look at the vast volumes of plastic that are being used. I had hoped to set up some videos today just on some of the removal, the images of removing these acres and acres of plastic from fields. And we'll probably set that up maybe next spring, when we talk about this again and possibly vote.

Here's another quote from a farmer: "I'm a small farmer in Washington State who's certified organic. We have recently phased out using plastic mulch because of how much of it ends up in the dump or stuck in the ground forever."

So, again, underscoring that when we raise concerns about the microplastics and they derive from biodegradable products, we are already

introducing microplastics from current use of polyethylene materials. It's not quantified and there's difficult scientific issues among these.

We had some very, I think, salient information submitted by scientists from Washington State University and the University of Tennessee, Brenda Madrid and her group, and led, also, by Lisa DeVetter. We've had a number of conversations. Emily Musgrave at Driscoll's has introduced me to them, and we've had a couple of conversations on that. And they have submitted a fairly detailed response to many of the questions that have been raised.

In the proposal, we had a thought experiment on a couple of options in terms of how they could be listed.

One would be to continue with the current annotation with no change, requiring a 100 percent biobased product.

And we could also start allowing use of the films and allowing it to be plowed into the soil as used, and then, monitoring and assessing what happens over time.

Possibly have some considerations for offsite movement or, for example, use near streams or water sources.

Requiring film to be gathered up and composted on farm or off farm. That has been mentioned in previous meetings.

And then, also, perhaps restricting used based on the environment.

I would say, in general, nobody was satisfied with any of these suggestions. Most people don't want the current annotation with no change. But those who are opposed to any tilling dry project going into the soil would like to keep that or, at least, again, perhaps even take it off, since there's no product that currently needs it.

And then, the other ones just seem too complicated and unfeasible to enforce. And the idea of gathering it up does not seem practical because these materials are too viable and will fall apart if they're handled.

So, I don't know where this leaves us right now. It seems to me that, when we start coming up with a proposal for next spring, it's

probably going to be to leave it unchanged or allow less than 100 percent biobased, biodegradable mulch. And there's going to be some variation on that, but I think those are going to be our two primary choices.

I encourage everyone to read in detail and carefully the submission by the group from Washington State and the University of Tennessee. And then, of course, we have the prior reports we've had that were commissioned by the NOP.

So, I'd like to hear more discussion on this. And I think, as a community, we need to talk about this more over the next several months, as we develop a proposal for the spring meeting.

CHAIRMAN ELA: All right. Thank you, Asa.

Are there comments?

It looks like Dave has one.

MR. MORTENSEN: Thank you, Asa. Your summaries are always longer, but they're also very detailed in a way that really helps me wrap my head around the problem. So, thank you for that --

MR. BRADMAN: Thank you.

MR. MORTENSEN: -- and all the work that you do for the Board.

And I agree with you. I've been on a lot of farms in the Northeast where I've seen where it's the plastic waste pile; like people don't know what to do with it.

While I was at Penn State, there was a lot of work going on to make the former groundcover plastic into bricks and burning them in wood stoves, and things that. But, I mean, no matter what you do, it seems to me, is my conclusion, that's a bad -- the practice of putting plastic like that out over all these acres is something we really need to figure out how to move away from.

One thought that came to me while you were speaking, and in light of some other things that have been said during the last couple of days, is the idea of continuous improvement and policy that we could suggest that moves us down the road, recognizing that we're not going to get all the way there because the problem is too messy, right?

What I mean by that is, while 80 percent

biobased isn't perfect, it seems to me at least a lot better than piles and piles of plastic off in the corner of a farmer's field, where they don't literally know what to do with it, but they need to keep using it.

So, I'm wondering if -- and maybe that's what you're proposing -- but I'm wondering if we could somehow frame this in a way that we see this as one in perhaps three steps of getting somewhere, where the interim step isn't going to be the final step, and it's not going to be exactly what we want, but it's a lot better than what we have. And then, continue to be looking for things that are more fully biobased and fully biodegradable in a way that meets the goals that we would set out with respect to the fate of those things.

I was compelled, as I think all of us were, when we heard the speakers and the panel last year showing us how much context -- i.e., soil, rainfall, irrigation, yadda yadda yadda -- and how much of an impact that has on the fate of these films. It seemed really strong to me.

And so, it's clear that's not a perfect

solution. Even the best films seem to be persisting in dry soils, and then, fracturing up into little pieces when you go through and till the field.

So, anyway, that's my thought, that we come up with a proposed continuous improvement concept where the next step is some high level of biobased, and then, we move toward not using the other kind of plastic, the more persistent plastic.

MR. BRADMAN: Yes, I tend to agree with that. In a way, we kind of view that as an aspirational proposal. That might suggest steps and, also, additional review down the road.

I mean, of course, historically, mulches could have involved, you know, like I think of strawberries and I think of straw or other organic material, and not plastics. And I tend to think of organic as less reliant on synthetic materials.

But, at least in terms of plastic, we're essentially being told that it's essential and we're heavily reliant on a synthetic material. Because it's not viewed as contaminating the soil

directly, it's kind of viewed as acceptable. But, to me, it kind of goes against some of the basic principles of where organic agriculture came from. And yet, we're increasing use of it and dependent on it. And I think that is a challenge.

MR. MORTENSEN: And I would also say, if I could, Steve, just quickly, I think we should be clear that it's not essential really, when you think about it. Maybe, in practice at large scale, it's essential. There are farmers up in the New England states that would use cover crops, suppress the cover crop, and that's the mulch. So, it's not that it's everywhere, but to do that at scale would be challenging, I would say. I mean scale meaning large-scale.

MR. BRADMAN: Right, although a local farm in California that I've known for 35 years, they use plastics and they feel like it cuts back labor, reduces tractor runs, so it has an offset. But it's just surprising, again, how pervasive it is. But I agree, an organic mulch, cover crops, you know, I think those are all systems to support.

I think we have some other comments from

Sue and Emily.

CHAIRMAN ELA: Yes, we do. And I'll be mindful of time as well, but I do want to give this some discussion.

So, Sue, and then, Emily.

Sue, you're still on mute.

MS. BAIRD: I did so well this morning.

Thank you, Asa, for that great summary and, Dave, for your thoughtful comments.

I really like your idea of doing a stepped, a graduation-type thing. I've inspected -- I don't know -- I wouldn't even guess how many farms I've inspected in 20 years of inspections. But plastic is ubiquitous. And they will tell you, farmers who are honest, including I tried it one time, and that was all I tried it, but they will tell you there's no way to get it all out at the end of season. They do their best, but there's always particles left in the ground. In my case, I put it down one time 15 years ago, and we're still trying to pull little pieces of plastic out of the ground. So, it does not break down.

This has got to be a bit away. It may not be perfect, but sometimes -- you know, only Jesus was perfect, they say. So, I really like your idea of doing it step by step.

Just my comments, and thank you.

CHAIRMAN ELA: Emily, go ahead.

MS. OAKLEY: Thanks.

I do recognize that plastic mulch is widely used, but I just have to go ahead and put a voice out there that there are many organic farmers, myself included, who do not use plastic, and it is not tool that is necessary for all organic production. I don't judge people's choice to use it, but it is certainly very possible to grow profitably without it. So, I just want to make that known. I'll put that out there.

CHAIRMAN ELA: Anybody else?

(No response.)

Great. Thank you, Asa, for that very thoughtful summary as well. I know this is another one of those that is kind of darned if you do, darned if you don't thing. And I know we'll keep working on it. And I think stakeholder involvement on this

is incredibly important because there are, obviously different sides and different thoughts. So, thanks, Asa.

MR. BRADMAN: Yes, and I just want to end, too, by saying, you know, I welcome engagement from folks. My email is public on the UC Berkeley and UC Merced websites.

I think that some discussion, open discussion, is important, and we want people to also submit comments and perhaps use the open docket. There's real-time discussions going on before final public documents are published for review. But I think dialog on this is really important.

CHAIRMAN ELA: Agreed.

Okay. Jesse, I think you're off the hook.

MR. BUIE: Yes. That ends the Crops Subcommittee report.

CHAIRMAN ELA: Congratulations, Jesse.

MR. BUIE: Can I make one comment? Can I make one comment?

CHAIRMAN ELA: Yes, certainly. Yes.

MR. BUIE: The cost-share, I didn't want you to forget that. I don't know at what point you want to bring it up.

CHAIRMAN ELA: Well, yes.

MR. BUIE: Okay. Good.

CHAIRMAN ELA: Yes, I'll bring it up here in a little bit.

MR. BUIE: All right.

CHAIRMAN ELA: Thank you, Jesse.

MR. BUIE: Okay.

CHAIRMAN ELA: But, Jesse, thank you so much for your leadership of the Crops Subcommittee and your being Secretary this year, trying to keep tally of an extraordinary number of votes. So, I'll say more later, but we sure appreciate your leadership.

MR. BUIE: Thank you.

CHAIRMAN ELA: All right. We are going to move on to the summary of the NOSB work agendas for the coming year.

I'll let the staff put that work agenda up on the screen here. And we can probably go to

the next. Yes.

So, just quickly going through it, we'll have the CACS Committee. The human capital document is still on. Certainly, as it showed up this meeting, that's going to continue to be a very thoughtful and important part of the CACS Committee.

Coming into Crops, paper-based crop planting aids. Well, we almost thought about getting it over the line, but that will be up for a vote again in the spring.

We're planning on chitosan, the various chitosan petitions coming up for a vote.

Biochar, we have a TR out, but we're thinking that will come to a vote as well as the ammonia extract, again, with a TR coming in.

Kasugamycin, another one that will go through a vote.

We just received hydronium. That will probably go to a discussion document or be deferred to the fall. We'll see.

Asa just covered the biodegradable bio-mulch change, which at this point looks like

it will come to a proposal and a vote.

And then, we have a bunch of sunsets that, as always, we're required to look at. And that list is up there. I won't go through each one individually.

Then, coming into -- keep scrolling -- Handling, we have the whey protein concentrate petition. Can you go back down a little bit? We had a discussion document at this meeting. It says a vote on that, we could come to a vote, but I'm inclined, short of other reasons, to let the sunset removal process go through until we vote on that whey protein concentrate. It's not because we're not aware of the petition. It's more the goal, as the petition has, of delisting the whey protein concentrate. So, if, for some reason, it doesn't get delisted, we'll take up that petition again. And I need to communicate with the petitioner on that.

We have CPC, cetylpyridium chloride, which should come up for a vote, and we're looking forward to the sanitizer panel helping us inform that as well.

And then, phosphoric acid, amending that annotation coming up for a vote.

Zein, a petition coming up for a vote.

And then, we also have a fish oil annotation and L malic acid reclassification. So, those are going to be important ones that are going to involve some discussion as well.

We've got a bunch of sunsets again in Handling.

We'll keep going down until we get to the next one. Livestock. Another chitosan petition which we'll try and cover all the chitosan petitions, both in Crops and Livestock, in the same meeting.

And then, a bunch of sunsets again in Livestock, which will be discussion documents, as normal.

Then, in Materials, we're expecting to have excluded methods as a discussion document there again next spring. Looking forward to that.

We do have a petition for tall oil, which we have not really looked at yet. It came in just before this meeting. So, we were waiting

to discuss that afterwards.

And then, of course, the NOSB research priorities which, as we saw this year, we'll have a discussion document on those in the spring, and then, a proposal in the fall. Because the spring kind of gives our stakeholders a chance to inform us about those research priorities and where they think we should go for the final document in the fall.

Are there any more after that? I think that is pretty much it. Yes. Okay. That is our work agenda for the next year, no small amount of work for sure.

And I just know the Board is ready for it, but it also is the challenge of our five Board members that just came on this year, they're going to be old hands. So, they're going to be adept at handling these things, but we will have five new Board members coming in as well. So, that is going to make it a challenge for us to both train and integrate them into the Board, but I have every confidence that that will happen and we'll get through this work agenda.

I do see that Dave and Asa have their hands up. So, I'll let you two comment.

MR. MORTENSEN: Yes, just quickly because it came up. There were a lot of comments about excluding methods. And Mindee just wanted to say a very brief word about excluded methods. Is that okay?

CHAIRMAN ELA: Yes, for sure.

MR. MORTENSEN: Yes.

CHAIRMAN ELA: So, Mindee, if you want to talk, and then, we'll go to Asa.

MS. JEFFERY: Thank you. Thanks, Dave and Steve.

In the sense of excluded methods, we're working on a discussion document for the spring meeting, the (audio interference) intentions of which are to document the history of this Board's work on the subject; understand the sprawl of biotechnology (audio interference) system; make progress on the remaining TBD list topics, and establish priorities for future work around this issue.

CHAIRMAN ELA: It sounds great,

Mindee.

Asa?

MR. BRADMAN: I just want to note that I don't see a list for Maritz (phonetic) on the work agenda item. I look at our plate in Handling and it's going to be very full, and in Crops as well. But just a reminder that that's a priority.

CHAIRMAN ELA: Yes, that is going to be one that we will, before it hits our work agenda, we will have to ask for it and have it approved through the Executive Committee because it was on as a sunset, which has obviously been removed, and before it gets formally added as a work agenda item, we'll have to go through that normal NOSB process. I don't see any problems with that, but it just does take a little bit of -- there is a formal procedure for that on the Board. So, thanks, Asa, for that note.

Emily?

MS. OAKLEY: Thanks.

Did it ever actually get taken off? Because it was on the work agenda when I got on the Board and was for at least a few years after

that.

CHAIRMAN ELA: Good question, Emily. I guess I'll have to look back at that. I guess I'll have to look back at that. I'm not sure. But good question. We'll double-check that. If it still on it, we will continue it, and if it is not, we will re-add, if possible. So, a good point.

Any other comments on the work agenda?

(No response.)

All right. We are going to move on to the most exciting part of this whole Board meeting, everything else before this notwithstanding, the final chance possibly for outgoing Board members to vote. So, I know you've all been on the edges of your seats waiting for this important part of the meeting, and that is the officer elections. I wish we had a Barnum & Bailey drum roll, or something, for the input into this circus of being officers.

So, I will open up the floor to nominations for the position of Chair.

MR. RICE: I would like to nominate

Steve Ela for Chair.

CHAIRMAN ELA: I was afraid of that.

(Laughter.)

Emily?

MS. JEFFERY: I second.

MR. BUIE: Second. Second.

MS. OAKLEY: Yes, I was going to nominate you, too. So, there you have it.

CHAIRMAN ELA: Okay. Sorry if I didn't look at the raised hands. I was too worried about trying to figure out how to escape.

Scott, I should have done this at the start. Well, first, I'm going to ask, are there any other nominations?

MR. BRADMAN: Nominations for Chair?

CHAIRMAN ELA: Chair, yes.

I see, Rick, you have your hand up. Are you wishing to nominate somebody else?

MR. GREENWOOD: No, no. I wanted to nominate you, but for a three-year additional term.

(Laughter.)

CHAIRMAN ELA: Sorry, we don't have policies and procedures that allow that. So,

you're out of order, Rick.

MR. GREENWOOD: Thank you. I was hoping so.

CHAIRMAN ELA: Okay. Scott, do you want to explain the process for elections, just in case we have a contested one? I should have done that at the top here.

MR. RICE: Yes, with the caveat that I'm not reading from our Policies and Procedures Manual right now. So, this is the policies and procedures in a Zoom world. We kind of looked at ways to do that and maintain both the confidentiality of members' votes, as we have done in the past, as well as transparency with all of our stakeholders.

I worked with both and we came up with Survey Monkey that can anonymously be participated in for Board members. However, in a case like we have here where it's an uncontested position, there is no reason to take part in such a thing, just as we wouldn't have a vote in person. We would briefly move to accept by acclamation. So, with that --

CHAIRMAN ELA: Scott, why don't I let you run this? I'll let you run this part of the meeting because we talked about that, since you are a disinterested party at this point. So, why don't you just continue with the process?

MR. RICE: Okay. Sure. I guess that probably makes more sense than you moving to move to "acclamate" yourself.

(Laughter.)

But I would move to elect Steve Ela to the Chair of the NOSB by acclamation. And as far as Robert's Rules, I'm not sure if we need a second or if we all just need to applaud.

MR. BUIE: So moved.

MR. RICE: All right.

CHAIRMAN ELA: We'll count Jesse as a second.

And I think you should ask if there are any objections, but I'm sure hoping there are.

MR. RICE: Are there any objections before we fill the blank with his name?

(No response.)

Hearing none, I am happy to deliver our

new "old Chair," Steve Ela.

(Applause.)

CHAIRMAN ELA: Thank you, everyone. I appreciate your vote of confidence.

MR. RICE: With that, congratulations, Steve, and gratitude to everyone watching us try to make our way through this in the digital world.

We will open the floor to nominations for Vice Chair.

MR. BRADMAN: I wanted to nominate Nate for Vice Chair.

MR. D'AMORE: If it requires a second, I'd like to do it.

MR. RICE: Very good. Do I hear any other nominations for Vice Chair at this time?

(No response.)

Hearing none, Nate, are you willing to stand for Vice Chair?

MR. POWELL-PALM: Yes, I needed to be assured that Steve was going to be Chair first, so that I can be his willing understudy. But, yes, I am willing.

MR. RICE: Excellent. Thank you.

Do I hear any objections to that nomination?

(No response.)

Hearing none, I would move to accept Nate Powell-Palm as our NOSB Vice Chair for the upcoming term.

(Applause.)

All right. Congratulations, Nate.

And last, but not least, we have the role of Secretary. Both Jesse and I have served in this. It's also a great one to participate in.

And I would open the floor to nominations for Secretary.

MR. D'AMORE: This is Jerry. I'd like to nominate Mindee.

MR. POWELL-PALM: I'd like to second that, if necessary.

MR. RICE: Excellent. We have a motion and a --

MS. BAIRD: Well, do I get to vote, too? I mean I wanted to nominate Rick.

MR. RICE: All right. We have a nomination for Rick.

MR. GREENWOOD: I would like to respectfully decline, but I appreciate the nomination.

MS. BAIRD: All right. Thank you.

MR. RICE: Thank you, Rick.

Do I hear any other nominations for Secretary?

And thank you, Sue.

(No response.)

Hearing none, any objections to Mindee as Secretary?

MR. D'AMORE: Have you heard her say she'd like to have the job?

MR. RICE: Oh, excuse me. That is a very fair point.

Mindee, are you willing to stand --

MS. JEFFERY: Good looking out, Jerry.

Yes, I am. Thank you.

(Laughter.)

MR. RICE: Then, I would move to accept Mindee Jeffery as our Secretary of the NOSB for the coming term by acclamation.

(Applause.)

MR. RICE: Excellent.

CHAIRMAN ELA: All right. Thank you, Scott. The main reason I handed it off to you is both for impartiality and because I didn't want to have to try and figure out all the wording on that. So, thanks. Thanks for doing that.

MR. RICE: As you can tell, I had a tight script.

CHAIRMAN ELA: Yes. Well, it's easier not to have to go to the vote, but that is always a way to do it as well. Although things were by acclamation, I just want to tell new Board members especially that there is certainly no problem with having a contested vote. That is not unusual in our history as well. So, never feel like it has to be a decision by acclamation.

But thank you all for your vote of confidence.

This is the sad part of the meeting, and it's really hard to do not in person because I have developed some really good friendships with people that are exiting the Board. And it's going to be really hard not to have your leadership and

thoughts and insight on the Board. I know new Board members will step into that role very well, but I so respect all the time that you all have put into this. And they are going to be deep shoes to fill.

And I just want to recognize you, each individually, and also give you each a chance to give a little farewell speech as well. I know we'll go a little bit overtime, but we have experience with that already in this meeting. We had a lot to cover.

But, A-dae, I want to say I so respect your insights to the Board on Native issues and tribal lands, and just your own perspective. I know you've had to balance a lot of things with family and work, but your comments always bring a perspective to the Board that I think many of us don't have. So, I so appreciate that service.

Dan, we have interacted not a lot, but, again, as a consumer viewpoint, you've always stepped in and provided a very important side of the discussion that I think really adds richness and makes us double-think. And I know, with your

background and holistic practices and things, that really gave you a wonderful perspective.

Jesse, I want to visit your farm someday, sooner than later. It's fascinating to me to hear about all the crops that I have no idea about how to grow and, also, to know you're balancing that with your clinic and the good work you do there. I know this has been an incredibly difficult spring and fall with your balancing act on that. But thank you for what you contribute, both as a farmer, but also what you contribute to the public through your health practices as well.

Scott, I certainly developed a deep friendship with you as well. As a certifier, oh, my gosh, I mean, I don't know how often we've turned to you in a pinch and put you on the spot and said, "What do the certifiers think on this?" And you've always come up with very good answers, and I know you've been a huge link through ACA and organic integrity, and all these things. Your insights into this on the Board I think have been truly invaluable in helping us make decisions. So, thank you so much for that input.

And, Emily, oh, my gosh, farmer's seat, a location that many of us aren't familiar with. I know you've been very frustrated at times, but thank you for serving out your term and for, again, your integrity, your insight, your hard work.

I kind of have to laugh that you have ended up with all the marine materials, but either that's inappropriate for a landlocked person or it's totally appropriate because some of us landlocked people do rely on those marine materials for use on our farms. So, I know that probably wasn't what you intended to jump into when you joined the Board, but thank you for all that work, and thank you for the insights of small farmers and for inspiring us to do things better.

There's another person that is actually going to resign after the sanitizer panel, and it makes me very sad as well. And that is Dave Mortensen will be leaving the Board. This is a hard one because, as we just saw on the ammonia extracts, Dave is a deep thinker and his scientific background really brings a lot as well. I think of the chelate petition a few years ago where Dave

was one of the few that could parse through that. So, I think the scientific expertise is invaluable.

And, Dave, I understand why you have to resign, with being head of your Department and all the COVID-related chaos, that that means trying to take care of students and run a university. I know that's a huge amount of work that is variable day by day.

But, again, your input on the Board ever since I've been on it, it's really nice to have that scientific background that you have brought to the Board. And I hope we can fill that with something that is even close to what you have brought.

So, with that almost tearful farewell, I am going to turn it over to any of the outgoing Board members that would like to say something.

And, A-dae, why don't we start with you?

MS. ROMERO-BRIONES: Thank you.

And I want to say, yes, the last five years have been transformational for me, not only personally. I had a baby in the middle of this.

I lost my grandparents. You know, like COVID, so many things have happened in these five years, and I've taken a lot of solace not only in my fellow Board members who are kind enough to pull my weight when they needed to, but also in the organic community.

I think I have a lot of faith in the organic community. I do think at times indigenous communities and the organic community are often pitted against each one another, and often our interests are articulated as adversarial. But I think if there are ways to be more inclusive in the organic community of not only indigenous farmers, but other farmers of color, I think we would all be better off and all well off.

Because, through my day job, I do have to participate in the larger conversation around agriculture in this country and they're massive. When we have one week of organic community and meetings, the other 57 weeks or 55 weeks of the year the larger agricultural community is having their meetings.

So, I think all that to say, there's

a lot of community that has to be built within the organic community with people who are not always included, and it would only create a stronger society and a stronger form of well-being, not only with people on our lands, if we could find ways to also focus efforts on inclusivity. And so, I look forward to participating in the NOSB not as a Board member, but as a participant.

And again, I thank the entire community for understanding and the kindness in the last five years. So, thank you.

CHAIRMAN ELA: Thank you, A-dae. May you, yes, may you have safe travels and continue your hard work. I know you do so much good for the communities you live in and for your family as well.

Dan, shall we put you on the spot next?

DR. SEITZ: Okay. It's surreal, I have to say, to say farewell via Zoom, but here it goes.

First, I want to say what an honor and privilege it's been to serve on the NOSB. It's been, I must say, the steepest learning curve I've

ever experienced. It started out like scaling a vertical cliff and over time progressed to a steady climb up an enormous mountain. I never quite reached level ground.

As a public member without a PhD in biochemistry and no farming or food production experience, I've been in awe of my colleagues who are not only so incredibly knowledgeable, but committed and outstanding to a degree I have never witnessed on a board.

I also want to thank the incredible NOP staff. You also bring outstanding dedication and expertise to your roles. I must mention Michelle by name, since from the day I arrived I have observed her tireless efforts on behalf of the NOSB and NOP, always with cheerfulness and goodwill.

We all on this Board understand that organic food could, if given half a chance, save the world. It could reverse climate change, feed the world, remediate environmental degradation, promote good human health, support the economic well-being of American farmers, and provide dignified and worthwhile work for millions,

perhaps even billions, of individuals worldwide.

However, I'm not sure that this profound understanding is necessarily shared by the rest of the USDA or other branches of government. So, Jenny, I appreciate your advocacy on behalf of the work and decisions of the NOSB, but I don't envy you your job.

A few words on the organic standards themselves. I do believe that the clear language and intent of OFPA was to not allow for the organic certification of hydroponic operations. I hope that this practice can be reversed or, at a minimum, there should be a way to inform consumers whether an organic product has been hydroponically raised.

I hope that the organic standards can keep pace with the ever-developing practices of genetic engineering. Medical engineering has no place in organic agriculture. It has unleashed enormous environmental harm, whether through use of potent pesticides, destruction of beneficial insects, or other impacts.

Finally, I hope that we can, through the increasing attention to enforcement, fully

stem the tide of --

MS. ARSENAULT: Dan, you're muted.

CHAIRMAN ELA: Dan, you just muted after "Finally".

DR. SEITZ: Oh.

CHAIRMAN ELA: Start with, "Finally". You're still on mute.

DR. SEITZ: Thank you. Thank you.

CHAIRMAN ELA: There we go.

DR. SEITZ: Finally, I hope that we can, through the increasing attention to enforcement, fully stem the tide of fraudulent organic products, whether produced in the U.S. or abroad, and also curtail the operations of factory farms posing as organic operations.

That said, I understand that all of life is a work in progress and perfection is never achieved.

Thank you again for this honor of service. I will miss you all.

CHAIRMAN ELA: Thank you, Dan. Yes, my goodness, again, thank you for your thoughts and your service. I know at times it seems like

a long five years, but you've borne it gracefully. Thank you again.

Jesse? We're kind of going randomly here.

MR. BUIE: Okay. I'm really honored to have had the privilege to serve on the NOSB because I believe, and in my first meeting on this Board I said that I believe, in protecting the integrity of our organic seal. And I said it on my first meeting and I want to say it on my last meeting.

And during another very contentious time in Jacksonville, I made this statement again. I said that one of the things that must happen is that the NOP must do its job. And I have confidence that Dr. Tucker is going to make that happen. Because, also, I believe that the best way to restore stakeholder confidence is that the NOP does its job.

And lastly, I want to say that I plan to use my additional time in working on trying to get minority farmers involved in organic farming. And I say this because I did it, and I'm 69 years

old, so I know the history firsthand. And as an individual, well, I know that if a person is willing to work hard, I believe in this organic system and this system will give them an opportunity to succeed.

And finally, Michelle, I thank you for everything you did when I was trying to learn, and you just went on and did it. I appreciate that.

And Steve has just been a man that's just been tremendous, your leadership, because I have seen this organization -- you know, I served with several boards, but, without a doubt, I think the Board that we have now is going to really take us to the next level. So, I'm really confident that the NOP is going to do its job, which is why I voted the way I did, and that this Board will maximize what the NOP can do for the stakeholders.

So, I'm going to miss you. Thank you very much.

CHAIRMAN ELA: Well, the feeling is mutual, Jesse. And I should point out that you served as Secretary twice, I believe, or was it three times?

MR. BUIE: Twice.

CHAIRMAN ELA: And I think sometimes Secretary is one of the most difficult jobs on the moment, having to do simple but complicated math. So, thank you, and for chairing the Crops Subcommittee as well. That, you certainly stepped up. So, thank you for your kind words.

I have said it before and I say it again, I really do believe we need more diverse representation on this Board. And so, if you will work to help get nominations in that will bring minority perspectives, diverse perspectives, anything we can do to support you in that, I am all in favor of it. So, thank you for making that note.

MR. BUIE: Yes.

CHAIRMAN ELA: I think that is something that really we have to be conscious of.

Let's go next to Scott.

MR. RICE: Thanks, Steve.

You know, this has been an incredible opportunity, as others have noted, and honor to serve on this Board. I want to give heartfelt

thanks and acknowledgment to all the support I've received on this Board from my personal family and from my work family at the WSDA Organic Program, with great thanks to our Program Manager and my friend Brenda Book.

I'd also like to give a huge thank you to and acknowledgment of the incredible organic community that supports this Board through its extraordinary engagement. It's impressive. And together, we're just a passionate lot.

To the certifiers, I hope that I've served you well, and I'm in awe of the work that you do, that we do, all day every day, day to day in the field, in the office reviewing all those system plans and materials, in here before the NOSB, so eloquently informing all of the nuances and details that you and we all do.

To Jenny Tucker, Michelle, and the fantastic team at NOP, thank you. Your commitment and dedication to the Board and organic integrity is clear.

Last, but not least, a big thanks to Steve for his calm and warm direction. It's been

a pleasure to serve with you as Vice Chair, and I wish you the best with the new officers in the coming term.

The work we do on the Board, it's detailed, it's technical, and it's intellectually engaging, and I never cease to be impressed by the insights and expertise of my colleagues. The sum of this Board is so much more than its parts.

But, beyond the nuts and bolts of our phone calls and deliberations, I think what makes this Board work are the relationships that we build. I'm so fortunate to not only have built working relationships with all of you, but I'm departing with true friends.

I wish our new members all the best and know that you will find your experience as rewarding, and occasionally as overwhelming, as I have. And as we've heard from our discussions through these tough topics this week, watch each card you play and play it slow. But, as for me, I'm going to hang it up and see what tomorrow brings.

Thanks, everybody, and may we be

together again soon.

CHAIRMAN ELA: Thank you, Scott. I'm trying to think -- Vice Chair, one or two times as Secretary? Help me out here.

MR. RICE: I think twice as well.

CHAIRMAN ELA: Yes, I was thinking so.

MR. RICE: That's a lot of vote counting.

CHAIRMAN ELA: A lot of vote counting. So, you certainly have stepped up beyond the normal duties and Chair of CACS, and I can't even think back now, my brain is mush, but other chairmanships. I know you were Livestock for a little bit.

So, thank you so much for your leadership and especially this year. I don't know how many times I was able to turn to you and say, "Scott, what do you think?" And your insights and editing of not necessarily the most well-thought-out documents that I wrote really makes us all look much better. So, thank you.

And with my daughter, hopefully, going to school up there, I hope to see you again. So,

thank you again.

Emily?

MS. OAKLEY: Thanks, Steve.

So, I have to just say, in this election year, I live in a so-called red state, and I can tell you that organic consumers come from all ends of the political spectrum, as do organic farmers.

The organic label must remain above political pressure or changes in political agendas. Organics is organics, regardless of who is in office.

Likewise, organics is not about who has the most money or who can hire the most lobbyists. Might does not make right in the organic system. Compromise and open, honest, and transparent collaboration are what's needed for this organic democracy to work. Every voice must be heard with equal resonance, even those who may not have spoken.

Let us be guided by the principles that created and built the organic movement and which sustain us to this day. The goal is not to get big or get out, or about adopting the newest

technologies. The goal is to nurture farm businesses that can provide fairly for the people who steward them, not by looking for the cheapest or easiest, or even most efficient, way, but by making a commitment to place, forming a relationship to the land they farm, and developing a sense of responsibility to the ecosystem around them and the broader global environment upon which the farm and, ultimately, we all depend.

Thank you to the committed staff at the NOP, and most especially Michelle Arsenault. None of us could do what we do without you. You are a gift to this Board.

To the remarkable folks willing to serve the organic community and uphold organic integrity by serving on the NOSB, especially, Steve, for your leadership, this past year has been the most fruitful year on the Board and the most collegial, and I believe it has to do with this entire group of people making a concerted choice to work collaboratively together.

And to the stakeholders who engage tirelessly in this process, often as volunteers

themselves, in hopes of safeguarding the values and practices of organics.

As another retiring Board member once said, I will miss the people, but not the work. It's been an honor to serve. Thanks for all you do, and I look forward to becoming just another organic farmer again.

CHAIRMAN ELA: Thank you, Emily. I wish I could buy your produce. So, if you will make deliveries to Colorado, that would be much appreciated.

I know you've shied away from leadership, top leadership on the Board, even though you would have been very well-qualified, but you have served as Chair of committees and, certainly, helped mentor a number of people in recent years, and certainly my cohort when we came on the Board. So, you've truly had an effect just with all your other Board members on the current Board, and I think you should give yourself a huge pat on the shoulder for that. So, thank you so much.

Dave, do you want to say anything?

MR. MORTENSEN: Yes, I don't have anything prepared. I guess I would just say that, like others have said, it's been a real honor to be working with you guys. And when I started this new position, I don't think I ever would have imagined what has come in the last year. Having 30 or 35 people here and trying to deal with COVID has really tapped me out. So, I'd rather not be stepping off, but I really can't manage more right now. So, that's what I decided to do.

I'll miss you all and I will certainly stay plugged in. I may not be staying plugged into NOSB/NOP things, but I certainly will stay plugged into continuing the good battle to argue for an ecologically-based organic agriculture. There have been a couple of times I wish I could have done more. Certainly, the Jacksonville vote really kind of threw me for a loop as a member. But I would agree with Emily, this past year has been incredibly collegial and respectful, and I think more than any other time I've been on the Board I've really been able to hear what people had to say, and had a better understanding of where

they're coming from.

So, yes, thanks.

CHAIRMAN ELA: Thank you, Dave. Yes, as well, I value your commitment to your students. That's very impressive. And thank you for trying to make it a safer place and still create education. I think education is about the best thing I can think of. And whoever said education -- and I think it was you, Dave -- should be a research priority, I think that probably would be a very good addition along with the human capital side of things.

So, thank you. Let's say you'll be sorely missed.

With that, there are just a couple of other things in closing remarks and business.

I do want to note that the Board, as a group, has created a sign-on letter, signed by individuals, not in our Board capacity, but as individuals of the Board, to send to the Secretary, encouraging the Cost Share Program be reinstated at its full cost, as stated in the farm bill.

We have all seen and we heard in the

Floor debate about the pressures on farmers this year, and I think that, even though it's only a difference of $250, it is a difference, and it really does make a difference to organic growers, and does support them in ways that they are not often supported, since they're often left out of other farm programs. So, the Board has individually signed onto those, and we will be forwarding that.

I know Jenny, Dr. Tucker, has intervened on our behalf as well with FSA, encouraged that. Thank you, Jenny, for stepping outside what your day job is and helping advocate for us. It does make a difference.

So, I just wanted to let everybody know in our community that the Board is very supportive of that Cost Share Program, and it's something that we'll do our best to continue to support.

The final thing is there is one more part of this Board meeting, and that is the sanitizer panel that will be coming up in November. Michelle is going to send out all the sign-in information.

I, personally, even though sanitizers

make my head spin, I'm really looking forward to the panel because we consistently have had notes from stakeholders that we need to review sanitizers as a group, not just in single materials, even though we will look at them as single materials, and I am hoping that this panel will help us look at them, at least think about them in a larger perspective.

And I'm really pleased that we know who the five incoming Board members are in January, and I hope they will participate in this panel because I think it will, hopefully, if it all goes well, set the stage for some of their decisions over the next five years.

And, Dave, I know you're going to stay for the panel, and as outgoing Materials Chair, you've certainly had a hand in making that. I look forward to your comments as well.

Our current five Board members who are going off, you are not off the hook yet. You are still on the Board until January. Just to remind you, we still have our teeth in you just a little bit. And, of course, your input into the sanitizer

panel as well will be very critical, since you've been through the throes of having to work on sanitizers and figure all this out. So, I'll remind everybody we'll have that sanitizer panel coming up.

With that, I think that concludes my remarks. I want to turn it back to the program before we close for today, just to see if they have any closing remarks.

Jenny, do you want to say anything?

DR. TUCKER: Just very, very quickly, I wanted to say a big thank you to all the Board members, including our departing ones. You have been an honor to work with, and I know we still have a couple of months left here, but I did want to add my thanks and praise.

And, Steve, again, a beautiful meeting facilitated. There was a lot more action in terms of voting and some real contentious issues this time. And so, you facilitated that as artfully and collaboratively as I have ever seen. So, I wanted to thank you for your leadership throughout this meeting. You are an amazing person and Board

Chair, and I look forward to working with you again in the year ahead.

I will simply close by saying, as I did in the spring, that we are all continuing to experience this very, very unique time of COVID and this pandemic in our own very unique and very personal ways. And yet, we, again, came together for democracy and action. And that just means the world to me.

So, thank you. Be well and be safe to all of you. So, thanks for all you do.

CHAIRMAN ELA: Yes, my final comment to the Board members is I will apologize to -- let's see, I have to look -- to Scott, to Dave, Dan, and Wood because you didn't get to start an equal number of votes, as the rest of them did. We didn't get around for those extra four times. So, I hope you don't feel slighted.

But, 71 votes later, I am going to call this meeting closed until we meet for a sanitizer panel.

Take care, everybody, and thank you so much.

(Whereupon, the above-entitled matter went off the record at 5:25 p.m.)

UNITED STATES DEPARTMENT OF AGRICULTURE

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NATIONAL ORGANIC STANDARDS BOARD

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FALL 2020 MEETING

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PANEL DISCUSSION ON SANITIZERS

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THURSDAY
NOVEMBER 12, 2020

+ + + + +

The Board met telephonically at 3:00 p.m., Steve Ela, Chair, presiding.

PRESENT
STEVE ELA, Chair
SCOTT RICE, Vice Chair
JESSE BUIE, Secretary
SUE BAIRD
ASA BRADMAN
JERRY D'AMORE
KIM HUSEMAN
MINDEE JEFFERY
DAVE MORTENSEN
EMILY OAKLEY
NATE POWELL-PALM
A-DAE ROMERO-BRIONES
WOOD TURNER

STAFF PRESENT

DR. JENNIFER TUCKER, Ph.D., Deputy Administrator, National Organic Program; Designated Federal Official

MICHELLE ARSENAULT, Advisory Committee Specialist, Standards Division

JARED CLARK, National List Manager, Standards Division

SHANNON NALLY YANESSA, Director, Standards Division

DEVON PATTILLO, Agricultural Marketing Specialist, Standards Division

ALSO PRESENT

ANGELA ANANDAPPA, Alliance for Advanced Sanitation

BOB DURST, Simple Organic Solutions

JOSEPH MORELLI, Ecolab

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

(3:00 p.m.)

MS. ARSENAULT: All right. I have the top of the hour. So, I'm going to hand it off to Jenny now to reconvene us.

DR. TUCKER: Okay. Good afternoon, everybody and thank you so much, Michelle. I'm Jennifer Tucker. I'm the Deputy Administrator of the National Organic Program.

And so, I would first like to welcome back all of our National Organic Standards Board Members. This is the final leg of our online meeting for fall 2020 and you've heard it from me a few times and I'm going to say it again.

Your continued dedication and flexibility has really made what has made this possible. We have more than 100 people joining together to talk about sanitizers.

It is a very important conversation for the community and for the Board. We're very, very grateful for our expert panel today. And so, we'll have the Board do those introductions in just a

couple of minutes.

But I did want to again thank the Board, particularly our outgoing Board Members who are kind of on their last online journey with us this afternoon. So, big applause to them.

This is the final virtual webinar for the fall 2020 meeting. Transcripts for all meeting segments will be posted online.

This meeting, like all other meetings at the National Organic Standards Board, will be run based on the Federal Advisory Committee Act and the Board's policy and procedures manual. And I will continue to act as the Designated Federal Officer for all meeting segments.

I do want to thank the NOP team for being on here and facilitating this process. Michelle, in particular, does a lot of work to bring expert panels together. And so, I thank you, Michelle, for everything.

And of course Steve and Dave, who are leading this session as part of the Board's work, you are both wonderful partners to work with. And

so, I think I'm handing the mic back to Steve. I'm sorry, I lost the email that tells me what to do next.

CHAIR ELA: You are.

DR. TUCKER: Okay. So, Steve, take it away.

CHAIR ELA: Thanks, Jenny. We appreciate you and the staff for making these virtual meetings possible and also, I guess when we're not meeting virtually.

But I want to welcome everybody to this final leg of our fall Board meeting. We did not include it as part of the Board meeting itself even though it is just because we wanted to make sure to give these panelists the time that they deserve and also to give the Board plenty of time to ask questions of them.

This has obviously been a very hot topic on our stakeholders and the Board. It's one that we certainly need to gain more experience on.

And so, I really want to thank the panelists for taking the time out of their day to

help edify us. And I also really want to thank them, this was supposed to be part of the spring meeting and for being willing to kind of hang with us as we adapted virtually and agree to be here today.

So, thank you to those three and we're really looking forward to the discussion. I am going to do a quick roll call of the Board Members so our transcriptionist knows who is here.

So, I will read through the names if you would say if you're present. So, we'll start with Sue.

MS. BAIRD: Here.

CHAIR ELA: Asa? I know we've been waiting for Asa to join. I hope he signs on soon. So, he is not present yet. I will try and let you all know when he gets online. Jesse?

MR. BUIE: Present.

CHAIR ELA: Jerry?

MR. D'AMORE: Present.

CHAIR ELA: Rick? Michelle, is he one of the ones that hadn't joined yet?

MS. ARSENAULT: Rick is not going to be with us today.

CHAIR ELA: That's right. You said that. Yes, I'm sorry. Bearer of short memory here. So, Rick is not present. Kim?

MS. HUSEMAN: Here.

CHAIR ELA: Mindee?

MS. JEFFERY: I'm here and I just saw a note from Asa in the chat.

CHAIR ELA: What did it say, I guess is the question?

MR. BRADMAN: I'm here.

CHAIR ELA: Great, Asa, welcome. So, Asa is present. Dave?

MR. MORTENSEN: Present.

CHAIR ELA: Emily?

MS. OAKLEY: Present.

CHAIR ELA: Nate?

MR. POWELL-PALM: Present.

CHAIR ELA: Scott?

MR. RICE: Present.

CHAIR ELA: A-Dae?

MS. ROMERO-BRIONES: Present.

CHAIR ELA: Dan? And Dan was one that couldn't be here today as well. So, Wood?

MR. TURNER: Here.

CHAIR ELA: All right. Thank you very much, everybody, for attending this. So, I'm going to go ahead and turn it over to Dave Mortensen to introduce the panelists and to run the, kind of the time for each of them.

And then after the panelists give their presentations I'll take back over to run the Q&A. So, Dave, you want to take it away?

MR. MORTENSEN: Thank you, Steve. And we want, the NOSB wants to thank the speakers, the three speakers, Bob Durst, Dr. Joe Morelli and Dr. Angela Anandappa for committing the time that it takes to prepare for this sort of discussion in anticipation of the questions that you'll be asked as well as the time you are taking out of your schedules this afternoon to be with us.

This subject is a subject of, the subject of sanitizers is one of those subjects

where the Board works hard to try to be consistent from one compound or one application to the next.

And it's one of the more vexing subjects that we encounter and we really appreciate your sharing your expertise on the logic underpinning where they're needed and what criteria we should be looking at very closely when we evaluate their fit for organic production.

So, we're delighted to have three experts in this area who spend all of their work time on this subject. So, they certainly have a lot to share with us.

Our first speaker is Bob Durst. For over 20 years Bob worked in and managed the Food Composition Lab at Oregon State University. He brings a deep technical knowledge of food chemistry and of the processing industry as well as a longstanding interest in organics.

He's written numerous technical reports for the Board and is intimately familiar with organic systems and handling. In addition to his past work at OSU, he is also Principal in

Simple Organic Solutions, a consulting group that assists organic food industry partners.

Dr. Joe Morelli is an organic chemist with 20 years of experience in formulations and new product development centered on food safety and quality. He's a private sector scientist in global research and development at Ecolab.

He's recently been working on a number of questions regarding cleaning and sanitation as well as on livestock handling in organic applications.

And our third speaker, Dr. Angela Anandappa, is the founding director of the Alliance for Advanced Sanitation as well as an instructor at Northeastern University. And before that, she was a research faculty member at the University of Nebraska.

Dr. Anandappa is an expert in food safety and associated materials and technologies and interested in food safety and sanitation challenges and innovations that could be useful in the organic industry.

So, the way that we structured the afternoon session is that the speakers will share their thoughts with the Board and with the group on the webinar. And we were going to hold questions and open the question and answer up at the end of the three presentations.

So, Bob Durst, we look forward to your presentation in kicking off the Panel.

MR. DURST: Well, thank you, folks. And I give my thanks to both the NOP and the NOSB for convening a panel like this.

In my recollection, this may be the first time that something like this has gone on which I find I'm enthusiastic about because getting all these outside opinions and opportunity to discuss in more depth than is usually available at the NOSB meetings is something I look forward to.

So, thank you for the opportunity and the invitation to participate in this. Next slide.

So, the first thing I want to do is sort

of set some background, at least from my perspective, about where things are at and what we should be looking at. And right at the very top has to be food safety.

It's got to be the top priority of everything that we do here. You know, a foodborne illness because of poor sanitation would be a really dark mark on the organic industry and we don't want that sort of thing to happen.

You know, there's been some hints of that sort of thing going on in the past and it's just not good for the industry.

And that being said, cleaning and sanitizing practices which are what prevent foodborne illness can be implemented that are compatible with organic principles and I hope that we can address a lot of the questions and things about that today.

Next slide. So, first I want to give just a little bit of background and some terms so that we're all kind of on the same page here. And some of this may be, you know, sort of grade school

stuff for people but we'll just go over it quickly anyway.

And I know processing and facilities. I don't know anything about the crops side or livestock side of things. So, this is going to be focused mostly on that.

So, good manufacturing practices are something that's implemented by the industry and are widely adopted. I'm going to talk about those in a little bit more depth here in a second.

Cleaning is the removal of unwanted materials from surfaces and areas that are being used in processing. And sanitizing is killing microbes.

And oftentimes they're conjoined. But they are distinctly different things. But we're going to talk about them kind of together.

And then the last brief mention is HACCP which is a set of policies, principles, practices that are becoming more widely adopted and they're certainly mandated in a few sections of the industry to ensure food safety.

Next slide. So GMPs, good manufacturing practices, are procedures that are in place to ensure effective cleaning and sanitizing of a facility.

As far as organics are concerned they are pretty standard practices with additional rinses to ensure that there is no carryover of these materials. Oftentimes there is additional testing involved to ensure that no residues are still present.

And that means that there is additional work that may be required than might be routinely done on conventional processing. And the object of this is to provide a safe, from a microbial standpoint, food supply.

And the conventional industry is not nearly as concerned as the organic industry is with the possibility of chemical contamination or chemical safety of things. Not to say that they aren't concerned about that also.

Next slide. So, cleaning is primarily there to prevent commingling of materials,

conventional materials or waste materials. And an OSP should address all of this.

It's there to prevent, the other part of cleaning is to prevent contamination. And again, that's standard practices maybe with extra water rinses and testing to ensure that there aren't residues.

And as I tell the industry all the time when I'm dealing with any of them, don't scrimp on cleaning and sanitizing. Just because the organic folks don't like chemicals doesn't mean you've got, you know, you should quit using them or minimize their use.

And it's still possible to ensure good cleaning and sanitizing as well as continuing or maintaining organic integrity. Next slide.

So, as far as sanitizing goes which is going to be the focus of this panel, there is a number of national list items which are sanitizers, some of which have annotations associated with them that they're only to be applied on food contact surfaces as opposed to direct contact with the food

itself.

We'll talk about these undoubtedly later on. But here's a short list of them. I put the quaternary ammonium compounds on here because they're not specifically listed nor they are they restricted.

But they are somewhat problematic and I'm sure we'll talk about that more later. Next slide.

So, HACCP is, as I said before is a set of principles for ensuring food safety. And it may be incorporated into an OSP or vice versa.

It includes critical control points which are designed to ensure the maintenance of a safe food supply. And generally, these are unchanged for organic processing.

The other thing that could be added to a HACCP-like plan are organic control points which are mostly around preventing contamination or commingling of the organic product with the conventional because the same food safety things are going to apply for organics as they are for

conventional.

Next slide. So, in the charge to this panel there were a number of materials that are potential sanitizers that were listed.

And I just threw this slide in here so that we could go back and refer to it possibly if necessary or just so that folks knew what we were looking at. So, there is a whole list of potential compounds and a couple of processes that we'll be looking at and talking about. Next slide.

So, in addition to the materials themselves are the questions that we've been posed with addressing such as things listed here. You know, are these toxic?

We'll, they're killing microbes so they ought to be toxic at least to something. But how far does that toxicity spread down through the rest of the environment, to human health, those sort of things?

So, these are all again the questions that we've been asked to address and I'm sure we'll be talking about them in the upcoming questions

and answers. Next slide.

So, the OFPA criteria, in evaluating these materials, include things like detrimental interactions with the soil or the rest of the environment, their general toxicity, environmental issues, human health, biological effects, whether there are alternatives either physical processes or other natural materials, natural products?

And of course, how compatible are any of these with organics? Next slide.

And so, since almost all of these materials are going to be synthetics, one needs to look at how OFPA evaluates a synthetic material. First, are there natural alternatives? What's the environmental impact both in the manufacture and the ultimate disposal of those materials?

Do these things have any impact on the nutritional quality or health impacts, adverse impacts on the food themselves? Are they a preservative? Are they GRAS and are they essential?

So, that's kind of the, a quick overview of what we expect the rest of this discussion to look like. So, that's all I had for my initial presentation, anyway.

MR. MORTENSEN: Very good. Thank you, Bob. That's a great, set the table for the following presentations and discussion. The next speaker is Dr. Joe Morelli. Joe?

DR. MORELLI: Thank you. Thank you, organizers, for inviting me to participate here. I'm looking forward to learning from the other panel members and throughout our discussion today.

I was looking to start this presentation by putting some opening thoughts on two of the pre-meeting questions. So, I'd like to share and go and review that. So, next slide, please.

With regards to Question 7, that was asking about a hierarchy in the active ingredients that would better meet the OFPA evaluation criteria better than others, I looked at this question to look more broadly at the different types of

antimicrobials that may be used in food production.

And at a risk of saying something that may be appearing obvious, I think this is a difficult task because the evaluation criteria or some of the considerations are relevant and appropriate.

However, the relative weighting of those considerations are going to be different depending on the type of application we're talking about.

Whether we're referring to an environmental sanitizer, whether in a food plant or a livestock facility, a food contact surface, a skin or a teat antiseptic or even a water treatment, each of those relative important criteria are going to be balanced differently.

And so, it's a difficult task to say that the trade-offs between these different things leads you to be able to define that hierarchy. And I think that's somewhat relevant in presenting how we see the variety of antimicrobials being used in the market today. Next slide.

To give some examples or illustrations to this point, I put a few here to point out or discuss like we can consider alcohols like isopropyl alcohol as an effective or useful antiseptic at low volumes.

Clearly, if you were looking to use this in a large volume whether large, you know, environmental sanitation or CIP sanitation, you would have some significant safety risks associated with that.

You can have antimicrobial active like hydrogen peroxide that has very favorable residue profiles and perhaps even very favorable environmental fate attributes. However, you would be required to use it under very specialized concentrations and temperatures that don't make it amenable for broader use across all applications.

You can look to something like chlorine dioxide, a very efficient antimicrobial for water treatment having the feature of notch generating trihalomethanes. However, it wouldn't be my first

choice if you were to do treatments of a broad and open surface area.

And we looked even to something like peracids or peroxyacides. Broad spectrum, able to work at very efficient levels at parts per million with favorable residue profiles because it will ultimately revert back to the parent organic acid.

However, there are questions about material compatibility. Whether you are looking at its use on stainless steel surfaces in a food processing facility where it will find important applications are going to be very different than the host of materials that you may find in a livestock barn where material compatibility could be an issue.

You can have benefits for peracids in, for example, use in flow management where the peracids are much more tolerant to soil loads and able to maintain in proper acid and critical control levels versus something like chlorine. But they come at a higher cost.

Balancing or understanding some of these different relevant considerations are going to be different depending on the application. Next slide.

It's not just the active ingredient. There are a host of ingredients that we formulate into a variety of antimicrobials and cleaning products in order to achieve the full functional capabilities whether we're talking antiseptics like a teat antiseptic, alkaline cleaners, acid cleaners, general cleaners and sanitizers.

I won't go into any particular detail at this point on some of those functional ingredients. But I did want to use it to introduce or discuss two additional points.

So, next slide, please. This is to point out for awareness some of the challenges that we face and the limitations of nomenclature and the use of CAS numbers.

This would be an example that we would consider for synthetics for a teat antiseptic that would be regulated as a drug product. If you look

through the various relevant references through the FDA and the EPA for food additives, you will find a plurality of different common names being used.

And even I as a chemist can often get confused in figuring out are these truly equivalent or not. CAS numbers are also not a perfect tool.

Many ingredients listed in the relevant CFRs do not list with a CAS number. And you can have multiple CAS numbers referencing to a specific material that, the same exact material.

So, it is cumbersome to work with it. It's important to have that awareness. And I think it's ultimately incumbent if there are any questions to ask the person supplying the information about the ingredients.

What is the precedence by which they think it conforms to the organic rules? Next slide.

The other question is about the opportunity for harmonization or at least understanding and explaining intent. And this

relates to synthetics for use between producers and handlers.

It's not uncommon for food production to use common types of cleaners and sanitizers throughout the operation.

In my experience in dairy production we will use similar cleaning and sanitation chemistries for cleaning the milking equipment at the farm as a producer as we would milk processing equipment as the handler and we have different rules about the types of synthetics that can be used across that board.

Next slide. The last topic I wanted to discuss, and it's a difficult topic, was Question 5 asking about the susceptibility to the development of resistance and the potential benefit of rotation of different types of sanitizers.

I will be up front. I am not the microbiologist here. This is a complicated topic.

But I wanted to share some of my views or opinions in this space in that I think it's

absolutely critical that we first make sure we understand what we mean by resistance. What is the magnitude of change that defines resistance and what are the methodologies that are used to make that determination?

And through that discussion we need to understand the differences between antibiotics and sanitizers. How they are used? The levels that they are, concentrations and levels that they are used at and the mechanisms by which they work.

Only then can we have the appropriate conversation about what is the appropriate metrics and what are we actually seeing whether it's resistance that's innate versus acquired versus simply adaptation.

The down side is that we often have a number of publications that talk about resistance as demonstrated for sanitizers by MIC and that's not the right tool.

As we look then to the question about rotation, for me we have many customers that have used the same sanitizer for many years still able

to effectively meet their food safety and food quality goal.

It wasn't necessarily a subject of resistance, in my opinion. And this is really, when rotation is relevant. It may be that you have a change in microflora in your environment that may favor one type of antimicrobial versus another one.

But it doesn't necessarily refer to resistance. Resistance or the ability to reduce the risk of resistance is, from my point of view, highly focused on making sure we are cleaning effectively and applying sanitizer in the right way to make sure that we knock down the population of microorganisms in that application.

That's the most important thing for me. So, these are some opening thoughts that I've had on at least two of the questions.

I know we'll have an opportunity to go deeper into these subjects as we go forward. So, thank you.

MR. MORTENSEN: Thank you, Dr.

Morelli. And our final speaker in the panel is Dr. Angela Anandappa.

And, Dr. Anandappa, would you like to go ahead and get started and we'll -- please be preparing your questions as we wind down the third of the three panelists. Thanks.

DR. ANANDAPPA: Perfect. Thank you, Dave. And I appreciate you inviting me, the whole Board inviting me to be on this panel.

And similar to Bob, I also am very happy to see that such a panel is being assembled for this kind of conversation. I am wondering if you can hear me, if the sound is coming out well because I hear a few glitches at this end.

Is it okay? All right, perfect. Thank you. So, I actually want to -- I have a couple of slides put together really kind of picking up off of what Bob and Joe had already presented to you so that there is hopefully less repetition.

But in general, I think there are several things that are really important for this

conversation. I am personally very interested in this topic and I was really happy to see the two particular questions being asked here because they are kind of central to my world in many ways.

Next slide, please. Okay, so in the context of all of the materials that have been shared with you so far for this conversation, just thinking about why, what and how I think are very important for evaluating the need for any one of these materials at all.

Does it really provide a functional benefit? And I think both the previous speakers also said something to the same effect. Do we need it at all and also do we have an alternative to it?

The equivalence in terms of whether it is equivalently performing to others. And so, this is important information for us to consider with any kind of sanitizer.

The other thing that I think is relevant to this but you may have already thought about this is that do we really want to have a conversation

about sanitizers only or is it about cleaning agents and other chemicals that we should also consider?

And to think of that in a holistic kind of view and also be able to evaluate that from a systems perspective. So, we can talk about that a little bit further.

Next slide, please. Okay. So, food safety is hurdles-based. And you heard, you know, Bob speak about HACCP.

And so, I like to think about this in terms of, you know, where do all these chemicals fit into our world of food safety because ultimately the goal is to ensure a safe product that does not lead to any kind of a recall or issue for the producer?

And so, reducing or eliminating that risk that we may have is really our goal. And so, if we are not doing that with the chemical, whichever that may be, it may not be the right approach.

So, it's one thing that it is important

for any producer as they choose a chemical to use. And next slide, please.

Okay. And so, one of the most important things in the world of this whole, you know, use of sanitizers, use of disinfectants is really how do we use it and the consistency with which we are using this.

So, between chemical action, physical action, contact time, that combination is really what gives us the deliverable that we're looking for. And of course, water quality, consistency of those protocols in every single day what we do and the efficacy of the sanitizer itself.

And I think this is one thing that I put this group of people something that is an opportunity that does not involve really evaluating any more chemicals that I think can help tremendously.

And it's really the consistency with which you clean, we actually clean not necessarily applying the sanitizing itself because we know that sanitizers do not work on unclean surfaces.

And so, the cleaning efficacy itself in removing the soil, removing the target that you're going after before you need a sanitizer is really important. Next slide.

Okay. Here are some images. These are not mine but I have similar ones on studies that we were doing.

And it's important for any producers to recognize that biofilms are present at a very high rate in most places. You know, just most places on the planet.

But we know that food processing environments between the equipment itself as well as the entire environment there can be a pretty high prevalence of some kind of biofilms. And so, it's important for us when we are looking at chemical efficacy to consider biofilms rather than target organisms.

And so, I've been looking at this for a little bit of time now looking at, you know, what types of studies do we really, should we be considering because there are papers and papers

and papers that we can look through.

But frequently they do not consider the entire biofilm nor do they do a good job of looking at biofilms in real-world settings. Next slide, please.

Okay. I think there is a few enters that you might want to press here. And to consider that bacteria live in communities. Press enter a few times. I think the others need to show up.

Thank you. And so, a study that I published in collaboration with my USDA collaborators and Texas A&M, just within the last month, we did this study which lasted quite a bit of time.

And it was really interested because we decided to do the study because we know biofilms are, biofilm work that has been done so far does not really take into account some of the real-world biofilms.

So, we want to play with these real-world biofilms and see. You ask the question of what is resistance and what does that really

mean? How do we consider that when we think about sanitizers?

And so, when we think about that, one of the things that we realize and we learn through this process is, you know, we've known some of this before. But we've learned quite a bit more about the social situations, let's say of these biofilm communities.

They really are living communities. And thinking of any one of those microorganisms as a unique or individual type of microorganism is one of the mistakes we make.

So, we think about E. coli or we think about listeria or salmonella and there are so many studies that have just been one microorganism. And that is one of the things that we need to consider in how we evaluate the efficacy of those biocides.

Enter, enter and we move to the next slide, yeah. And of course the fact that the biofilms are ubiquitous so that they are different in these different environments.

And so, what we are looking at in terms of the next generation of the types of microbiological work here used to look not just at the one microbe but also at the whole community and look, these next-generation genomic tools to really analyze them.

Enter, thank you. Okay, next slide. Okay, the middle image is one that we got as part of a study that we published.

But, you know, another thing that we see in the studies that are published frequently in sanitizer efficacy studies it really shows us, you know, individual microorganisms.

And so, we're looking for equal 157:H7 here. And really what we are seeing is that over time that microbial community changes.

And so, our evaluation of whether that microbial community is responding a certain way to the presence or to our cleaning protocol seems to be dependent upon what's going on in the facility, what type of product is being produced, the type of surfaces being cleaned, the cleaning

protocol and of course, you know, the introduction of certain types of pathogens.

And so, it's very complex. The biofilm itself is complex. The surface is complex. And so, to both your questions, to 8 and 9, you know, these are not easy things for us to tackle, but they do require a lot more work.

So, next slide. Okay. And so, as I think about what are the main characteristics that we need to consider here, there are a few that really are important.

One is the word resistance and persistence. Resistance, when it comes to bacteria, the entire world of biocides we think about it as resistance that will lead to antibiotic resistance which is really one of the most important things that we're concerned with.

But is it really the same as saying its resistance to a sanitizer? And they really aren't the same thing.

There is what we call resistance that can lead to the horizontal gene transfer and then

the kind of between organisms and are they actually picking that up and do we reevaluate it that way or is it that the organism is developing some learning mechanism by which it can then say no, I don't want this sanitizer?

And so, these are the kinds of biological systems that we have in play right now. And so, there are several things that are important here.

But I think the big one that I want to suggest here is that for organic foods one of the biggest opportunities is to drive the fact that cleaning versus the use of a sanitizer alone, it can make a big difference in whether or not you need a new chemical.

So, there are many things that we can discuss. I think I want to stop right here so that we can ask questions.

MR. MORTENSEN: Thank you very much for that presentation, Dr. Anandappa, and for the three presentations. Steve Ela is going to be facilitating the question and answer. So, Steve,

do you want to --

CHAIR ELA: I'll take over. Thank you, Dave, and thank you to the three panelists. I know we're -- you threw out some -- I'm just going to say food for thought. I don't know how appropriate that is.

But I know that's just the -- you scratched the surface of the whole topic. And so, I'm going to look forward to the discussion and questions.

And we have plenty of time for this. So, I will encourage the Board Members to dive into this and let them -- our panelists edify us and tell us where we're misthinking and where we're thinking correctly. So, Emily, go ahead.

MS. OAKLEY: Thank you. And I apologize, there is some background noise. I hope you guys don't hear it.

Thank you guys so much for taking the time to be with us and to share this expertise. And just as a little bit of background, as the Board receives petitions for new materials, as Dr.

Anandappa referred to, it can be very difficult to determine the necessity.

And I'm wondering if you could elaborate a little bit more on some of how the Board can look at these petitions, each one sort of based on its own needs and merits and use potential and give it a fair evaluation given that we already have materials and aren't always totally clear about the necessity of a new one, although of course we understand, you know, evolving needs, different uses, et cetera.

So, I just -- I know that's a very broad, broad, broad topic, but overall I think what we're looking for as well as starting that conversation on how we can assess new petitions fairly and effectively.

DR. MORELLI: Which question is that directed to?

MS. OAKLEY: Any of you that might want to answer.

DR. MORELLI: You know, I think that you really, you have some of the building blocks

for making that assessment now. It's how do you weigh the different factors?

You know, what does it offer from an efficacy? What does it deal with, with regards to safety, residues, environmental fate? You really are touching on a number of the things that are right.

I think that where I would also include is what can it do to enable user compliance? That's another important point to consider with that.

So, as you look at that what is it offering above and beyond what you have and are you weighing that correctly? As I mentioned before, I think this is a difficult task.

I could see certain ingredients that I would not favor in one application but another one it would be my top choice. And so, that's why.

And I also think that what Bob said in the beginning is still essential. What does it do to offer us and ensure we have safe food? I mean, at the end of the day if it helps us achieve

safe food better that's, it should be considered.

MR. DURST: Let me add something here. And that is that the protocol that is in place in the current rules and regs along pest management where you have a hierarchy of treatments and materials available to you is something that might be appropriate here with cleaners and sanitizers that we have a list of things that are approved and are widely used.

And if a facility or an operation finds that those are not effective in some way, shape or form, you know, there is nothing at present for them to do. But maybe we need to say okay, in this circumstance you've got an acute outbreak of some kind you need to do something, possibly hopefully for a short length of time.

Here is what you can do. Here are some materials that are the next level up that you may be -- may be available to you.

CHAIR ELA: So, could I -- I know Asa has a question. But can I interject there?

So basically, I mean I think that's

actually a great approach that you start with cleaning and then -- and like a certifier could actually look at what have you done first that would be natural such as cleaning and then you, what you're suggesting is then you move up, you know, from cleaning, IPM approach and then to hard core -- or harder core chemical.

Is that, am I hearing that right? Bob, you're on mute if you're responding.

MR. DURST: Yes. That's basically what I was suggesting.

The problem there once again though is what are those materials and most -- and in an event like that would not be something that you could -- you know, it's something that would need an immediate response is part of the problem.

You know, a plant that has an outbreak or suddenly discover high counts or something like that isn't going to want to wait a week to hear a response. They're not going to want to wait an hour.

They're going to want to do something

about it now. So, that -- again, as all of this, difficult situation too.

DR. MORELLI: I would add that, you know, in my experience if you would look to some of the antimicrobials that were listed or even those that you might say are more natural based whether essential oils or certain organics, they will typically require fairly high concentrations to be effective in the type of application conditions we're speaking about or they will not have the breadth of kill to deal with the variety of food safety and quality issues that food processors are worried about.

So, it's not only that question. You're going to say what is the relative -- let's say what is the relative environmental fate impact if you're having to use tens of percent in concentration and large volume, you know, CIP sanitation or environmental sanitation versus something that may be effective at part per million levels?

That's again why this is not an easy

thing. But I assure you that many of the first steps in saying natural will not necessarily have the full spectrum of kill and capabilities and efficiencies to fit a number of these applications.

CHAIR ELA: Asa, why don't you go ahead.

MR. BRADMAN: I have a couple of questions and one is theoretical and one is perhaps a little bit, a little -- kind of a case study.

One, in terms of resistance it's been suggested to me -- like I understand the idea of sanitizers, particularly oxidant mechanism sanitizers if we're talking about resistance there that's different when we're talking about in terms of antibiotic resistance.

But one microbiologist that I know suggested that particularly for quaternary ammonium compounds, that there is a mechanism where mobile DNA elements, specifically Class 1 integrons can be impacted by quats and there can be induction of antibiotic resistance.

So, distinguishing antibiotics and

sanitizers here. But there could be cross over. So, I'm just curious if that makes sense to anyone on the Panel.

And then my second question is, you know, we have a petition right now for CPC, let me get my pronunciation right here. I just lost it.

DR. MORELLI: Cetylpyridinium chloride.

MR. BRADMAN: Yes, exactly. So, that's a quat. And this is the first time this class of material would be on the national list if it was approved.

And, you know, I'm thinking when I look at this, you know, it's another chlorine compound. You know, what benefit would it have relative to existing chlorine compounds?

And then it's also in the category of a food contact material which, you know, raises other concerns about, I think, the consumer. So, I'm just curious, question one and question two, you know, what your take on that is.

DR. MORELLI: And question three. Let me first say the term chlorine compound in referring to the salt of the chloride as a chlorine compound is probably not the most accurate.

I think it's better to be represented as a quaternary compound. You know, there are many different elemental forms of chlorine. Only a number of them are often used as antimicrobials for their oxidative properties.

Chloride is not going to be one of those types of components. I will jump in and say that the cross-resistance is a tougher topic.

You've got -- there is a lot of literature. It's very complex literature. There is a number of panels that have reviewed on this topic.

And, yes, in laboratory settings they have been able to demonstrate the ability for cross-resistance to happen. But they do not have that proof in the real world circumstances.

And part of the challenge is, I think that Angela was suggesting is you need to have

a pool of microorganisms available that have the genes that can be horizontally transferred to the subsequent ones so you get an acquired resistance.

And the magnitude of what that change needs to be is something that can be discussed. When you create that in an artificial environment in a laboratory you can demonstrate that.

Proving that out in the real world where the population level of microorganisms is much lower is the complicated piece. So, cross-resistance gets to be a much tougher topic.

And the reality is today we have evidence that suggests in the lab one way, yes, it's possible and in other cases, no. And that's why this is a difficult subject.

And we can talk a little bit more about what resistance means in this case. But I will pass it over and see if Bob and Angela wanted to jump in and comment too.

DR. ANANDAPPA: Yes. I think it's important for us to determine or to understand that there is a difference between resistance and

persistence.

And this is what's happening in food environments. And as much as we want to test this and we want to see if this is actually true, the real world situation versus the lab is truly -- it really is difficult to prove.

And it's really --- you know, it changes dramatically. But I would stick with the word persistence. There is a way that microorganisms like to persist and they like to build niches and a certain amount of rotation is necessary.

But we have still not found kind of a good recommended protocol to say you must change at this time. And we're looking for methods by which we can tell, you know, an operator when they should do that, right.

I think intuitively people do that and I think to Joe's point he said, you know, you can see a plant using the same chemical for many, many years and there may not be a change.

But we haven't necessarily done a lot of evaluations on those types of facilities for

us to genuinely be able to say there is no genetic change, right, because we don't monitor plants for as long as we would like to.

So, there is an opportunity for some kind of resistance, which I don't think it's proven yet for us to be worried about in that way. But there is a necessity to be able to say, yes, there is a possibility here that we need to monitor and because of that there need to be options.

And so, I think this is a previous question. But one of the things that we need to provide operators is, you know, some way by which they can choose chemical a, b or c.

If you don't pick one of these you must do this and in this circumstance when you have an outbreak or when you have to do an intense cleaning activity -- the non-daily cleaning activity -- then you must, you have the option of using a different material.

Those are the kinds of things that I think in our thought process and logic we should be able to provide people for that, you know,

monthly clean for instance, right, or preventive kind of approaches that they need to take.

I also want to touch on a couple of things that you had on the list which is, you know, not our typical chemicals that we've been using so far.

But things like, you know, the nanotechnology and other approaches that we need to have some options in our toolbox and those are really worth talking about.

DR. MORELLI: I would add a little bit more on this subject on resistance and cross-resistance in that there is -- we need to understand that, as I said in the beginning we need to make sure we are talking in common language of what we mean by resistance because you can have innate resistance.

That is the organism already has some of the genetics that allows it to be expressed phenotypically that promotes a resistance to particular antimicrobials. You could say like a spore-former or a different type of microorganism,

it may have a much thicker, more complex outer cell membrane. Those are innate. That does not mean resistance.

It just means it is less -- it has a higher tolerance for a particular antimicrobial. Then you have acquired resistance in which the genetic information is exchanged to the microorganism.

It has to be expressed as well. So, it can't be simply a genotypical proof that the gene is now incorporated into the microorganism so therefore it must mean resistance.

No, it must also be expressed that it can lead to a change in tolerance that is relevant. And then you can have adaptation. And that is that the environment in which the microorganism is being exposed to can often influence its susceptibility to it.

So, that gets to the question about what really defines resistance. Well, at the most basic level if you talk about antibiotics it should be a change in clinical efficacy.

Now, given that antibiotics are used internally at very low levels they often use MIC, a minimum inhibitory concentrations in order to look at this change in tolerance to the antibiotic.

And that probably is relevant given the way it works within the body. It's not relevant when you're talking about using and looking at a sanitizer because it's going to be used at a much higher concentration with a lot less soil and it could be, in essence the way I think about it or it can give an image, is just let's say that resistance is developed by enabling a greater heat flux to remove the antibiotic out of the cell.

And you've gotten genes that increases are up, regulates the use of heat flux. So, now you can imagine heat flux is like a man with a bucket in a boat and he's bailing out the water.

Well, now you simply put five men in there with pails bailing out the water. But if they get hit with a tsunami at a high concentration, it's not going to stop. You're still going to knock it down.

So, when you talk about what represents a meaningful change in resistance for a sanitizer, it may be well, do I no longer meet the standards that are required to be -- meet the registration test standards at the appropriate concentrations?

That could be one way. So, we really don't even have that basis to say what defines what resistance is. A change in susceptibility may be temporal and an adaptation.

So, the evidence of looking at sub-lethal cycles and then saying I see a change in MIC is not an appropriate measure. So, anchoring on these things and making sure we know what they represent is, I think important to advance the science.

MR. BRADMAN: I could ask more questions but I'll let other people.

CHAIR ELA: We'll definitely come back to you, Asa. Dave, you're up next.

MR. MORTENSEN: Yes. I -- over the years that we've been working together on the Board the issue of having the tools in the toolbox is

a word phrase that comes up a lot like we need to expand the insect management toolbox.

In this case the sanitizer toolbox. And I have a concern when I think about that word phrase expand the toolbox that it's a potentially slippery slope.

Like, where do you stop expanding the toolbox before the list of materials that are used in organic becomes so long, you know, that, you know, that we're not perhaps being discerning about who passes through the gate to get on the list?

And so, I've wondered -- so with that little bit as a backdrop, can you imagine a way that compounds like these, the sanitizer compound group where we actually start from saying no, what does no look like and if you pass no, in other words if you're above the criteria that put you in a must not proceed to the toolbox category, that that might be the strategy of defining no as a rule of thumb or a process step for the Board would help us to have a clear set, a logical set that says, you know, we really can't have these compounds

used.

But if they pass, no for these criteria then we should be considering other factors. And question one, does this make any sense?

And two, if it does make sense, what are some of the rules of thumb that would lead one to conclude that a compound is a no compound, it doesn't go for further consideration to the toolbox? If anyone is willing to take a shot at that long-winded question and statement.

MR. DURST: I'll jump in with something and it may divert slightly from what you're asking and your statement.

But the use of cleaning compounds -- moving away from sanitizers for a moment -- is virtually unrestricted as far as what those materials are because those have some kind of intervening step in them, typically rinses and purges, et cetera to allow them to be used.

And so, procedurally you don't have to evaluate all those cleaning compounds because they're not making contact with the food or -- and

the food surfaces -- contact surfaces has been cleaned up. Sanitizers are a little different than that.

But maybe in some cases where there is a situation where there is a big outbreak or something and somebody needs to do something -- and of course this applies way more for a processing plant where you've got food contact surfaces, not direct food contact. That's a different question.

But, you know, one could use virtually any material to knock down that outbreak, clean the place up, sanitize the place but then have to go through again some kind of predetermined procedure to clean and make sure that any of the residues from those materials that were used that aren't on any list are no longer present and you can start back up again because you've knocked down the outbreak that you had.

And that's kind of how quats right now are used in the industry. There are some pieces of equipment and some situations where quats are the most appropriate sanitizer to use.

But because of the fact that they leave residues that's what's always kicked them out of being used, you go through extensive cleaning operations afterwards and then re-sanitize with something else and move forward and continue the process.

Now, I'm not sure how applicable that kind of procedure is in direct food contact or livestock, that sort of thing, where you've got direct food contact.

MR. MORTENSEN: Thank you, Bob.

DR. MORELLI: The producer or processor obviously will want to optimize their production time too. And so, additional steps will always be difficult for them to consider.

The question posed is a difficult one. I don't know if I have the perfect answer. I think there would be a hierarchy of choices depending on whether that application was, you know, in direct food contact or not, in my opinion.

There would be different decisions I would make.

MR. MORTENSEN: Thank you, Joe.

DR. ANANDAPPA: Something to add to that is that I think people rush to sanitize and they don't consider the quality of their water nor do they consider, you know, the frequency at which they need to test or in some areas of the country I think we have, we're lagging in our ability to be compliant with some of the water requirements.

And I think in particular when it comes to fresh produce and products that, you know, are consumed fresh or minimally processed, this is an area in which I think, you know, Dave, your question of, you know, do you move forward or not, this is a special area that we need to consider does a chemical need to be used?

Does a disinfectant need to be used? I mean, what category of material are we using it? And also, are there other additional considerations that probably need to come first before you add an additional material?

And water certainly is one of the big ones here where we've seen, you know, plenty of

examples in which water can be an issue.

You know, an example that I work with personally is that, you know, you see counts and it's even after the sanitizer is applied and sometimes it has to do with the fact that the water source may not be treating -- may not have been treated properly. And so, that does happen.

MR. MORTENSEN: Thank you, Angela.

CHAIR ELA: Yes, those are great points. We've got questions from Jesse and Wood. But I just want to throw one in.

You know, in one sense it's like shouldn't we approve everything because, you know, they all have purposes.

And then I guess the other question becomes, you know, do we try and evaluate, I guess, downstream environmental damage is a better way of saying it versus, you know, what -- versus the fact that these are all biocides and, you know, may have specific purposes?

So, I guess what I'm trying to really ask is, it kind of follows on Dave's of how do we,

I mean in one sense it seems like there would be very few materials that we shouldn't approve because they all have different uses.

But in the case of one that might, you know, really cause some, you know, some level -- I'm going to say extreme but maybe it's not that high -- you know, biological damage after it's used, you know, in waste water or wherever else, you know, is that the only one we wouldn't approve?

DR. MORELLI: You know, you still are asking some of the right questions. I think again, if you have a new candidate what is it offering above and beyond the other ones either in outcome, microbial control outcome from a food safety, from an environmental fate? You know, I don't think it opens the entire door. But there can be sort of a rational assessment to say are you, if there are trade-offs is the trade-off in a positive direction for consideration of a new material?

I don't think you can just look at one factor in that. But I think that you could do an assessment. It might be more application

specific, in my point of view. So, if it's a water treatment than how does it compare to the other water treatment capabilities? What's its pros and cons and does it have a place that has merit? To try to go generically across the whole family, I think that's where you're going to fall short and it's going to be disruptive and weaken your capabilities and make our food less safe.

CHAIR ELA: Yes, thanks. I mean, I think that really, you know, it comes down to that question that we all struggle with of what you just said. Is it different enough from what we already have to approve it but yet, you know, also what you're saying is even small differences can make big differences depending on how they're used. We might circle back around. But I want to give Jesse and Wood a chance to ask their questions. So, Jesse, why don't you go first.

MR. BUIE: Yes. Continuing on that line of questioning with the cleaners and the sanitizers, where do we consider the functional groups that are attached to these molecules because

normally -- what I'm saying if you look at what we have on the list basically, you know, you've got the hydroxyl groups and the carbonyl groups. Is that something that should be considered when we look at a new compound to see what is the difference between that and what we already have and --

DR. MORELLI: I think at an organic functional level I don't see that making sense to me. I think that there are functional classes of materials and what they do. It's not going to be down to a hydroxyl or an amine or something like that. I think you're, I look at cleaners from my point of view if I understand it that we would have an appropriate invention rinse step and are often only considered for questions of whether they conform to the organic rules or not is if they have prohibitive substances in it like irradiation or sludge or genetically modified materials. The, but to break it down to that organic functional group, I don't think that you're going to be able to make rational decisions through that process.

Did I misunderstand your question?

MR. BUIE: No, no. And also, I have noticed that it looks like there may be interaction between maybe a cleaner and a sanitizer based on the function of groups that are on it. That's the other part of my question. And is that something that's being, should be considered when we are adding something to the list?

DR. MORELLI: Can you give me an example because in my mind the process of cleaning means you have to remove all the soil and all the cleaner away through the rinse process before you seek to do the sanitation step? You're not, you shouldn't be putting sanitizer on top of residual cleaner.

MR. BUIE: Right, I see the point you're making. Completely, complete that first process before you go to the second process there shouldn't be any interaction between the --

DR. MORELLI: There shouldn't be. And then again, if this speaks to this question of resistance and cross-resistance as well. Make

sure you do cleaning effectively and then apply the sanitizer to its label instruction basis and contact time and concentration to make sure it does the job right. And as Angela was saying and Bob, you do not sanitize right if you haven't cleaned the environment or the surface or the equipment appropriately.

MR. BUIE: Right.

MR. DURST: But having said that, there certainly are situations where you've got an environment or a circumstance where the efficacy of sanitizer depends on the pH that something is at. And if for some reason you have a really alkaline water system your sanitizer may not be as effective as if it is acidified in some way, shape or form. And that kind of brings up another area that we probably ought to be discussing.

And that is that just, you know, approving a compound like peroxyacetic acid which is on the list, that is never applied or any of the commercial formulated products that are peroxyacetic acid based, for instance aren't pure

peroxyacetic acid. They've got stabilizers. They've got some other compounds in them and discussion had come up in the past as to whether, gosh, we didn't look at, you know, Compound A, B, C that happens to be in all of these formulations and it's not on the list. So, does that mean that all these peroxyacetic sanitizers really don't, can't be used because they're formulated with this stuff?

And I think I'm correct in saying that the ruling kind of was -- or the take on that was that because the TRs were looking at formulated products that typically had these stabilizers in them, for lack of a better term that the whole range of compounds that were used there were going to be acceptable even though there is stuff in there that's never been approved and that's not on the list for sure.

DR. MORELLI: That's correct. But there are often a number of advantages. You're right. For most of the peroxyacetic acid formulas you are really talking water, hydrogen peroxide,

acetic acid and the peracid. You do have a stabilizer that's essential for it and it's at a very low level and it gets vetted through the different applications whether it's through the FDA or the EPA in assessment of the risk reward and saying that's appropriate if there was a way to stabilize it.

I think part of the reason why it's been accepted is there isn't an alternative. You look at the peracid and it does offer a lot of benefit against some of the evaluation criteria, the criteria that I take in consideration. Broad spectrum, efficiently used at low levels, most will revert back to the parent thing. The hydrogen peroxide will ultimately break down to oxygen and water.

The peracid will move back to acetic acid that's naturally prevalent. You're really going to have a very low level of stabilizer. I look at those advantages over, for example, using chlorine. And I would say that there are, if I looked at the risk reward balance between the two

I would say peracids have a number of very viable attributes.

To your point before about water and water quality and pH for sanitizer, that's just as important for the cleaning, to be able to effectively clean. A big part of what we do with our customers is making sure we understand their water and what that means to maximize that they can clean effectively. And that's also why we have many different functional elements into the detergent to make sure we have robust cleaning given the diversity of water conditions that our customers face.

CHAIR ELA: Okay, Wood, on to you. Wood, you're on mute.

MR. TURNER: Can you hear me now?

CHAIR ELA: There you go.

MR. TURNER: Sorry. This is obviously incredibly technical and complex and I'm, I feel way out of my league here. But I want to pivot a little bit and ask kind of a similar question but probably a more simplistic question. And I'm

just wondering if there is any meaningful or intellectually honest way to kind of consider the people that I consider to be sort of the front line workers, if you will of the organic industry. And that's people who are handling materials. And is there any way to kind of limit the list in any meaningful way as a starting point to say, you know, these are the most safe or these are the only safe for handlers or is that also equally complex?

DR. MORELLI: Hard to answer. Very application specific if you're talking about safety for the handler.

CHAIR ELA: Yes. That does come around to, and I know Asa has been very concerned about this, safety for the handler versus efficacy in terms of sanitizing.

MR. TURNER: I understand that it's complicated when we're talking about food safety and environmental safety. But I just, you know, it's hard not to think about that as a piece, as being equally important. We're talking about consumers obviously. We're talking about

ecosystems obviously. But I think those people are absolutely critical to this whole process. So, I just -- I appreciate the complexity and I appreciate the nuances around application. But the question still holds for me.

MR. DURST: I wonder if that can't be, since all of these materials have to be approved for use anyway outside of organics if we can't, you know, turn to OSHA or somebody like that as the regulator of those kinds of things even though those regulations may not be ideal in our minds. At least there is something that one can turn to there.

CHAIR ELA: Emily has got a question.

MS. OAKLEY: Thank you. I know that this is a very broad and general question. But the Board is challenged when we receive these petitions for new materials which is really what prompted us to go down this road of trying to elicit more information about sanitizers. In reviewing these new material petitions for determining what is the specific need or what is the specific use

for which each sanitizer or disinfectant is being petitioned? And is there a need there that is not already being met by existing either materials or practices?

Obviously, when a petition material comes before us the petitioner feels that there is a unique need. But how we weigh that out with the, with what's already available has been very, very difficult for us. So, I understand that what I'm asking is very broad and probably difficult for each of you to answer. But I was wondering if each of you, Angela, Bob, and Joe, had thoughts if you were sitting in our shoes in essence, if you were on the Board how you would approach these petitioned materials and how you would fairly and accurately evaluate them.

DR. ANANDAPPA: It's a good question, Emily. And really a flow chart comes to mind, right and we sort of need one of those for this at which point you say yes, yes, no. There has to be that end point. And it seems like, and I don't know, you probably have something like that

for your decision tree so far. But that seems to make sense and it's something that perhaps I would want to communicate to people before they develop their petition and send it to you.

That said though I think there are some opportunities where, you know, currently approved materials can be approved for a different use case. I think there are many of those that if you do have those, those are probably the easier ones to approve. But other than that, you know, my experience has shown that pretty much any one of these materials you've got to have a backup material and a backup to that material because if you do not have that you should have that.

So, I would want to have that. That's risk management for your list irrespective of, you know, the petitioner themselves. We do need to have different applications. Also their efficacy. They have options for using them. Simply, and I say that because there are certain applications such as meat and poultry or poultry which may be very different from, you know, fresh

produce or whichever but they may be trying to use the same chemical and I know that there are instances where they do that.

So, in that situation you've got to have, you know, two to three options in the same class for the same purpose. If you don't have that, that may be an easier one to approve. But I think other than that there has to be that stop and it has to check off all those boxes that you say no, we do have something that addresses that and a scientific basis that goes with that.

MS. OAKLEY: Can I follow up with that, Steve?

CHAIR ELA: Go ahead.

MS. OAKLEY: So, I think that what you're saying makes a tremendous amount of sense. How do we as a Board develop that? I mean, we had looked at trying to get a technical report sort of based on much of what you're describing. But that actually met with some resistance within the stakeholder community.

And it seems to me that a technical

report might be able to flesh out some of what you're discussing, although of course it would simply be suggestions for us as Board Members rather than, you know, providing us with a framework. But do you have suggestions for how we might develop something like that, not just as Board Members but I know you're not maybe super, super familiar with all these different, you know, processes by which we receive information. But any suggestions you have would be greatly appreciated.

DR. ANANDAPPA: Yes. I think taking some of the presentations that we've done for today and then having a little bit of a tete-a-tete with some of, as a follow up with it that this alone could develop, you know, a very, very basic stick figure framework that we could probably flesh out a little bit. But I think that necessity, efficacy and alternatives kind of approach come first to me. You know, what is the -- is it a distinct situation from what has existed in the past?

And I think that is very different from

the perspectives of petitioners because they are coming from, you know, their space and their viewpoint. And as much as I would have respect for where they're coming from there are points at which, you know, as a Board you have evaluated it before and you've been able to have different decisions made and that history does matter in that decision making process. And I would say that's probably where you start off and add to that.

DR. MORELLI: I think I would add to that, that we're always learning. We're a steward of our products. Our customers are a steward of their products as well. Requirements are changing. Requirements are changing in this industry that may change the landscape of what cleaners or sanitizers can be used. And so, you have to be able to think and adapt to offer so that you have a market for those organic products through the process and meeting their requirements.

You know, to your point before about what would you do as selection and this is a

difficult one, I don't know if I would have the perfect answer right now. There would have to be either one, in my mind you have an emerging change in requirements for safety or microbial control that is not being effectively met with the solutions today. Then I would be much more open to accepting something of any type of chemistry that meets certain thresholds. If that information is not provided and they are saying we think it's needed then I would be asking does it hit on one or more other of the evaluation criteria that gives it an advantage over the existing to accept it in?

You know, I guess and I would be less concerned, for example, if you think about a topic like environmental fate. I would be much more amenable to taking an antimicrobial that may break down to components that are already naturally known to be in the environment or obviously in foods as a preference over something that may not. That to me would make much more sense. So, I think you could think through some criteria that says okay,

if you can't substantiate the efficacy or the market need requirement technically to prove it what about the other features?

One or more. Set your threshold to say we want to see you improve on attributes if I compare it against the existing in that application that would benefit those areas. I think then you're in essence trying to improve the tools in the toolbox.

MR. DURST: I'll add to that just a little bit. You know, CPC was mentioned earlier. I will admit that I know nothing about it. But as a general class being a quat that has some unique and different characteristics than any of the sanitizers that are currently on the list. And so, they're -- and again not knowing anything about it specifically there may be a necessity, as Joe said that, where the, it's efficacy profile is appropriate for some need emerging pathogen or something like that, that maybe it's appropriate to have something in that class in the toolbox, as Angela has mentioned, to fall back on if the

current practices are becoming ineffective.

CHAIR ELA: I think we'll go to Asa but I have some follow ups on that after Asa asks his question. So, go ahead, Asa.

MR. BRADMAN: You know what, Steve, I think this discussion has been really interesting and why don't we hold off on my question. So, go ahead if you're asking about this issue of evaluation.

CHAIR ELA: Sure. I mean, I guess so it brings to mind two questions. One, I mean, you know, in talking about quats versus chlorine materials versus peroxides, do you think -- I mean would we be better to have at least one material from each of those classes in our toolbox? I know Angela mentioned, you know, really that we may need two to three options in the same class.

I mean are there, yes, is it better to go across classes so we can bounce around given the comments on resistance versus persistence or is it and then within those, I mean even though we have alternatives taking Angela's comments of

two to three options within that, I guess I would be kind of interested in your, each of your perspectives on that. I'll choose one of you, Angela.

MR. DURST: Real quickly.

CHAIR ELA: Go ahead.

MR. DURST: It's often not that you need things, multiple things in the same class. It's often that you do need something in a different class because it has a different kill spectrum associated with it.

And so, you know, you might have an organism that is very sensitive to chlorine. So, you haven't got a problem using chlorine based materials but you get something that's resistant to this, somewhat more resistant to that and you need to knock it down with a peroxy or quat or something like that. So, yes, I'll leave it at that.

DR. ANANDAPPA: And just to clarify, Steve, I think I agree with you that you might want one from, one or two from the different classes

not necessarily, and just to clarify, from not to have three of the same type of compound, let's say.

And I'm sure Joe can tell us a lot more about, you know, with his chemistry background. But I feel that that is, you know, giving people options isn't necessarily about, you know, being able to necessarily even think about the same microorganism.

But the idea that having a certain amount of rotation is recommended all, you know, throughout, right. This is a good practice.

But we don't do it with a real rationale unless there is a real, you know, a crisis. And for the crisis situation if you have, a certain, you know, number of tools available what might sometimes happen which is, watch out, is that you have the crisis used too frequently, crisis package used too frequently which isn't effective either.

So, you do have to classify them in such a way where people have a sense of, you know, what should be used. So, a certain amount of recommendations of best practices are necessary,

not only tools in the toolbox.

DR. MORELLI: I would just add, the question, we use the term chlorine let's make sure we understand what we mean by that term chlorine. There are many different antimicrobials that are chlorine based that have different attributes and profiles.

At the same times we know, for example, in the dairy industry there is growing pressure with regards to chlorine residues that may influence the ability to using traditional hypochlorite and chlorine as a food contact sanitizer step.

So, again I mentioned before that there will be evolving regulations. There will be evolving and improving expectations and standards in the food industry that's going to affect what that toolbox is going to look like.

CHAIR ELA: Asa, why don't you go ahead?

MR. BRADMAN: So, I had a couple of questions and a comment. One, I just want to

reiterate some other comments around the importance of occupational impacts, that's a big dimension of these things.

And it's not quite the focus of the discussion today. But, for example, I've worked with farm workers for many years and also working in processing facilities and they complain just bitterly about exposure to bleach and related compounds.

And I've looked at other environments with seafood processing and things like that and again, just really high exposures related to bleach and similar compounds.

And also, when I've tried to look for OSHA and other, you know, like other environmental and occupational monitoring I really didn't see much literature out there on exposure assessment, monitoring in food processing facilities.

And I think, that I think should be just inherent to the use of any material that have, you know, potentially severe respiratory or other effects.

So, again it's been in the chats and comments today. And again, I think that's more of a, maybe a Board issue than what we're hitting on today.

But, you know, I'll give an example though where we have been challenged. Last year or two years ago we voted down silver dihydrogen citrate.

And part of it was that the mixture of uses didn't seem appropriate. And we were also concerned about environmental impact.

At the same time I think that material actually probably had a better occupational profile than some other materials. So, I heard the mention of nanomaterials.

And there is, I think concern in the organic community about these materials. But it sounded like they were being suggested as something we should adopt.

So, that's kind of a combination of comment and question number one. Number two is I also heard mention of an IPM approach.

And it sounds like that's being talked about more in terms of rotating materials and maybe prevention to some extent, but not necessarily managing populations.

And I just, you know, the question I have out there if we apply disinfectant sanitizer that wipes out, you know, every living thing or maybe even we use heat or flame the ultimate oxidizer, do we then open up niches for pathogenic bacteria that wouldn't exist?

And is there an IPM approach to food safety that considers, you know, managing populations rather than just trying to kill what we don't like?

DR. ANANDAPPA: Asa, this is a very complicated area I think you are bringing up and there is probably three fold, three or four fold answers to what you're going after.

The nanomaterials part if we could park it for a little bit. I think one of the important things that you're asking about is can we take kind of a holistic view to the food processing

environment instead of thinking of it as, you know, a target that, where we're trying to use the sanitizer to eliminate or completely eliminate the microflora or the pathogens, right.

And I think this is the connection point again of how we look at the frequency of sanitation and the run time. So, I'm assuming this is inside a facility where you are actually run time, where run time actually matters, right.

But outside of that setting as well there is cleaning that's necessary from the farm to transportation to getting it into the facility. All of those steps require an appropriate cleaning step and the cleaning step if done correctly the sanitizer is not the biggest issue that you should be facing.

And I think that is the big opportunity that you have if you're trying to see it as, you know, do you look at it as IPM? So, IPM which is for pest management is really about exclusion.

And you're really trying to do everything possible to avoid having to use any kind

of, you know, trapping or chemical mechanism or something like that. But you're really trying to use a holistic understanding of the target organism.

Similarly, for bacteria and for pathogens of interest that a sanitizer would be used for, that is the same approach that you're looking for as sanitizer is your last resort for completing eliminating it on the surface of interest.

So, you're not trying to sanitize your entire facility. You're not, that is not the intent.

And so, if you do have to think of that as the intent you're really talking about worst case scenario, right. And so, you do have these risk-based approach that you will have to use when you are thinking about that.

So, I think an IPM approach is really what you're talking about. It's really not IPM for sanitizer. But you might want to call it, you know, a risk-based approach for applying the

sanitizers or applying a disinfectant.

The other part of it you asked about, you know, using silver and things like that. There are some really interesting studies that are showing efficacy.

The bigger issue that we are seeing is the environmental cost of that which may not be a good match and it's really not suitable for certain applications that, you know, are organic.

So, evaluating it may be worth doing. You may not find that you're approving it. But it still is an area to look at and to look at science and kind of drive the science and it's need to back-up and substantiate what's being proposed.

DR. MORELLI: And I think there was a middle question there and I don't know if, Angela, you're the more appropriate person to speak to that. And you were talking about in essence biomes and the influences of sanitizers on the biomes and what that means.

And I thought I saw that that was an element of your presentation, Angela. My

perspective it is an emerging field. We are having the technology now to better map biomes.

And we will learn more as we go along as we leverage that tool that we really didn't have before. So, I don't know, Angela, if you probably have more experience on this topic to discuss.

DR. ANANDAPPA: I love the idea of using biomes and the fact that we can look at this because it's a technology we didn't have years ago. I have seen it being used in places.

I know some facilities that actively are trying to investigate the efficacy of it. There is a lot of caution to be taken in place with that.

It is, you know, you are really talking about manipulating the biological environment that you're working with, right. So, unless you have the budget to frequently monitor what's going on this is a really costly affair right now.

It is worth pursuing for someone who has the ability to do so and a couple of big companies are trying to do that. Not necessarily

organic.

But I think it is an area to look into. I have not seen, let's say I'm not enthusiastic about adopting it across the board. But I do think it's an area to monitor for the future as the technology gets a little bit cheaper for us to be able to monitor.

And also, you know, I would like to see, you know, more people capable of doing the kind of analysis so that you can determine how things are going within the plant.

MR. BRADMAN: Thank you.

CHAIR ELA: I have a question for, Joe, did you want to say something more?

DR. MORELLI: No.

CHAIR ELA: I have a question for the program. And I think I should know this answer but I often can work myself around confusion.

So, I think Bob mentioned that, you know, as long as there is proper like water rinse between using a cleanser, a cleaner or a sanitizer, a processor can pretty well use what they want.

But I wasn't, I guess I'm not entirely clear if that's completely true. I mean, do we, you know, as processors do we have the option to use any cleaner and then rinse?

Can the program answer that or I was thinking we might still have to be somewhat what's approved, but I think I may be wrong? So, can somebody answer that for me?

DR. MORELLI: Yes, maybe, Bob, you're better to answer this. But let me weigh in that I think that a part of your GMPs should be asking and addressing that question of whether you are validating a cleaning process where you will expect to remove any of the residual of the cleaner and the chemistry.

There are organizations that have tried to set up sort of guidance documents, the Global Food Safety Initiative to give folks questions about how do you go through and ask is your cleaning step effectively removed?

Have you validated it? And if you can't characterize it maybe you look to the

chemical properties to make some assessment about the risk of whether it needs to be measured or not and then find out what your true chemical residue risks are and make sure that you're able to monitor for that measure and monitor for that.

So, it's not just -- it shouldn't be a part of the GMP and the HACCP approach to make sure that they can answer that question. Is that reasonable, Bob? Do you agree with that?

MR. DURST: Yes the, you know, all of that should have been addressed between -- in the OSP and approved by the certifier. And I see in the chat, I don't know who the certifier is, but basically they said, yes, anything goes as long as you can get rid of it.

CHAIR ELA: And I guess, Devon or Jared or Jenny, do you have a comment on that?

MR. CLARK: Yes. I mean we, as was kind of alluded to here, you know, we do look to the certifiers to make sure that it's documented in the OSP that, you know, that prevention of contact with prohibited substances is being upheld

in some way.

And then I think both Bob and Joe, I think you both touched on that, that we really do look to the certifiers to have that evaluated and approved in the OSP.

CHAIR ELA: So, what you're saying is really when we get a petition for something what we're really looking at is, I mean, anybody could use anything as long as there is a cleaning step.

So, what we're really approving in a petition is either food contact or that material not removed with a rinse after its applied. Am I, you know, otherwise anybody can use anything. Am I interpreting that right?

MR. DURST: Yes, you're interpreting that right. But the key here is that there is a real difference between cleaning, here is where the differentiation is between cleaners and sanitizers.

Cleaners one does want to completely remove them so there are a lot of rinse steps afterwards. After a sanitizer you don't want to

touch it or rinse it or do something like that because you're at high risk of recontaminating an already clean surface and that's not good. Processors don't want to do that.

CHAIR ELA: Sure, yes. I guess I also had another question. And it kind of comes back to the biofilms that you talked about, Angela.

And I have heard about biofilms. I'm not as familiar with them as I should be, I'm sure. But part of my understanding is that they are incredibly difficult to remove through cleaning and they're also incredibly difficult to reach with sanitizers.

So, what kind of approach are you, I'm going to say recommending for lack of a better word. I know it's a difficult topic. But how do we approach this?

DR. ANANDAPPA: Yes. It's an interesting topic to say the least. But biofilm removal is really, you need to understand that biofilms are multi-layered organisms.

Imagine a hotel. I think this has been

described a few times for people not here of course. But imagine a high rise hotel and your biofilm is what you might see or be able to detect is right, it's the penthouse.

But all those layers, you know, all the floors underneath there is microbes that live there, right. Somewhere in between you have, you know, layers that are not living cells that at which point you might say, you know, you are cleaning from the top.

You can detect that. You are cleaning. And you say okay, well that's not alive.

You know, and it's really difficult to be able to detect if you use ATP and, you know, certain testing methodologies that we have to be able to say it's gone which is a reason, you know, we advocate for using the contact time, using an adequate amount of scrubbing, scrubbing and cleaning versus relying on a sanitizer.

And again, I think, you know, we've said this about, you know, using instruction, the manufacturer's instructions to apply a sanitizer.

But prior to doing any of that if you don't do an appropriate amount of scrubbing and cleaning, like actual cleaning is removing those layers, removing all of the floors that the biofilm is on.

So, identifying the potential areas in which you might have biofilm development is what you need to first figure out and that's a lot of areas in a plant, right. Imagine your shower, right.

There is biofilms all over that shower. But there are certain areas in which you might visibly see it and you might be able to say I need to clean that a little bit more.

That's the same approach that you have to take in the food processing environment where you need to identify those niches and be able to really use a lot of physical force. And then it's only after that, that you can even go with the sanitizer.

But, you know, it's one of the biggest mistakes we tend to make when we don't see something. We don't have, you know, an indicator

that says it's gone.

So, people tend to, you know, forget or they move on and they say that looks good, it looks shiny. But the shiny surface may still have a biofilm.

So, it's really a matter of tricking our own minds to say the cleaning is necessary before we sanitize.

DR. MORELLI: And I would agree with that. And sometimes hygienic design is also important.

A lot of equipment in food facilities are not designed to be effectively cleaned. There are dead ends. There are places.

We do have technologies and ways of improving cleaning. I'll give an example. In the dairy industry spore count is a concern and lab pasteurized counts are quality metrics for milk that farmers are incentivized to penalize based on how they can deliver against those.

We tend to believe, for example, lab pasteurized counts are associated with some of

these biofilms and we have the means to be able to knock those down. Same way with spores to be able to clean up and knock down that biofilm to low enough levels in order for them to do it.

Now, these are not your typical cleaning procedures. They take a little bit more steps and processes to do it. So, they're not something we do as an ongoing cleaning process.

Obviously, we think that's important. I think that Angela is right. It is hard sometimes to know about the biofilms and be able to check to make sure you've eliminated them all.

But there are some cases where microbial metrics that we believe associated with that are a good metric and we are able to demonstrate that we can help promote and remove the biofilms.

CHAIR ELA: So, is there a way to help prevent the formation of them to start with, kind of coming back to the IPM model? And then is there, I mean, you know, I understand the complexity of scrubbing.

But at some point, you know, we all worry if you scrub enough then you've created, you know, microscratches and things on the equipment that in themselves want to harbor those microorganisms.

So, I guess I'm curious, you know, how we approach this without creating more trouble.

DR. ANANDAPPA: Steve, I think you're getting into an area in which the solutions aren't yet compatible with organic production. But good hygienic design really is the solution.

But good hygienic design even in the best circumstances doesn't mean that you're going to avoid complete biofilm formation mostly because, you know, with every single new thing that comes into the environment you have an opportunity for a biofilm to take root and become happy there.

So, you know, proper cleaning is really what it comes down to in any circumstances.

CHAIR ELA: Fair enough. You're not making me any more comfortable as a processor. But I guess the next, the other question I would

have is should we be, I mean really should we be annotating the substances.

We talked mostly about non-food contact surfaces. But, you know, we haven't touched much on food contact.

I guess I would like to, I know those are, Bob said even with food contact surfaces, you know, we don't want to rinse them afterwards because it kind of defeats the purpose or potentially could.

But with, where we have actual food contact and, you know, this is certainly the case in the animal processing world, what do we need to think about in those situations?

MR. DURST: Yes, that's a real good question and it is something that may be part of the evaluation criteria as you're looking at them.

You know, is this going to be -- this material if it's coming up for petition going to be used strictly as a food contact surface sanitizer in which case there is different criteria that one may want to apply to it versus a direct

food contact material.

CHAIR ELA: And so, with direct food contact what would you three say? I mean, obviously there is going to be a lot more questions of absorbance and, you know, surface contact or not.

How would we look at those direct food contact materials versus, I'm going to say food surface contact for lack of a better word?

DR. MORELLI: I want to make sure, Bob, I want to make sure we're clear. For me I think a food contact sanitizer in part is a little bit different than say a food tissue treatment.

I want to make sure we're on the same thing. In those cases we need to get approval through the appropriate government authority.

If it's a food contact sanitizer it goes through the EPA and they will be reviewing and have the capabilities and knowledge base in order to do assessments on the safety of those products to make that decision that it's approved as a no rinse food contact.

The same thing with food treatment. It depends on the nature of that treatment. But that will be under FDA and they will also do the appropriate risk assessment for the chemistries that are approved for food contact.

CHAIR ELA: Agreed that we still often are more restricted in organic. I mean, if you said we just rely on FDA then any of the materials could be used and organics would tend to put a little deeper in that.

I mean obviously it has to be FDA approved. But would we go any further in organics? And if we would go further, how would we do that?

DR. MORELLI: Those are the principles which you want to, you know, make -- guide the decisions. It comes to first principles.

MR. DURST: Well, not just first principles. But it goes back to the OFPA criteria.

You know, what's the toxicity? Does it affect the, you know, are these residues that may have adverse health effects, those sorts of things.

CHAIR ELA: You're not making it any easier for us. Go ahead, Angela.

DR. ANANDAPPA: And of course is it GRAS, right? So, that's one of the things that we always seem to look for.

If it does at any point come into contact with the food we're going to look for, you know, residue limits, limits on that and toxicity levels and of course, you know, do we actually recognize this as a safe product versus a sanitizer alone? So, all of that.

CHAIR ELA: Emily.

MS. OAKLEY: Thank you. So, I'm trying to kind of summarize up in my own little notes what we're talking about here, particularly because what always concerns me because I'm an anal person, is what are the Board's next steps with this topic?

And I don't want this sanitizer panel to be the last that we address it. So, how can we as a Materials Subcommittee in particular who is charged with this work agenda item broadly but

as a Board in general move forward with some of this information?

So, it seems to me and forgive me for sort of brushing through some of the points that we've discussed. But it seems to me some of what the Board needs to be looking at is, first is this base process of adequate cleaning and rinsing happening first and how does this material fit into an adequate system of cleaning and rinsing, assuming that's already taking place as Angela has stressed.

I really appreciate, Angela, the extent to which you've stressed the need for cleansing and rinsing first before sanitation especially for the efficacy of sanitation.

Then sort of asking ourselves the new need that a petition material might be meeting, the need that's not currently being met by the allowed materials. And is that being adequately demonstrated?

Efficacy, how well does the material work for the specific need identified? And

alternatives, what are existing alternatives that we have and are they adequate?

Are there any materials already approved that could be employed in a new use rather than adding a new material? And then rotation. How does this material fit into rotation and/or the need for backup materials?

So, forgive my long reading of my notes. Am I adequately capturing the genesis of this conversation and what we as a Subcommittee might need to look at because I mean, one thing I'll note is that as Board Members we don't typically expect ourselves to get on this Board and think about we're going to be evaluating sanitizers and disinfectants.

We think more in terms of just broader steps. But obviously we understand that sanitizers and disinfectants are needed.

But we don't necessarily have the same criteria for evaluating them as we do perhaps for other materials given that there is a need that is different than, for example, a fertility need

for producing or growing a material.

So, long-winded to just put the question back out there. Am I capturing adequately what we've discussed?

Are there things that I should be putting into this evaluation list or not, evaluation list is not the right term, but overall approach list that we as a Board can start exploring?

DR. MORELLI: I think from my point of view you've captured it well. I would actually, would ask the question. What can you learn from the FDA and EPA that makes some of these assessments for the food contacts?

How do they balance these decisions on these and how could you bring some of their thinking in the way they approach that risk balance into your processes and then with your first principles use that to guide how you make your decisions?

I think they are the ones who are dealing with these challenging questions the most often.

DR. ANANDAPPA: I agree with Joe and I agree with Emily. Emily, you did a good job of summarizing that process of how we might go about that.

But I agree with the fact that we do have agencies who are doing a lot of work in this area and that it really may be very appropriate to look to them and how they go through the risk thinking of that as well.

MR. DURST: Yes. And I agree that you captured most of this.

The one thing that one would expect is that if you've got a TR for a particular or if you had a particular material petition and there was a TR generated that the information and assessment from EPA or FDA, the appropriate agencies there would be captured in that TR.

But the problem is that they're certainly looking at different criteria than the organic world is. And, you know, adding additional OFPA criteria to that assessment of what comes down from EPA, USDA or FDA has to be captured

somehow.

And I think goes back to some of the earlier discussions about, you know, some kind of decision tree or additional questions that may be appropriate to ask about these materials.

MS. OAKLEY: Steve, would it be okay to follow up?

CHAIR ELA: You have a follow up, Emily?

MS. OAKLEY: Yes.

CHAIR ELA: Go for it.

MS. OAKLEY: Yes. So, I think actually, Bob, you just captured in a nutshell the Board's conundrum that, you know, while these materials may be necessary and while they may be approved through other regulatory processes and deemed safe and adequate we also have these additional evaluation criteria within the organic system that we are trying to evaluate materials on.

And I think, you know, if there is anything to the stakeholder community that the

Board can communicate it is just the challenge of trying to weigh those different needs, both the organic needs and then the food safety needs.

And trying to find that balance has for me been very challenging over the past, you know, almost five years now.

MR. DURST: And you've got a situation where when you get a TR or you're looking at a material you're looking at it as a single material and out of the context of the whole system that's going on.

And it's been pointed out a number of times during our conversation today, one really needs to take a bigger look at it and maybe, you know, something like a TR-like thing addressing sanitizers as a generic rather than this particular compound or that particular compound somehow needs to be added to the mix of things so that you have, and maybe that's part of the decision tree kind of thing.

CHAIR ELA: Sue has a question. Sue, we're not hearing you.

MS. BAIRD: Why would that not surprise all of us? It's my mode of operation. This has been a great conversation and I know the one that the materials have struggled with.

I think I understood, Dr. Joe, you to say that we are getting improvements in materials and that you're working on those all the time. And my concern would be that those of us who do the evaluations to the OFPA would say well that's got the same base chemical as the other one.

So, we might not need to add it because we've already got another, we've got something that's got that base. And by making that decision I think I'm hearing you say that we may be losing some new technology that we, as the organic manufacturing facilities would really perhaps need.

And maybe I'm oversimplifying. Can you clarify that?

DR. MORELLI: I think you're absolutely right. You know, as new technologies become available and perhaps that are meeting first

principles and meeting other attributes for improvement it's not just chemistry.

In some cases it may be about compliance, making sure they're doing things right at the right levels.

And so, there are the potential for innovations that, yes, if you look at categorical from a chemistry standpoint and you did not consider it from what it does holistically to improve food safety or the other relevant attributes, yes, you could be missing out on slowing down the opportunity for innovation to be integrated to the organic area. So, I agree with you 100 percent.

MS. BAIRD: Thank you.

DR. MORELLI: And let's be honest. There is a lot of different antimicrobials on the market today.

You're wrestling with how do you make this decision? Well, it is a complicated topic and I think that's quite relevant when you look at the diversity of antimicrobials in use today.

These are tough topics to work through. We often have to provide a variety of different antimicrobials to meet our customer's needs in food safety, food quality, how it's going to be applied, and cost.

And so, that often represents a variety of things that are all this balancing act. So, it's not -- don't be surprised that this isn't -- this is a hard decision because it's a hard decision.

MS. BAIRD: Right. One follow up, Steve?

CHAIR ELA: Yes, go ahead. Yes, of course.

MS. BAIRD: As we're seeing microbes in teeniest little critters as they are who do a lot of transformation, I'm really -- we do need an arsenal. One type is just not enough.

Just a comment. I've worked in the turkey processing business as a QA manager for quite a while as some of you know my past before I ever became an organic inspector.

And I think, Joe, and Doctor Joe, Bob and Doctor Joe may have taught that class back in what 2000 when we took those classes back then struggling about these same issues. So, it's not something new.

But I would be -- I just would caution us as NOSB to be cognizant that microbes are changing. They are transforming and we need to the tools to be able to change along with them.

DR. MORELLI: And as you know, Sue, so are the standards, for example, of managing and microbial control for salmonella and campylobacter. Those conditions are changing.

Customers are going to need new solutions. And that's through the whole food supply chain.

MS. BAIRD: Right, absolutely. Thank you.

MR. DURST: And there are other challenges too with just new processing technology that comes along.

The one that comes to mind right up

front is hydro-coolers and the possibility of contaminating huge batches of stuff but the -- if treated properly and with the right materials has the opportunity to greatly improve the food safety of fresh greens.

MS. BAIRD: Right.

MR. DURST: Yes, challenging.

MS. BAIRD: It is. Thank you.

CHAIR ELA: I know, you know, this has been great. We often get comments back from our stakeholders that they're very concerned that we're going to take away sanitizers.

We also get comments that, you know, we should have a comprehensive review of sanitizers. You know, I think this certainly brings out and, you know, I don't think it was really ever the intention of the Board to take away sanitizers at all because we recognize the need for food safety in organics, just as you said, Bob.

But I think, you know, this is -- as a comprehensive review this is a good start and it shows the complexity which I think we already

realized. But it adds to it.

But I think your comments on cleaning and such are, in some ways we already knew that. In some ways it's always good to reiterate the obvious because sometimes those get forgotten and we all want magic bullets.

So, are there any last questions from the Board? I'm not seeing any. I think you've given us a lot of food for thought. Dave, do you want to say anything?

MR. MORTENSEN: Yes. I just wanted to thank the panelists for the time they took with us.

I also found Emily's summary -- I was sitting here thinking of Angela's decision tree suggestion and a number of other comments that were made throughout the course of the afternoon. I think all of it was really helpful.

It would be really nice for the Board and for our work, the work of the Board on behalf of the organic community to somehow forge a more dynamic relationship with EPA is I think something

that's come up here and on the discussion of inerts a couple of weeks ago.

But this has been enormously helpful. I think a path forward is clearer than it was before the panel and that's a testament to the quality of the presentations and the quality of the question and answer. So, we thank you very much for the time you've taken.

I am sure that the Board will be seeking input as we try to refine a decision framework that helps with our process. So, we'll be reaching back out to you all and we do really thank you for the expertise you shared with us.

CHAIR ELA: Yes, I would very much echo that. It was, you know, say like the silver petition that we received which we ultimately did turn down and a lot of it was based on downstream effects.

I mean, what you said made me feel like our process at least on that was good. We certainly struggled with it a lot and the downstream effects were one of our main concerns

for ultimately turning it down.

But we did see that, you know, that was a different class and that, you know, some of those things could be very valuable.

I just, yes, I personally want to thank you three for taking the time. I know it is no small amount of work to prepare for one of these and it's not just the three hours of panel discussion but it's the background and pulling together slides and putting your slides together.

So, thank you very much for that. I think you've given us, like the decision tree thought of how do we approach these IPM thoughts, those are all great ideas. Jenny, do you want to say anything?

DR. TUCKER: I wanted to add my thanks to the panelists and also to Dave and you, Steve, for facilitating. This was very, very interesting.

And so, I encourage folks if you show camera we can give a Zoom thank you if you're out there still watching we wave two hands in front

of the camera to say thank you. And we genuinely appreciate your being here.

And so, Steve, I think our last thing is for you to adjourn the fall meeting. Do you have your gavel?

CHAIR ELA: No gavel. I will go out and get a tree limb or something from one of our trees. But, yes, after public comments and three days of Board meetings and a day of sanitizers we will officially adjourn and call this fall meeting closed.

So, thank you, everybody. We will regather in the spring. Take care.

(Whereupon, the above-entitled matter went off the record at 5:08 p.m.)