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, NOSB Advisory Board Specialist, National Organic Program
DAVID GLASGOW, Associate Deputy Administrator, National Organic Program
DEVON PATTILLO, Materials Specialist, National Organic Program
ANGELYQUE PEGUES, Management Analyst, National Organic Program
JENNIFER TUCKER, Ph.D., Deputy Administrator, National Organic Program; Designated Federal Official
SHANNON NALLY YANESSA, Assistant Director, Standards Division, National Organic Program
PENNY ZUCK, Accreditation Manager, National Organic Program
MS. ARSENAULT: Welcome. You are listening to the first public comment webinar for the Board meeting, the National Organic Standards Board meeting. So if you logged onto the wrong place and you don't want to be here, now is your time to leave.

So welcome. We are having two public comment webinars this week, and then the actual Board meeting will be next week. So you're welcome to join us, we'll add the access information to the website soon for the Board meeting portion of the meeting.

If you're online right now, you should see an instruction slide on the screen. Hopefully you can see that. It's a, has login information. And if you -- one second, I am getting a reminder here to start the recording. Thank you, Devon.

So if you're online you should see the instruction slide, and if you're only on the phone with us, I'm just going to summarize a little bit of what's on the instruction slide.

If you ever have technical problems,
you can go to Zoom.com and click the support button, which should be in the upper righthand corner, and the contact us button. And you can usually call them or live chat with them, with the caveat that Zoom is really busy these days, just so you know.

A transcriptionist is on the line with us. She's transcribing both the webinars and will be transcribing the meeting next week as well. The transcript will be ready -- a full transcript will be posted to the NOP website and will be available about two weeks after the Board meeting concludes. We have to make it accessible, by federal law, before we can post that document, so it delays it a little bit.

So for today, we're going to ask that people please mute your mic until it's your turn to talk. And then we can unmute you from our end and probably better that we do that. And if you're unmuting yourself, we're unmuting you, we're just going to toggle back and forth all day long. So but we'll figure out, I promise.

If you're on a phone that does not have a mute button, you can hit star 6, and that works like a toggle. So star 6 to mute, star 6 to unmute,
in case we do have issues.

Speakers had to sign up to address the Board, and so we're going to call on them when it's their turn to speak. And Steve Ela, the Board Chair, will be calling on speakers for their testimony. And only the 15 NOSB members who are on the line with us are allowed to ask questions of a speaker. So no audience questions during the webinar portion, or the meeting actually.

So, and we ask that speakers please state your name and affiliation clearly at the start of your comments to ensure that the transcriptionist can hear and associate the correct name with your comment.

We are timing people today. For you regulars, you know we always use a comment timer. Commenters have three minutes. And in about ten seconds, I'm going to demonstrate to you what the speaker timer sounds like. Hopefully you can hear it well through the speakers, it's pretty loud. And at the end of your three minutes, the timer will beep.

So hopefully everyone can hear that all right. And that will indicate the end of your
comment, and we ask that you just please finish your sentence, and then Steve Ela will, the Board Chair will open it up to questions from Board members.

Now I'm going to turn the mic over to the National Organic Program's Deputy Administrator, Jennifer Tucker. Jenny. Hopefully your mic is unmuted, let me --

DR. TUCKER: Okay, good morning, everybody, or afternoon, depending on where you are. Michelle, can you hear me?

MS. ARSENAULT: We can hear you, yes, thank you.

DR. TUCKER: Great. So first of all, thank you, Michelle, that was a great kickoff. Hi, everybody, this is Jenny Tucker, Deputy Administrator of the National Organic Program. Welcome to all our National Organic Standards Board members. I'd particularly like to acknowledge our five new Board members, who are actually beginning their very first public meeting with us today.

So that's Nate Powell-Palm, Kimberly Huseman, Gerald D'Amore, Mindee Jeffery, and Wood Turner. So welcome.
And to all of our Board members, we thank you for your insights, your engagement, and your flexibility as we identified new ways to connect for this meeting.

To our public commenters today, thank you as well. The public comment process is a vital part of the Board's and the Program's work. These webinars have become a standard part of the NOSB meeting over the past few years, or smoothing the transition this time. We thank all of you for signing up to have your voices heard.

I also want to thank our audience, there are a lot of you out there, and you always serve as important witnesses to this public meeting process, and we're grateful that you are here.

This webinar today opens a series of virtual webinars that will occur over four days through next Thursday, April 30. Meeting access information for all meeting segments will be posted on the NOSB meeting page on the NOSB -- on the AMS website. And transcripts for all segments will be posted once they are completed.

This meeting, like 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. I will act as the 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, Michelle Arsenault, Devon Pattillo, Shannon Nally Yanessa, and David Glasgow.

I also want to thank Steve Ela, Chair of the Board, who's going to lead the webinar. Steve, you are a wonderfully collaborative partner, and I am truly grateful.

I'm now going to hand off the mic to Shannon Nally Yanessa, who is our Standards Division Director, who's going to do a roll call of NOSB members and NOP staff. So thank you very much to all.

MS. NALLY YANESSA: Thank you. Just wanted to do a sound check. Michelle, can you hear me?

MS. ARSENAULT: Yup, I can hear you, thank you.

MS. NALLY YANESSA: Great, okay, thank
MS. ARSENAULT: And I just wanted to remind Board members to unmute themselves so Shannon can hear you when she's taking roll call. And as a reminder, you can just, if you're muted, you can just hold the space bar down to talk and then release it when you're done.

Thanks, Shannon.

MS. NALLY YANESSA: Sure, you're welcome. Good afternoon, all. So I will start with the Board members in alphabetical order. Sue Baird.

MS. BAIRD: Yes, I'm here.

MS. NALLY YANESSA: Thank you. Asa Bradman.

MS. ARSENAULT: Asa, if you're talking, we can't hear you. But I see you on there.

MS. NALLY YANESSA: Okay, we'll keep going then. Jesse Buie.

MR. BUIE: Present.

MS. NALLY YANESSA: Thank you. Jerry D'Amore.

MR. D'AMORE: Here as well.

MS. NALLY YANESSA: Thank you. Steve
MR. ELA: I am here.

MS. NALLY YANESSA: Great, thank you.

Rick Greenwood.

MS. ARSENAULT: Rick is on the line as well.


MS. HUSEMAN: Hello, I'm present.

MS. NALLY YANESSA: Thank you. Mindee Jeffery.

MS. JEFFERY: Good morning, everyone.

MS. NALLY YANESSA: Good morning.

Dave Mortensen.

MS. ARSENAULT: Dave is not going to be with us until later.

MS. NALLY YANESSA: He's calling in, okay.

MS. ARSENAULT: Thank you.

MS. NALLY YANESSA: Yeah. Emily Oakley.

MS. OAKLEY: Present.

MS. NALLY YANESSA: Thank you. Nate Powell-Palm.
MR. POWELL-PALM: Good morning, present.

MS. NALLY YANESSA: Good morning.

Scott Rice.

MR. RICE: Good morning, present.


MS. ARSENAULT: I'm not seeing A-Dae logged in at the moment. Sorry, thank you, Shannon.

MS. NALLY YANESSA: Okay. Dan Seitz.

DR. SEITZ: I'm present.

MS. NALLY YANESSA: Thank you, and Wood Turner.

MR. TURNER: Good morning, I'm here.

MS. NALLY YANESSA: Good morning. Thank you. And now I'm going to go over the National Organic Program staff. Michelle Arsenault.

MS. ARSENAULT: Here.

MS. NALLY YANESSA: Jennifer Tucker.

DR. TUCKER: Present.

MS. NALLY YANESSA: David Glasgow.

MR. GLASGOW: I'm here.
MS. NALLY YANESSA: Devon Pattillo.

MR. PATTILLO: Present, thanks.

MS. NALLY YANESSA: Angelyque Pegues.

MS. PEGUES: I'm here.

MS. NALLY YANESSA: And Penny Zuck.

MS. ZUCK: Present.

MS. NALLY YANESSA: All right, thank you all. And now I'm going to hand the mic over to Steve Ela, who is the Chair --

MR. ELA: Thank you.

MS. NALLY YANESSA: Of the National Organic Standards Board.

MR. ELA: Great, thank you very much, Shannon and Jenny. I'm assuming you all can hear me. Welcome, everybody, to this public comment webinar. As we start I want to just say a couple quick things.

I want thank everybody for being willing to both do this webinar, like we have in the past, for all the oral commenters that were supposed to appear in person for being willing to do this via webinar as well.

We really appreciate all the public comments. And we know it's been a bit of a scramble
to move this from an in-person meeting to a virtual meeting. But I particularly want to thank the NOP staff for really working to make this work.

And of course all of you as our stakeholders for giving us input and your public comments, or either written or oral. We know it’s a very crazy time where many people have lots of competing demands other than the NOSB, and so all the comments are greatly appreciated.

I also really want to recognize the new members. This is a difficult way for them to start where they don't actually get to be in person. But again, Jerry D'Amore, Kim Huseman, Mindee Jeffery, Nate Powell-Palm, and Wood Turner, we appreciate having you on the Board and we're excited to have your input.

With that, I want to just note that these webinars are, follow our public comment policy from our PPM manual. In general, the way we're going to work this is these will only be speakers who signed up during our registration period.

I will be -- call upon you in the order of the schedule. Each speaker will have three
minutes, and we will have time for questions from the NOSB members. And I will take those questions in order as best as I can.

If any of the Board members do not have their hand up or I can't see it, please feel free to jump in and note that you want to ask a question.

Everyone that is giving a comment must give their name and affiliation for the record. We do not allow for proxy speech, proxy speakers. And of particular importance as always, any individuals providing public comment shall refrain from making any personal attacks or remarks that might impugn the character of any individual.

If that does happen, I will jump in and ask to continue without that. And if it happens again, we will cut you off. So we want to keep this very up and up and with great respect for everybody that is commenting.

I will announce the speaker coming up and the next speaker after that so that the, everybody can be ready, and it will also give our staff time to look up the phone numbers and have people ready as we go down the list.

As Michelle mentioned, each speaker has
three minutes, and the timer will start when the speaker begins. When the timer goes off, if you would please complete your sentence and end your comment when you hear the timer. And then the Board members will indicate to me if they have questions and I will recognize them in turn. Only NOSB members are allowed to ask questions.

So with that, are there any questions from the Board? All right, if I don't -- hearing none, our first speaker will be Philip LaRocca, and we will have Peter Nell following that, and then Lynn Coody. So we will start with Philip LaRocca.

Phil, could you please state your name and affiliation, and then we will start your three minutes. And Phil, we're not hearing you, so if you're on mute, you will have to unmute yourself.

Still not hearing you.

MS. ARSENAULT: So I can un --

MR. LAROCCA: I think I got it. Can you hear me?

MR. ELA: There we are. We can now, thank you, Phil. Please state your name and affiliation and then continue.
MR. LAROCCA: Okay, my name is Phil LaRocca, I'm the owner and winemaker of LaRocca Vineyards. I'm also the Chairman of the Board for CCOF, the California Certified Organic Farmers. Also the Vice Chair of COPAC, California Organic Product Advisory Committee.

This is my 47th year as an organic farmer. I am very comfortable working in dirt, I am not at all comfortable working with computers. So bear with -- that's why I had a hard time unmuting myself.

Anyway, those on the West Coast, good morning, those on the East Coast, I guess it's good afternoon. I shall be brief with my comments because dealing with this is stressing me out.

I support the rule that a three-year transition period after the use of a prohibited substance in any crop or livestock production, including land, under containers inside greenhouses if a prohibited substance has been used. Talked about that for a while.

Also encouraging strengthening the requirements for increased days on pasture and the percentage of pasture required for dairy, other
livestock.

And three, maintain vigilance on export fraud as well as all organic production. We must maintain the integrity of the organic seal.

With that said, I would like to say thank you to the NOP, the NOSB, all organic producers, handlers, processors, consumers. We are all involved in this organic culture, and I find this to be vital to the wealth and health of our planet. As any farmer, whether you're an organic farmer or not, recognizes that weak plants are those that attract disease and pests. So it is with our planet and our bodies.

As we face this major health crisis, it is important that we as a culture, even though we may have our differences in our approach, but in the end, the integrity of what we do as members of this organic community should always win out.

It is my absolute belief that our hope for a healthy world rests in the production and consumption of organic food. Thank you.

MR. ELA: Thank you, Phil. And I just want to note that A-Dae is on the line and we had, she is unable to mute yourself. So A-Dae, we do
know you're there and we will work on that, as well as Asa. Are there questions for Philip? I see Emily has a question.

MS. OAKLEY: Thank you, Phil. I appreciate your comments on the three-year transition period, and I had a question. This has turned out to be a much more complicated issue than I had originally realized.

I was wondering if you're aware of any transplant or seedling production facilities on the West Coast or in California in particular that might be transitioning or using the same facility for organic and conventional seedling production, either simultaneously or shortly transitioning from conventional to organic, or back and forth.

MR. LAROCCA: I have heard that that was taking place, but I don't have any factual evidence of anybody doing it. We talked about this in CCOF, and as far as we know, none of our certified members that grow in containers have done that.

So we are aware of it and we've put that out to all our members that we are keeping a vigilant eye on that.

So as far as I know, we do not have any
of our members practicing that at this time.

MS. OAKLEY: Thank you.

MR. ELA: Are there other Board members with questions? I don't see any. So if you do have a question, please jump in.

Philip, I do have one question personally, and so I just want to be very clear, you support a three-year transition for greenhouses pretty much just across the board, is that what you're saying?

MR. LAROCCA: Yeah, I do, we -- I've had a lot of feedback on this where one of the arguments is that, you know, as a longtime organic farmer, if we were to transition onto a regular farm, it's a three-year period.

And a lot of these farmers that are going through this three-year period feel cheated that somebody can just jump in, put a greenhouse on land that, say, had a prohibited material on it. And because they're growing in a container in a greenhouse, that they can automatically receive certification.

A, I don't believe that that should take place for the fact that the prohibited material
is put on. And B, it's not fair for farmers that are growing on ground that have to wait the three-year period and other growers don't.

MR. ELA: Any other questions? All right, thank you, Philip, we do appreciate your comment.

Next up is Peter Nell, and after that we'll have Lynn Coody, and then Peggy Miars.

Peter, if you'd state your name and affiliation, you're up.

MR. NELL: Good morning, my name is Peter Nell, and I work for California Certified Organic Farmers, CCOF. CCOF represents over 4,000 certified organic farmers, processor/handlers, certified organic businesses, etc., at the local, state and federal level.

We are aware that a petition for novel ammonia products is forthcoming and may be -- may have already been submitted to the National Organic Program for NOSB's review. We encourage the Board to prioritize this review, this petition.

CCOF supports the goal of protecting marine species, including fish and marine materials. We support the re-listing of aquatic
plant extracts to the National List of Allowed and Prohibited Substances.

As noted in our written comments, over 880 of our certified organic farmers list aquatic plant extracts as plant or soil amendments in their organic system plans. Aquatic plant extracts have been used by organic farmers for decades, and CCOF is unaware of commercially available alternatives for these products.

Should the Board recommend de-listing aquatic plant extracts in the fall, a significant phase-in period would be necessary so that organic farmers could make substantial adjustments to their longstanding fertility management plans.

Similarly, over 1,000 CCOF members list liquid fish products in their OSPs. As noted in our previous written comments, CCOF appreciates NOSB for taking the time to consider the impacts of non-synthetic inputs used in organic production. These materials sometimes are not given the same attention synthetic materials are given as they go through the sunset review process and other review.

However, the technical report for
liquid fish products notes that there are no species of wild native fish harvested exclusively for the use of liquid fish products. Therefore, the question remains on whether an updated annotation or additional requirement on liquid fish products is warranted for its use in organic crop production.

Lastly, I would like to support NOSB's continued efforts of creating and updating the research priorities. Those are an important tool for our universities and other research centers.

And I'd like to welcome the new members of the Board. Thank you, new members, and not-as-new, for doing complex, sometimes difficult work on behalf of the organic community and ensuring we have a robust system in place. Thanks.

MS. ARSENAULT: Steve, if you're trying to -- I won't try to unmute you, I'll let you try to do it yourself. But if you're talking, we can't hear you yet. Thanks, Peter.

We are having a little bit of a delay issue. Steve, it looks like you're unmuted.

DR. TUCKER: So until Steve comes on, I could invite, as the DFO, questions from Board
members.

MR. BRADMAN: This is Asa, can you hear me?

MS. ARSENAULT: We can hear you and see you, Asa.

MR. ELA: I'm sorry, Asa.

MR. BRADMAN: I just wanted to comment on the statement about the ammonia product. And yes, there is a material that's been petitioned aquatic. And that's kind of right now cycling through the review process.

And there'll be, you know, of course probably a discussion document and proposal in time for public comment and review. But we're kind of in the middle of reviewing that document now.

MR. ELA: Thank you, Asa. Sorry about toggling my mute in the wrong direction before this. Thank you for jumping in, Jenny. Any other questions from the Board?

All right, thank you very much, Peter. Lynn Coody is next, followed by Peggy Miars, sorry, Peggy, and Aimee Simpson.

So Lynn, we are ready for you. Please state your name and affiliation. And Lynn, we're
not hearing you yet. Lynn, still not hearing you.

MS. COODY: Hi, can you hear me now?

MR. ELA: We've got you, yeah, continue please.

MS. COODY: Okay, great, thanks. Hi, this is Lynn Coody, and I'll just say for the transcriptionist, my name is spelled with two O's, C-O-O-D-Y. And I'm presenting comments for Organic Produce Wholesalers Coalition. OPWC is seven businesses that distribute fresh organic produce across the United States and internationally.

Sunset materials. OPWC submitted written comments on 11 sunset materials. Our comments include information about the use of these materials in growing fruits and vegetables, as well as comments from many growers about their need for these materials to produce specific crops.

Paper production needs. OPWC strongly supports the Crop Subcommittee's efforts to resolve differences in certifiers' approval of paper plant pots. Although we agree with this direction of the Subcommittee's proposal, OPWC suggests some technical clarifications to
proactively address issues related to review of brand name products within this category.

The proposal focuses primarily on the source of the fibers used to manufacture these products. The Subcommittee chose not to include a biodegradability standard in its proposal, due to concerns about the time and costs needed for testing to that standard.

However, the listing motion for the definition of paper-based crop planting aids does use the words degrade into the soil. Our concern is that this definition would result in the application of the ASTM standard for biodegradation when evaluating paper planting aids.

We suggest a revision in line with the Subcommittee's intent to avoid testing for biodegradability. We also found the listing motion for the national list was not in line with the findings of the technical report with regard to glossy ink.

The Subcommittee proposed using the same text used in the listing for newspaper, but we think it's important to correct an error in the
newspaper listing when applied to paper or planting aids, because the planting aids are likely to be reviewed more stringently than newspaper.

Biodegradable, bio-based mulch. OPWC's grower questionnaire yielded numerous responses about this material. Growers commented, coalesced around two points. First, plastic mulch is a very important weed control tool for horticultural crops. And second, there was a strong interest in using biodegradable plastic mulch.

The goal of NOSB's recommendation was to create progressive policy to promote the use of a new type of plastic mulch. However, during implementation the Board's recommendation failed to move growers toward either biodegradable or bio-based sources of plastic mulch film.

Our written comments provide a roadmap for regulating the source materials used in biodegradable mulches in an incremental fashion in order to provide better alternatives for biodegradable plastic mulch films in the near term, and to signal that there is market interest for mulch films containing increasingly higher
percentages of bio-based content.

OPWC appreciates the flexibility from the Board and the NOP staff in organizing this online meeting so the important work of regulating the organic trade is not interrupted even by a worldwide pandemic. Thanks again.

MR. ELA: Thank you, Lynn. And I will show throughout this webinar my infinite ability to mispronounce names. So I know most people by their first name, and suddenly I'm looking at last names going hmm. So I apologize, and I will apologize in advance to everyone else, you will not be alone.

Are there questions from the Board for Lynn? I don't see any questions. Lynn, I have one question with the biodegradable mulch. We've struggled with having, being able to feel comfortable that the mulch will degrade in all environments.

And I think that is, that's been one issue, and it kind of comes back with the paper production aid issue as well, of really knowing like, for example, in a dry, arid environment will those materials degrade similar to a wet, humid
environment. Do you have any thoughts of how we should address that?

MS. COODY: Well, I think that the strongest tool for addressing it is getting started on evaluating the different types of biodegradable mulch films that are currently available on the market and seeing which have -- well, kind of looking at different types of plastic and the amount of biodegradability that is possible.

And as far as your question about certification and the opportunity for reviewing and looking at things in a specific environment, I think that certification has the tools to do that. And our comments provided some ideas about how you could address that based on different uses.

So the worst, the most difficult situation is when a biodegradable mulch is used repeatedly, because it doesn't necessarily give you a chance to evaluate which plastic is from which year. But we suggested a tool for using photographs to document the amount of biodegradability.

So I think with some, the certifiers putting their heads together could figure out ways
to do that. And I think it really has to be an on-the-ground, individual approach based on microclimates and actually the way that farmers are managing their specific soils.

I don't see that there's going to be a universal approach to that that will work in all environments and in all ways of handling soil, individual soils by individual farmers.

MR. ELA: So as a followup, you're saying rather than the Board trying to assess that all the materials that we think we would allow would break down in all environments, we would allow, we would kind of push it to the certifiers to make sure if these biodegradable materials are being used, they're not accumulating in the soil.

MS. COODY: Yeah, I think that's the only way. I think it really has to be looked at individually. And I think what the Board should regulate is the ability to increase biodegradability over time.

Even if it's not perfect when you first start, you could have papers from the NOP after the NOSB has made its rulings, the NOP could explain different ways to regulate from the certifiers'
point of view, and also to manage from the growers' point of view as we go on.

It's kind of a learning curve, but I feel like we need to take a step and then take the next step and the next step after that. Which I think is doable through regulations through the NOP and instructions to certifiers.

MR. ELA: Great, thank you so much for those comments, and thank you for the comments on the paper production aids. I thought your thoughts were very -- made me think. And we may have not quite gotten some of the wording right, but we'll certainly talk about that. Really appreciate your comments.

MS. COODY: Thanks, Steve.

MR. ELA: Anybody else? All right, with that, we will move on to Peggy Miars, and then we will have Aimee Simpson, and then Jay Feldman after that.

Peggy, could you state your name and affiliation please. Peggy, we're not hearing you, so. Still not hearing you.

MS. MIARS: Can you hear me now?

MR. ELA: Yes, now we have you so.
MS. MIARS: Okay.

MR. ELA: Yup, you're -- please continue.

MS. MIARS: Good morning from Oregon.

Okay, my name is Peggy Miars, I'm the Executive Director and CEO of OMRI, the Organic Materials Review Institute. Today I'll comment on EPA List 4, inerts of minimal concern.

As we know, in 2015, the NOSB recommended a change to annotation language at 205.601(m) and 205.603(e) to reference the EPA's Safer Chemical Ingredients List, or SCIL, instead of EPA List 4.

Five years have passed, and we're in the same situation, so I'll repeat part of OMRI's comments from 2015, in which we said the Subcommittee stated the proposal that, quote, There is a lot of similarity between the Safer Chemical Ingredients List and the review criteria set by OFPA, end quote.

OMRI went on to suggest that it would be helpful for a final recommendation to include a specific plan of how the NOSB will address these gaps, and a rationale for moving forward with a
recommendation prior to the gaps being addressed. Plans such as this will give transparency and integrity to the recommendation.

Now I'll highlight and expand on some of the data that OMRI provided in our written comments. Comparing OMRI data from March 2020 to OMRI's 2011 data that we previously submitted, we see that between 2011 and 2020, the number of distinct, inert ingredients used in OMRI-listed products increased from 189 to 365. That's an increase of 176, or 93%.

The number of distinct inert ingredients in OMRI-listed products that do appear on the SCIL or the 25(b) list increased from 130 to 153. That's an increase of 23, or 17%. The number of distinct, inert ingredients in OMRI-listed products that do not appear on the SCIL or the 25(b) list increased from 59 to 212. That's an increase of 153, or 259%.

Replacing the allowance for EPA List 4 inerts with the SCIL and 25(b) list would lead to the prohibition of some, but not all, currently allowed pesticides in the OMRI products list.

If the SCIL and 25(b) list replace List
4, certifiers and material review organizations need clear and specific language to guide them in material review, and/or an MOU should be created between NOP and EPA so that OFPA criteria are applied before a material on SCIL is given approval for organic use.

Thank you for your ongoing work to uphold organic integrity, and I hope to see you in person at a fall meeting.

MR. ELA: Thank you, Peggy. Are there questions from the Board.

MR. BRADMAN: Asa, sorry, can you hear me?

MR. ELA: Yes, go ahead, Asa.

MR. BRADMAN: Okay, thank you. Apologies, I don't have all the cues here and the mute button is a little hard to reach sometimes.

Peggy, I have a couple of questions. One, are there any substances on the EPA List 4 right now that should be prohibited? I know there's strong feelings about some of them.

And then two, I just want to put out there in principle, I think all inert ingredients and all ingredients in any formulation should be
publically available. I'm curious to know what kinds of inerts are being used that are not on 25(b), the 25(b) list.

And also even within the 25(b) list, there's materials there that are potentially respiratory irritants or other concerns. They might have low acute toxicity, but I think that any user of a material should know what's in the material that's being used. And I don't know if OMRI has a position on that, but I'd be curious to hear your response.

MS. MIARS: Yes, thank you for those questions. So the first question was whether there are any substances on List 4 that should be prohibited. And my response to that is that OMRI doesn't take positions on whether to allow a material or not. We take our cue from the NOP and what is -- what they say is allowed will be allowed.

We don't take a position on that.

Let's see, you asked a question what kind of inerts are in I think in OMRI-listed products that are not on 25(b), and that I don't have with me, but we could find out that information.
And then your last comment/question about whether inert ingredients should be publically available, again, OMRI doesn't take a position on that. We do reviews according to the organic standards. So we don't take a position on that.

The one comment that I will make, since I do interact internationally, is my understanding is that the EU doesn't really pay attention to inerts, which is quite surprising to me.

MR. BRADMAN: Thank you.

MS. MIARS: You're welcome.

MR. ELA: Any other questions for Peggy from the Board? Thank you very much, Peggy, we do appreciate it.

Next we have Aimee Simpson, followed by Jay Feldman and Kiki Hubbard.

Aimee, you have the floor. Could you please state your name and affiliation.

MS. SIMPSON: Good morning from Washington. Yes, my name is Aimee Simpson, and I'm the Director of Advocacy and Product Sustainability for the PCC Community Markets, the largest grocery cooperative in the country, based
in Seattle, Washington area.

We have experienced in the past six weeks unprecedented challenges across the organic community and food supply chain. Grocery workers, farmers, farm workers, processors, transportation crews, delivery men and women, and many, many more have been thrust into the front lines against COVID-19.

We've been tasked with the job of keeping society fed, and we've been deemed essential, a fact that many of us knew but had never contemplated in a manner like this one facing us now. And yet, it is a term that lies at the very core of the organic principles.

PCC has always prided itself on prioritizing organic, and whenever possible, local producers. We've done this to support a better way of growing and providing food for our members and shoppers, a way that is safer for farm workers, better for the environment, and in our minds essential for the future of our world and food supply.

Well, never has this essentiality been more evident, because it is the organic, local,
small, and mid-sized producers that under the circumstances of COVID-19 have proven their ability to adapt and continue to provide supplies during these challenging times.

It is these producers that have kept our shelves filled with eggs when other grocers had none, it is our organic distributors that delivered without fail the produce not only to our stores, but also to help our struggling food banks across the region.

It is also the organic farmers that supply local farmers markets that we worked with to help create new food supply chains when our large scale national systems were failing and no longer could provide the food necessary to support our grocery rescue partners.

Unfortunately, we all know the economic strain of this pandemic is the second wave, one that poses almost a greater threat than the pandemic itself to the small and mid-sized organic farmers, distributors, and suppliers that have become the lifeline to our communities, the ones that have embodied true essentiality.

We recognize that given the stresses
of the times, there may be calls for relaxed enforcement, less regulation, but now more than ever we must support the organic producers that uphold the very highest of organic standards.

They cannot be undercut by fraudulent imports, origin-of-livestock loopholes, poor pasturing enforcement, and practices that fail to build soil and uphold basic organic principles such as cover cropping and biodiversity. They must be supported by making the organic label as strong and consistent as it can be.

I want to thank the National Organic Program and Board for adapting to the demands of these times and continuing to provide us with the opportunity to voice our support for organic. We are grateful for your dedication and hard work and ask you to complete this work.

Please, as you do it, consider the new lens of essentiality and work to protect the organic standards and producers to whom we and the many people in our community could not have endured these times without. Thank you.

MR. ELA: Thank you much, very much, Aimee. It looks like Emily has a question.
MS. OAKLEY: Hi, Aimee, it's not a question. I just wanted to thank you for your extremely poignant and articulate comments. So thank you very much, I agree with them wholeheartedly.

MS. SIMPSON: Thank you.

MR. D'AMORE: Jerry D'Amore here, I would like to second that.

MR. ELA: Any other Board members with questions? Thank you very much, Aimee, we do appreciate it, and we appreciate your support.

MS. SIMPSON: Thank you.

MR. ELA: Next we have Jay Feldman, followed by Kiki Hubbard and then, here's, I'm going, I'm sorry, Jen, but Jen Berkebile. So Jay, you're on up, and could you please state your name and affiliation.

MR. FELDMAN: Good afternoon, I'm Jay Feldman, Executive Director of Beyond Pesticides and former member of the NOSB. Can you hear me?

MR. ELA: Yes, we can hear you. You're fading in and out just a little bit, but let's continue and I'll let you know if --

MR. FELDMAN: Okay. Welcome to new
members. It's Beyond Pesticides' sincere hope that you will embrace the history and spirit of the Organic Foods Production Act in ensuring that the rich diversity of the organic community and industry is an integral part of the deliberations of this Board.

We hear the word integrity when we talk about the role of the NOSB. Integrity goes to the value of the organic seal in the marketplace and the longterm growth of the organic market. The NOSB has a special responsibility in safeguarding the integrity of the National List of the Allowed and Prohibited Substances, ensuring that elements of the law have been fully evaluated with an adequate technical review.

Short-term market growth should not be achieved at the expense of longterm trust in the organic sector. Allowed synthetic substances must not cause, one, adverse effects to health and the environment from production to use through disposal.

Two, must be compatible with an organic system, which is defined in the law. And three, must be essential. We do not add synthetics, even
those meeting other criteria, unless we determine the need in organic production.

And of course, sunset means that a substance does not stay on the National List unless current information shows that it meets criteria of OFPA. This is admittedly a very high bar. OFPA's requirements go beyond those of other agencies like EPA and FDA. The law maintains a default assumption against synthetics in organic production and processing.

We formed the NOSB to be the steward of this process. For example, certain substances and practices are essential not to organic production, but to industrial agriculture. Under the law, we need more pasturing of animals. We will preserve the marine environment and virgin forests.

We will stop the use of chlorine-based substances. We will eliminate inerts that are among the most hazardous materials used in organic production. We will ensure rigorous inspection certification without conflict of interest.

If we do not adhere to these principles in law, we will erode the trust of consumers, who
pay a premium, and we will have lost the opportunity to grow the only market that offers an opportunity to sustain life by stemming the climate crisis, protecting farm workers, and halting biodiversity decline.

For Beyond Pesticides and our constituency of consumers, farmers, scientists, medical practitioners, municipalities, landscapers, and school districts, the NOSB is not a panel of vested interests that are seated to protect a piece of the pie, but one charged with growing the integrity of the label so that organic becomes mainstream agriculture.

You actually may sit in one of the most important seats for our future. But what do we do when USDA holds us back if there are critical issues that you can't get on the NOSB work plan, or you want to provide advice to the Secretary of Agriculture?

Please assert the authority that Congress gave to this board, for without the Board asserting its authority, organic will remain a niche market, and we will suffer the apocalyptic environmental and health catastrophes that the
scientific community predict.

The good news is that we have a solution: organic. We just need to pursue it with all our collective strength. Thank you for your service on the Board.

MR. ELA: Thank you, Jay. Are there any questions for Jay from the Board? All right, thank you again, Jay. And we will move on.

Kiki Hubbard, you are up, then Jen Berkebile and Amalie Lipstreu will be after Jen.

Kiki, go ahead. Please state your name and affiliation.

MS. HUBBARD: Hi, everyone, can you hear me?

MR. ELA: Yes, you're on.

MS. HUBBARD: Thank you. I'm Kiki Hubbard, and I'm the Director of Advocacy and Communications for Organic Seed Alliance. We are a national nonprofit that ensures that organic farmers have the seed they need to be successful. And we do this through research, education, and advocacy.

A warm welcome to the new Board members.

Thank you so much for volunteering to participate
in this very important public process, and thanks to the NOP for making sure that the spring meeting happened today. Despite the challenging circumstances, I hope everyone is staying well.

My comments that follow emphasize the importance of keeping seed and plant breeding issues at the forefront of the NOSB's work plan and NOP's priorities for implementation.

I'm going to briefly touch on three areas, the first of which is that we want to emphasize again that we're so pleased that two Crop Subcommittee proposals unanimously were passed at previous NOSB meetings on the topic of organic seed. These included updating the organic seed regulation and strengthening guidance for certifiers regarding the organic seed and planting stock requirement.

As organic seed growers work to increase the quantity and diversity of organic seed available to growers, policy must follow suit to ensure increased adoption in a measurable and reasonable way. This will require the NOP taking action to implement these strong proposals.

Secondly, on the topic of genetic
integrity of seed, we're happy to see that three of the research priorities in the current discussion document underscore the importance of collecting data and more information on this topic. Clearly we have been hindered by a lack of data along this path.

But there are a few steps that we can take right now, the first of which is we believe it's still urgently needed that there be a USDA task force that is charged with collecting baseline data of seed, both organic seed and --

PARTICIPANT: I lost you.
MS. HUBBARD: Can you hear me now?
MR. ELA: You're still good, Kiki.
MS. HUBBARD: Oh, okay. So it's critical that we collect this baseline data to inform policies moving forward. And ideally that data would be collected not just at the seed level, but across the entire value chain.

And the NOSB is also well positioned to develop recommended guidance on GMO testing for certifiers and the broader organic industry. Best practices in this regard do not exist, and we need to understand better how best to move forward with
testing so that there's more consistency in how we're currently testing and should be testing.

Lastly, we hope to see the topic of excluded methods back on the agenda this fall. It's important that we continue to understand the alignment of both new and older breeding techniques with the organic standards in order to provide more clarity to organic farmers, plant breeders, seed companies, certifiers, and the organic community at large.

So we encourage the NOP to adopt the recommendations that have been passed to date by the NOSB on the topic of excluded methods. And we hope the NOP and NOSB will work together to make sure that this important topic remains on the agenda at future meetings.

So please let us know how Organic Seed Alliance can be of service to you, and thank you again for your time and efforts.

MR. ELA: Thank you very much, Kiki. Are there questions? It looks like Sue has a question for you, Kiki. Sue, go ahead.

MS. BAIRD: Good morning, Kiki.

MS. HUBBARD: Morning.
MS. BAIRD: It appears that I have become the hemp consultant of the world. I'm getting all kinds of requests to help hemp producers. And are you aware of any hemp organic seed? Because I'm not finding any. That's my first question.

Secondly, it does appear, talking to University of Missouri researchers, that there is a lot of CRISPR technology being used for hemp seed.

And thirdly, what about feminization of hemp, are you familiar with hemp? I'm sorry.

MS. HUBBARD: Yeah, thanks for the question, Sue, much appreciated. Hemp is not a crop that Organic Seed Alliance closely follows.

It is increasingly an important crop to organic growers, we all know that. So unfortunately, I do not have answers at the ready to your questions, but I'd be more than happy to follow up with you on all of them. I'll jot them down right now.

MS. BAIRD: Thank you.

MR. ELA: Are there any other questions from the Board? Thank you, Kiki, we do appreciate it, as always.

MS. HUBBARD: Thank you.
MR. ELA: Next -- one thing I want to just say to all our speakers is that we aren't using video, so if when you're giving your comments, if you're trying to use video, just know that that won't appear. We're keeping this pretty much just audio.

Next up is Jen Berkebile. And Jen, if I mispronounce your name, you can correct me. And then we have Amalie Lipstreu and then Nicole Dehne.

Jen, if you would state your name and affiliation, please continue.

MS. BERKEBILE: Good afternoon, everyone, can you hear me?

MR. ELA: We've got.

MS. BERKEBILE: Great. My name is Jen Berkebile, so you got it right, Steve. I am the Materials Program Manager at Pennsylvania Certified Organic, and we certify over 1,600 organic operations throughout the U.S.

Today I'll be commenting on paper for use as a crop production aid. I appreciate the Crop Subcommittee's work on this topic. PCO supports the allowances of paper pots, seed tape, collars, and other paper-based crop planting aids.
Paper is already permitted for use as both mulch and as a compost feed stock, and PCO agrees that an alternative listing for paper crop production aids is a sound and sensible solution for allowing paper for other crop uses.

However, we caution the Subcommittee regarding the complexity of the proposed listings. Including a definition for paper-based crop planting aids that requires ASTM D6866 testing will likely be a barrier for the allowance of many products, especially feed tape and collars, that manufacturing may be unwilling to test.

If a paper-based crop planting aid, especially the paper pots currently on the market, meets the ASTD6866 percentage requirement, PCO supports this definition, accepting that some products will be disqualified simply because manufacturers may not be willing to pay for the testing.

PCO supports soliciting paper-based crop planting aids as crop production aids at 205.601(o). PCO will apply sound and sensible decision making when verifying the proposed requirement for 100 percent bio-based fiber.
content when commercially available, as such products do not currently exist and are unlikely to exist in the near future. We will collaborate with other certifiers and develop a consistent process for verifying compliance.

PCO recommends that the Subcommittee pass the proposed listing, again provided that the paper-based crop planting aids, specifically the paper pots currently on the market, meet the 85 percent bio-based content requirement.

I wanted to take a moment during my comments to thank the NOC and NOSB for holding a remote meeting. We appreciate that moving from an in-person meeting to a remote one on such short notice was likely a challenge, and I know that sitting in so many hours of remote meetings may be difficult for all of us.

So thank you to both the NOP and the NOSB. PCO does hope that the NOSB meetings can continue to be held in person when it is safe to do so. The in-person meetings are used as an opportunity to connect with other industry members in a more meaningful way than can occur during a remote meeting. We encourage the NOP to continue
holding in-person NOSB meetings whenever possible.

Thank you to the NOSB for your time and dedication on the Board and your work on these issues.

MR. ELA: Thank you very much, Jen. Are there questions from the Board? Sue has a question.

MS. BAIRD: Jen, I'm interested -- in your written comments you said that you have 138 poultry operations who would interested in fenbendazole for blackhead. Did I read your comments correctly? And I know that you didn't talk about that now maybe, but --

MS. BERKEBILE: No, that's a good question. So we have approximately 138 poultry operations that are interested in fenbendazole for use as a parasiticide. I would say a subset of those requested it specifically for blackhead. I think that some of the requests came through as a general request.

But some came through specifically as for having this issue with blackhead. And now fenbendazole is labeled for poultry, can we use it for that use. Does that make sense?
MS. BAIRD: It does make sense. Can I follow up, Steve?

MR. ELA: Yes, please.

MS BAIRD: The petitioner has specifically asked us for worm infestation. Blackhead of course is not a worm. Is that an issue? I know that it is used in conventional worm with blackhead.

MS. BERKEBILE: That's a good question. I guess if it, I will say if fenbendazole for poultry is added to 603 listings, then as long as it complies with the annotation, which I'd have to look at specifically to say whether or not blackhead falls under an allowed issue to be treated with those 603 parasiticides.

MS. BAIRD: Thanks. I'll ask maybe Merck or some of those people might know. Thank you.

MS. BERKEBILE: Yeah, yup, thank you for the question.

MR. ELA: Are there other questions from the Board? I have one myself regarding the paper pots. I know a rationale in, well we first of all hear your concern about whether feed tapes
and other things will comply with the bio-based requirement. I think our rationale was that the paper pots, just because they have to hold up longer, from, the word from manufactures is then they need to use, you know, additional fibers that do not break down as quickly.

Whereas the feed tape, because it's kept dry right until right before use, would not require those additional synthetics. It's our assumption that they would meet that bio-based requirements.

I also, at least in looking through public comments, didn't see, and I need to keep looking, any manufacturers of those tapes commenting that they wouldn't need that. So given how the annotation is currently written, you would be okay if we passed it at this meeting?

MS. BERKEBILE: PCO would support the Subcommittee passing the proposed listings as written, yes.

MR. ELA: Great. Any other questions? Thank you very much, Jen.

MS. BERKEBILE: Thank you.

MR. ELA: We will move on to Amalie
Lipstreu, and then we will have Nicole Dehne and Jaydee Hanson coming up next. So Amalie, if you'd state your name and affiliation.

MS. LIPSTREU: Can you hear me okay?

MR. ELA: We can, go ahead.

MS. LIPSTREU: Thank you. Good afternoon, NOSB members and NOP staff. I'm Amalie Lipstreu, the Policy Director for the Ohio Ecological Food and Farm Association, and I appreciate the opportunity to speak with you this afternoon and to share our thoughts on the eve of the 50th anniversary of the first Earth Day celebration in 1970.

For many people who buy organic products, it's not hard to imagine that they see support for the organic industry is akin to the sentiment that drove that first Earth Day and the resulting landmark environmental legislation.

They have the opportunity to purchase food grown in a way that protects the environment and stewards animals in its care, as well as the beneficial insects necessary for agriculture to thrive into the future.

As members of the NOSB, you are all
aware of the role and benefits of this national system of agriculture, as well as its shortcomings. And it's to the latter to which you must devote significant effort. That effort may include strongly advocating for setting your own work agenda. Despite its best intentions, large bureaucracies are often unable to respond nimbly to the needs on the ground.

One of the most pressing needs currently is also an opportunity for organic to shine. Global climate destabilization is a threat to our very existence, and organic agriculture can and should figure predominantly in efforts to adapt and mitigate this threat.

While there are efforts at state and national levels to incentivize practices that can help move us toward improvements in carbon sequestration, most are piecemeal. The most effective way that we have as an agricultural community to address this issue is with a systems-based approach that integrates multiple factors and practices within the agro ecosystem.

As you are well aware, organic certification is the only governmental sanctioned,
third-party accredited system of agriculture with the means to be accountable and respond to this need. This will require taking a serious look at the oversight of soil management provisions within the standards to ensure that we can continue advocating for organic as the gold standard of agriculture.

That includes enforcement of soil building, cover cropping, crop rotation, and biodiversity practices required in the organic regulation, establishing clear standards for the certification of container systems, and restrictions on the use of highly soluble nutrients.

In summary, please add the role of organic agriculture in climate change to your work agenda. Thank you.

MR. ELA: It looks like Emily has a question.

MS. OAKLEY: Thank you. Thank you, Amalie, for your comments. And I was wondering if you could elaborate on some of the lack of soil enforcement provisions that you see might be occurring or that you think we need to ensure don't
occur.

MS. LIPSTREU: Sure. Well I know that I think most, certainly most certifiers probably feel that, you know, they're doing a good job in checking in with producers during the inspection time.

But I think if it's something that we are holding up as an opportunity for all of agriculture to look to, we need to have really a firm footing and foundation in showing that the practices that are required are being followed, implemented, and achieving results.

So I know that when the National Organic Coalition held some discussion groups at one of our last NOC pre-NOSB meetings, there was a considerable amount of variation in terms of what people felt was and wasn't being verified. So I think just whatever action the Board can take to provide greater consistency when it comes to those soil-building practices that will serve us better as an organic community.

And also, again, addressing the need for certification standards for container systems and restrictions on those highly soluble
nutrients.

MS. OAKLEY: Thank you.

MR. ELA: Are there other questions from the Board? Thank you very much, Amalie. We'll next have Nicole Dehne, then we'll have Jaydee Hanson and Julia Barton after that.

Nicole, go ahead. Tell me how to pronounce your last name, and if you'd tell us your name and affiliation.

MS. DEHNE: We'll be happy to, it is a tough last name to pronounce, so no worries, Steve. Can you guys hear me okay? Oops.

MR. ELA: We can hear you just fine.

MS. DEHNE: Okay, so my name is Nicole Dehne, I'm the Certification Director for Vermont Organic Farmers, representing over 800 organic producers in the state of Vermont. I'd like to thank the NOSB for all of your hard work and for the opportunity to give comments today on a few agenda items.

The first one is biodegradable bio-based mulch. BBM has been on the national list since 2014, and yet there's currently no product on the market that can meet the required criteria.
One of the biggest challenges, as you know, in meeting this criteria, is finding a material that has 100 percent bio-based polymers.

Thanks to the NOSB's proposal allowing paper as a planting aid, we may have a path forward. If we're willing to accept some synthetic, non-paper fibers in paper, we should also do the same for BBM.

We agree that we want to be careful about the effect of these synthetic polymers and their potential to accumulate small particles of plastic in the soil. Research on this topic should continue.

However, we are also struggling with the impact of our dependence on plastic. This shouldn't be taken lightly. We have a responsibility to try to reduce our plastic use, and BBM is one important one way to do this.

The NOP's rescinding of Policy Memo 15-1 provides an opportunity for the NOSB to revise the current definition to reduce the bio-based content. We implore the NOSB to make this change, use the proposal for paper planting aids as a guide, reduce the bio-based content from 100 percent to
85 percent, and require producers to use materials with higher bio-based content when commercially available.

In addition, we suggest that the current listing be amended as follows. BBM mulch film must not contain, as opposed to must be produced without, organisms or feed stock derived from excluded methods. It's not typical for certifiers and material review organizations to evaluate this far back into the manufacturing process to evaluate GMO status. Instead, it would be more typical to prohibit GMOs in the final product being reviewed.

We feel strongly that we need to make these important changes in order to produce a commercially viable product. Our farmers feel it's time to reduce our dependence on plastic, and many feel that the use of BBM would be an important step towards achieving this goal.

The other topic is fenbendazole. We do certify, VOF certifies small poultry producers. It has been our experience that these farmers do not require synthetic parasiticides to manager their flocks. Typically, our farmers control
parasites by good pasture management.

It's our concern that because the outdoor access requirements for poultry are not consistent, that allowing fenbendazole for all poultry producers would result in abuse of the allowance.

How can producers without pasture have a pasture management plan? Will organic poultry producers have enough land to keep birds off the infected pasture for enough time to prevent new infestation? If adequate land is not available, poultry will continue to get re-infected, and the need for fenbendazole will become routine. That's it for me.

MR. ELA: Thank you, thank you very much. And the irony is that I was going to pronounce your name actually correctly, but then I correct -- then I thought no, it won't be that.

MS. DEHNE: Right, right, so close.

MR. ELA: Oh, yes, oh well. Are there questions? It looks like we'll start with Mindee. Mindee, we can't hear you, so you may need to unmute yourself.

MS. JEFFERY: Hi, Nicole, thank you.
I'm wondering if you could provide us with any perspective on what the barrier is to evaluating bio-based mulches this far back for GMOs in the original source material.

MS. DEHNE: Sure. I don't necessarily think that there's a barrier; it's just it seems in the annotation that the NOSB is requiring stricter requirements as far as evaluating GMOs.

So it's pretty typical for certifiers and material review organizations to say there's no GMOs in the final product, but then to go back some steps and say were there any GMOs in the production of the product materials, for example, that we haven't necessarily been doing. That's not as typical.

I'm not saying it's not being done at all because it could be inconsistent, but it isn't like the typical way in which certifiers will do that review for GMOs.

MR. ELA: Emily has a question.

MS. OAKLEY: Thanks, Nicole, for your comments on synthetic fibers and the paper production needs and BBM. I was wondering if you're aware of any BBM products on the market that could meet that 85 percent wording suggestion that
you had.

MS. DEHNE: Thank you. That's a great question. In fact, the last manufacturer that I spoke to was saying that they could have a commercially available product that had 60 percent bio-based material, but I felt that to be consistent with paper and to provide some incentive, I thought, you know, a compromise of 85 percent made sense.

So I don't -- it's very possible that there wouldn't be one that could quite comply yet, but I think we would be getting closer to complying at 85 than we would at 100.

MS. OAKLEY: Would you mind sharing with the Crop Subcommittee offline some of that information, or provide it to Michelle?

MS. DEHNE: Absolutely.

MS. OAKLEY: Thank you.

MR. ELA: Are there other questions? All right, thank you very much, Nicole.

MS. DEHNE: Thank you.

MR. ELA: We will move on to Jaydee Hanson, and then we will have Julia Barton and Mark Kastel after that.
So Jaydee, you are up.

MR. HANSON: Thank you. I'm very pleased to represent the Center for Food Safety.

MS. ARSENAULT: Jaydee, this is Michelle. I can barely hear you, so maybe a little closer to the mic or phone, computer.

MR. HANSON: Can you hear me now?

MS. ARSENAULT: That's better. Steve, can you hear okay? Make sure it's not just on my end.

MR. ELA: Yes, now, it was the same. So yes, that was better.

MR. HANSON: Okay, I'm holding the mic right on my mouth. Good afternoon, I'm Jaydee Hanson, Policy Director the Center for Food Safety, and I'm pleased to meet virtually several of the new members and pleased to give the oral comments of -- these oral comments to the National Organic Standards Board.

We are a nonprofit with some million consumer and farmer members that support organic food and farming and grow organic food and regularly purchase organic products. I would note in beginning that the Center strongly supports the
comments that the National Organic Coalition made to strengthen organic agriculture during the COVID pandemic, and especially those proposals that benefit low income consumers.

We note that the USDA has the final rule on organic livestock due June 17, 2020, as mandated by Congress. We are certainly hoping that the NOSB will push the NOP and the USDA to meet that rule.

Want to comment on priorities related to new kinds of genetic engineering. The NOSB should defend against allowing all genetic engineering in organic agriculture, including these new GE technologies. The NOSB must uphold the definitions and framework that was put in the place by the NOSB in 2016.

There are also six new techniques that the NOSB had identified for review, and we urge the NOSB to make progress on them as swiftly as possible. NOSB should urge the NOP to codify the prohibitions in organic for new genetic engineering techniques by publishing a guidance document in the NOP handbook. We're disturbed that the NOP has not finalized these recommendations yet.
New genetic manipulation techniques are being introduced at an increasingly rapid rate. Organic stakeholders and accredited certifiers must have clarity on which genetic techniques and methods are allowed and which are prohibited under the organic regulations. The NOSB and the NOP must provide that clarity.

Some genetic engineering companies have deliberately mischaracterized their techniques as exactly the same as traditional breeding. Recombinetics, whose scientists use TALENs, a kind of gene editing, to make hornless dairy cows, claim that their hornless cows have no off-target problems. That is a problem when the gene editing misses its target.

Fortunately, scientists from FDA examined the complete DNA sequence of the animal and found that it contained the entire sequence of the plasmid used to move the DNA around in the genome, making it not at all the same as traditional breeding and not on target.

The organic community and the NOSB has clearly --

MS. ARSENAULT: Jaydee?
MR. HANSON: Yes.

MS. ARSENAULT: Sorry, this is Michelle. I don't know if you heard that, that was the timer that went off, so --

MR. HANSON: Is that the one-minute timer, or the?

MS. ARSENAULT: That was three minutes.

MR. HANSON: Three minutes, okay. Well thank you very much and we had a few other comments orally, but you've got them all in writing.

MS. ARSENAULT: Excellent. Steve?

MR. ELA: Thank you, Jaydee. Yup, are there any questions for Jaydee? It looks like Sue Baird has one. Sue, I think you may on mute.

MS. BAIRD: There you go, is that better? Sorry about that.

MR. ELA: Much better.

MS. BAIRD: Okay, great. I was responding, I'm asking a question on your written comments. And of course I'm wanting to know about your fenbendazole. And I appreciate your comment that said more work was needed.
You did bring up an interesting comment that I had not considered, at least, and perhaps some of the other Board had, is that some of the laying hens could end up as slaughter animals. And that there might need to be withdrawal time both for a slaughter animal and for -- in the egg itself. So could you elaborate on that?

MR. HANSON: Well you know, there are many cases where laying hens do end up being slaughtered. There is one area that in this pandemic time, the -- and they're not organic hens. But the hens used to produce eggs for vaccine development are slaughtered and put into mostly chicken soup. And there would be other hens slaughtered in commercial operations as well, that's --

MS. BAIRD: I did appreciate that comment, thank you.

MR. HANSON: Thank you. Thank you for reading all the way to the end.

MR. ELA: Are there any other comments or questions? Perfect, and Jaydee, I apologize for the timer not coming across to you, we'll work on that.
MR. HANSON: We have audio problems. You know, one of my jokes about genetic engineering is that we think genetic engineering's going to work, but we can't get electronic technology to work, and it's 100 years old.

MR. ELA: Fair enough. Well thank you very much.

MR. HANSON: Thank you.

MR. ELA: We're going to move on to Julia Barton, and then after that we have Mark Kastel and Steve Etka.

So Julia, please state your name and affiliation. We're not hearing you, Julia. Still not coming across.

MS. BARTON: Can you hear me now?

MR. ELA: We've got you, yep, go ahead, please.

MS. BARTON: Okay, super, thank you. Good afternoon, my name is Julia Barton with the Ohio Ecological Food and Farm Association. I hope you all and your families are well.

First, I'd like to thank you for your time and attention to NOSB work during COVID-19. Your focus and efforts when there are many other
things demanding your attention is appreciated.

Thank you for your service.

I'd also like to thank the NOP for its quick action in pivoting this meeting to a digital format amid work-from-home orders and many other issues on its plate. Thank you.

There are few items like to discuss today on behalf of OEFFA. We and many of the growers we serve are anxiously awaiting a proposed rule on strengthening organic enforcement from NOP.

These concerns were initially raised by OFARM and other farmer groups. And OEFFA's Green Grower chapter keeps us informed as to how these challenges continue to impact them. You'll be hearing from several of them this week.

We both appreciate the work the NOSB and the NOP have done thus far to address both domestic and import fraud, and we need the rulemaking process to address this issue and present it to the public for feedback. We'd appreciate any help the NOSB can offer in urging the NOP to move that along.

Secondly, regarding fenbendazole,
OEFFA certifies over 100 poultry operations in nine states, and our experience has been very different than the feedback I heard earlier from our neighbor, PCO. We can recollect only one request for parasiticides in the last year and a half.

Further, we request a poultry-focused technical review to provide the information necessary to make an informed decision regarding the use of this parasiticide, specifically with respect to poultry. We have concerns regarding fenbendazole residue in eggs, and we imagine a poultry-focused technical review would provide more information regarding that concern.

Further, we appreciate the Board noting the emergency language that was previously recommended by the NOSB in spring of 2018, and we urge the NOP to move forward with those changes.

Next, please work with the NOP to put greenhouse and field container production back onto the active work agenda. The tacit endorsement and certification of myriad systems without clear or applicable standards is a disservice to organic certifiers, producers, and consumers. We need to work together to figure it
Lastly, OEFFA producers have repeatedly asked the NOSB meetings to be moved to accommodate field work. Given this foray into digital meetings, I got to wondering if this format might not make that more doable. Maybe one meeting each year could be in person and another held remotely.

While in-person meetings encourage valuable industry networking that virtual meetings do not support, holding remote meetings once a year could help level the playing field of access to these meetings and increase, as the NOP has previously done through the use of these webinars, the ability for broad participation.

Thank you for your consideration of our comments, and for your work. That's all I have.

Thank you.

MR. ELA: Thank you, Julia. Are there questions? Yes, Emily has a question.

MS. OAKLEY: Okay, this is embarrassing, but I'm getting old. And I lost my question, but it was an important one. Can you backtrack, sorry, to fenbendazole and perhaps jog
my memory of my question. It was regarding the poultry TR that you were requesting. Could you elaborate on that a bit?

MS. BARTON: Yes, we have requested that previously, and we are doing so again. So our understanding of the fenbendazole conversation is that the information we're using to make decisions is based on a mammalian technical review that was when we were discussing fenbendazole use in mammals, when we had the big parasiticide discussion over what ought to be used in mammals.

And poultry are different. They're a different species, and they deserve sort of that focus that we gave mammalian species. So we're hoping that that technical review, if it could be completed, would give us the information needed to make an informed decision about this material.

MS. OAKLEY: Thank you.

MR. ELA: Sue, you had a question. We're not hearing you, Sue.

MS. BAIRD: First of all, Emily, you are not old. That's almost insulting to someone who really is old. Did you, were you aware that we have requested a TR limited for the laying hens?
MS. BARTON: No, but I'm glad to hear it. So I would hope that we had information to make that decision.

MS. BAIRD: Right, right. That is the reason we moved this back into discussions is because we're waiting on the results of that limited TR.

MS. BARTON: Oh, well that's great news. I apologize for not having had that information of time.

MS. BAIRD: No, no worries. Thank you for your comments.

MS. BARTON: Thank you.

MR. ELA: Emily, it looks like you may have had your memory jogged.

MS. OAKLEY: Yes, thank you. So the question is actually for the program, because I know we have heard at the past several meetings and we'll probably hear from other commenters as well asking that we put container growing back on our work agenda in terms of developing standards for the ponics systems and others.

I was wondering if the program would like to or could respond to those requests that
we're hearing from stakeholders.

DR. TUCKER: So this is Jenny Tucker. Appreciate the public comments, and we want to continue to listen to community feedback on this topic and others.

MR. ELA: All right. Are there any other questions? Thank you very much, Julia.

MS. BARTON: Thank you.

MR. ELA: We are going to move on to Mark Kastel, and then we'll have Steve Etka, and then Abby Youngblood.

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

MR. KASTEL: Testing, Mr. Chairman, do you copy?

MR. ELA: We copy. Go ahead please.

MR. KASTEL: Thank you very much. Hello, my name is Mark Kastel, and I am the Director of OrganicEye, the investigative arm and a project of Beyond Pesticides.

Here's a little reality check in orientations for new members. The success of the organic movement is based on the story behind the label. That story has been greatly degraded
through fraud and corruption. We are on the cusp, and this pandemic might greatly accelerate the shift. After the smoke clears, we could have organic food and farming without farms.

The shift to industrial agriculture, something we were trying to get away from in the first place, is almost complete. The majority of organic dairy cows are now coming from livestock factories managing as many as 20,000 animals, milking them three, even four times a day, and creating the illusion of grazing. Good enough for certifiers and the USDA.

The law requires access to the, quote, outdoors, for all organic livestock. But the majority of our organic eggs are coming from factories managing as many as a million birds with zero outdoor access.

And don't get ready to applaud the new animal welfare rule. It requires just two square feet outdoors and 1.2 feet indoors. These are also factory conditions.

And how about imports? Are any of those eggs, meat, and dairy products truly organic if what the animals are eating is laundered
conventional feed?

Dig this: after years of stonewalling and cheerleading under the previous Director of the NOP telling us how bulletproof the certification system was for oversight of imports, the NOP recently announced that 75 percent of all certified operations in the Black Sea region have lost their USDA certification, either through revocation, suspension, or get this, surrender.

Other fines or enforcement? None. With more authority from Congress, it might get better. But the USDA, corporate agribusiness, and their lobbyists at the OTA never quit their cheerleading until we all received and indelible black eye after damning coverage of import fraud from the Washington Post.

When Congress charged the USDA with oversight of the organic industry, protecting consumers, ethical farmers and businesspeople against, fraud, they ordered the Secretary, he shall, or she shall consult with the NOSB in implementing the Act. Instead, when certifiers have questions regarding enforcing the law, and I wish I wasn't making this up, the NOP tells them
to confer with other certifiers and define, decide on their own.

It's time for the NOSB to assert their authority and oversight of how the law and regulations are carried out. Thank you very much.

MR. ELA: Are there questions from the Board? Seeing none, I thank you very much, Mark. We appreciate your comments.

MR. KASTEL: Thank you, Mr. Chairman.

MR. ELA: We are going to need to move on to Steve Etka, then Abby Youngblood, and then Alan Lewis. Steve, go ahead please, and state your name and affiliation. Steve, we're not -- yup, now we've got you, go ahead.

MR. ETKA: I'm Steve Etka with the National Organic Coalition. In the face of the pandemic, NOC appreciates NOP's decision to hold the NOSB meeting virtually. And we also appreciate NOSB members' flexibility with this new structure. We look forward to the meeting returning to being in person post pandemic.

NOC has been very busy advocating for federal actions to address the needs of organic farmers, consumers, and businesses impacted by the
pandemic. To date, Congress has passed three coronavirus response packages, the third of which provided over $20 billion to USDA to respond to the COVID impacts on farmers, and billions more to the SBA to help citizens, including farmers, maintain their payrolls and incomes during the crisis.

On April 17, Secretary Perdue announced the broad outline of the USDA plan to implement the legislation, including direct payments to farmers and purchases of agricultural products for donation to food banks. We're still seeking more details on how the plan will affect organic farmers specifically, and Congress will likely be debating a fourth COVID response package in the coming weeks.

In a letter that NOC sent to USDA on April 2 jointly with OFA and OFRF, we argued that the pandemic should not delay congressionally mandated action on two pending organic rules. Both the final rule on the origin of livestock and the proposed strengthening organic enforcement rule should be published immediately.

Both of these rulemakings are critical
to the economic viability of organic farmers and businesses and to maintaining the integrity of the organic label and the confidence of organic consumers.

One of NOC's top priorities in the past couple years has been in promoting the role of organic agriculture as a solution to the climate change crisis. This not only means documenting and rewarding the good work that organic farmers are already doing to reduce greenhouse gas emissions, build soil health to more effectively sequester carbon, and to foster more resilient farming systems.

But it also means being honest about areas where organic can do even better. This means closing loopholes in organic livestock and poultry regulations that allow organic production using large confined animal operations that foster -- that fail to foster environmentally beneficial interaction between animals and pastures.

It also means putting more teeth into regulations that require farmers to use soil-building practices.

As the world deals with the most
immediate crisis in the form of COVID-19, the spotlight has temporarily moved off of the climate change crisis facing our planet. It's our hope the pandemic experience will help us understand more about how to make our food system more resilient, not only to pandemics, but also to climate change as well. Thank you.

MR. ELA: Thank you, Steve. Are there questions from the Board? Seeing none and hearing none, thank you very much, Steve, we appreciate it.

We will move on to Abby Youngblood and then Alan Lewis, then we're planning on taking a break. And then after break, we'll have Robert Rankin.

So go ahead, Abby.

MS. YOUNGBLOOD: Good afternoon. Can you hear me, Steve?

MR. ELA: We can hear you, go ahead.

MS. YOUNGBLOOD: Great. Good afternoon, I'm Abby Youngblood, Executive Director at the National Organic Coalition. Thank you, NOSB members and also National Organic Program for the opportunity to provide testimony during this
challenging time.

The National Organic Coalition is a national alliance of organizations and companies representing diverse stakeholder groups that serves as a unified voice for organic integrity. Each year we identify top priorities that we believe require sustained focus, advocacy, and leadership from the organic community to strengthen the integrity of the organic program.

For 2020, NOC has prioritized advancing organic as a climate change solution, strengthening enforcement of the organic regulations to prevent fraud, and restoring fairness in the organic dairy sector.

On the climate change priority, NOC is requesting that the NOSB create a work agenda item related to carbon sequestration and enforcement of soil health provisions in the organic regulations. We are also asking the NOSB to restrict the use of highly soluble sources of nitrogen in organic agriculture.

My colleagues, Steve Etka and Alice Runde, are commenting on some of the actions needed to strengthen enforcement to prevent fraud and to
restore fairness in organic dairy.

In addition to these top three priorities, I'd like to highlight a few other areas of critical work for the NOSB and the National Organic Program. We urge the NOSB to uphold the prohibition against genetic engineering in organic agriculture, including new GE technologies. Based on the definitions and the framework that was put in place by the NOSB in 2016, it was a unanimous recommendation.

There are also six GE techniques that still need to be reviewed by the NOSB, and we urge the NOSB to make progress as swiftly as possible to move this work forward.

Regarding the three-year transition period for operations that produce organic crops, there is a lack of clarity for greenhouses and facilities that produce crops. The NOSB should ask the NOP to provide that clarity so that all certifiers and organic operations are held to the same standard.

NOC also believes that hydroponic systems and many container systems are inconsistent with both the foundational principles
of organic farming and the certification requirements of the National Organic Program as set forth in the organic law, especially with regards to soil fertility.

Last, I want to comment on liquid fish products as a fertilizer and the use of fish oil in organic foods. On liquid fish, NOC supports this work agenda item and the Board's efforts to ensure that these products are not harmful to the marine environment.

And while we approve of the concept of listing wild native fish harvested solely for fertilizer on Section 205.602 of the National List, we have several concerns that we raise in our written comments, including how this could be enforced.

Harvesting wild-caught fish for the exclusive use of fertilizer is a misuse of a resource from the ocean and should not be supported by organic production. Fish fertilizer should be allowed from waste products only, and only if this requirement is enforceable.

On fish oil, while we appreciate the Handling Subcommittee's attempt to address
concerns regarding fish oil, the proposed annotation is from our perspective insufficient to mitigate environmental concerns. And it doesn't address the concerns that we have regarding contaminants, as well as the fact that fish oil is not a necessary organic food ingredient and does not meet the essentiality criteria as outlined in OFPA.

Thank you, NOSB, for the work you do to protect the integrity of the organic seal, and thank you for this opportunity to comment.

MR. ELA: Thank you very much, Abby. Emily, we're not hearing you.

MS. OAKLEY: Oh, I'm sorry, I didn't realize you had called on me.

MS. ARSENAULT: I didn't hear you either.

MR. ELA: Sorry.

MS. OAKLEY: Okay.

MR. ELA: Okay, Emily, go ahead.

MS. OAKLEY: Thank you, Abby. Thank you for your comments asking that the NOSB ask the NOP for clarity regarding the three-year transition period in greenhouses. And as you
know, in previous meetings, there have been some attempts to get that clarity, but it has been challenging to date, and I was wondering if you had any specific suggestions for the NOSB on how we might try to achieve that clarity.

MS. YOUNGBLOOD: That's a great question. One of the things that we have been examining is looking across certifiers to see if what's happening is consistent. And we believe from our conversations with certifiers that there isn't consistency from one certifier to the next.

So my suggestion would be for the NOSB to look at those areas of inconsistency and to use that lack of consistency to request that clarity from NOP.

MS. OAKLEY: Okay. So to follow up on that, I think that's a good point and it's one I've heard from the NOP as well. But we don't have access to that kind of data in terms of inconsistency across certifiers. I think it would almost have to be something done internally through the NOP.

Do you have suggestions or know, have other ways that you think we might try to get access
to that data?

MS. YOUNGBLOOD: I think it would be a good conversation to have with ACA as well. I know that that's, you know, the mission of ACA is to have that consistency from one certifier to the next. So I think it's definitely a good conversation to be having community-wide. Within NOC's membership we have several certifiers who participate in our coalition work.

And I know that even within our own membership, there is not always consistency on that issue. So that's more anecdotal at this point, but I would imagine that ACA would have kind of a broader scope and looking across more certifiers to see where the inconsistencies are.

MS. OAKLEY: Thank you, Abby, that's helpful, and I will follow back up with you on that, particularly maybe getting some specific examples that your members might be willing to share that I could then share with the NOP.

MS. YOUNGBLOOD: Great. Thank you, Emily.

MR. ELA: Asa, you have a question.

MR. BRADMAN: Yeah, I have two
questions. One, or actually a comment. But I assuming, I just want to ask, do we have any written comments, a specific explanation of why the current, the annotation about, let's see, fish oil is insufficient?

MS. YOUNGBLOOD: Yes, and I will try to answer your question, Asa, but it may be better to ask this of Christie Badger, who's our NOSB consultant. We do, in our written comments, go into some detail about how there can be contaminants. And that's problematic when you're -- so the contamination issue is one of the issues that we raise.

And I think with regards to fish oil, another thing that we have been raising for many years is the fact that fish oil is not a necessary organic food ingredient. So from our perspective, it doesn't meet that criteria in OFPA regarding necessity or essentiality.

So those are some of the points that we raise. And if I didn't fully address the question that you have on fish oil, I think that would be a great question to ask of Christie Badger, who could go into more depth.
MR. BRADMAN: Okay. Thank you. I think the issue of contaminants is an interesting one, and there's been some discussions within the Board and at other meetings. I think that's -- personally I think it's a hard call there just because you know, everything in the world everywhere is contaminated.

And so the question for me is: how do we, you know, act to regulate sources of food that may be contaminated, or sources -- or ingredients that may be contaminated given that I mean literally everything in the world has some contaminants in it. So how do we set criteria or standards?

And I just think that's a tough call. Maybe there'll be some materials that are more prone to getting contaminated or another based on location, but again, it's -- I think how to approach that is complicated. And we can say that about virtually any input or, you know, material that's used. Anyway, just some food for thought there.

About the harvesting wild fish for fertilizers, in some ways, we harvest wild seaweed for fertilizers, and there's strong support for
that. And I totally support not harvesting wild fish for, as a fertilizer, you know, as an input.

And then for me that kind of begs the question about marine plants. And I know we're having an ongoing discussion as a board and as a community, but I think that there's kind of an interesting analogy there.

And so I, we still needed criteria for, you know, harvesting nutrients from the ocean and transferring those to land. How do we set up a standard to do that? And I don't know if that's really a question to you, or I'm sure NOC is thinking about that. But how to make that work as we go forward I think will be a challenge.

MS. YOUNGBLOOD: Yes, I agree that it's a challenge, and I do want to be clear that NOC does support the use of liquid fish products as a fertilizer. But we want to make sure that it's from the waste products only.

MR. BRADMAN: Right.

MR. ELA: All right. We've got two more questions, and then I'm going to move on. Jesse, you had a question?

MR. BUIE: Yes, well a comment. And
I just wanted to acknowledge your suggestion for -- to consider a step-down percentage in the non-bio-based component of the paper products in our future sunsets. That was one of your suggestions.

And also I just wanted to comment on your efforts for, to compliment on your racial equity efforts that the organization is doing. That's all.

MS. YOUNGBLOOD: Thank you, Jesse. We appreciate that and my colleague, Alice Runde, is going to comment further later on about racial equity issues, and Christie will be talking more about biodegradable bio-based mulch.

MR. BUIE: Okay.

MR. ELA: Thank you, Jesse. Mindee, last question for Abby.

MS. JEFFERY: Thank you, Abby. I wanted to see if there -- if stakeholders could potentially give more information on the fish oil essentiality question, specifically around nutrient formulations, because the FDA requires fortification of infant formula. And thank you to the Center for Food Safety for noting that.
And I would love more information about how we can achieve infant formulas as a certified organic and how those formulations can happen with or without fish oil, and if the community would support an annotation along those lines.

I don't necessarily expect a total answer there, but I am hoping we can get that information from the organic community.

MS. YOUNGBLOOD: Yeah. Thank you, Mindee, and NOC looks forward to working with you and other Board members on that issue.

MR. ELA: Thank you very much, Abby. As always, appreciated.

We are going to move on to Alan Lewis and then take a break. After the break, we will have Robert Rankin and Marcelo Girotto.

And so Alan, please go ahead.

MR. LEWIS: Thanks. Sound check, can you hear me okay?

MR. ELA: We have you loud and clear. Go ahead, Alan.

MR. LEWIS: Great. Well thanks everybody, and thanks Board members and NOP staff. So far it's been seamless, which is really
awesome. I have five quick, far-reaching comments, then I'll let everyone get a break.

As a reminder, Natural Grocers is, has 157 stores, all certified organic handlers by Sam Welsch at OneCert.

To start, as a reminder, retail is still the weak link in organic compliance. Between pesticides and lack of non-commingling practices in the supply chain, transportation and handling, it really calls into question whether we're delivering organic to consumers or not.

A single example is walking into King Soopers, which is the Kroger brand in Boulder, and seeing a open bulk bin of organic quinoa at the very bottom of a six-foot stack of other bulk bins above it, all conventional products. If you have a customer who's aware of what's going on, that just really causes a lot of confusion and concern.

Secondly, the whole COVID crisis in food chain supply crisis has really called out the concentration of production as a huge problem. And luckily as a silver lining, the public is much more focused now on local food production, food quality. And looking at the problems with
concentrated meat processing, CAFOs, dairy, and hydroponics as potentially not the cheap food solution that it has been promoted as for the last 70 years.

In particular, the hydroponic concentration and massive disparity in cost structure has reduced a lot of local quality organic production, especially of course in the tomato area. And this really is an opportunity for the organic community to tell that story of why supporting farmers is so important.

So moving on, someone is, apologize, I'm not sure if I'm being spoken to or not. I reclaim my time.

MR. ELA: You're good.

MR. LEWIS: Okay. And of course, this is a great I-told-you-so moment for all of us. My short decade in the organic industry and some of your 60-year tenures in organic industry, the public is strongly refocused on healthy food and local food. And notice the innate, instinctual response, human response. People are looking towards their diet, healthier food and a cleaner environment as Asa referred to.
The next thing is of course genetic manipulation. By whatever method or name you want to call it, it's running rampant behind the scenes. And they're using COVID as a cover to normalize the idea that natural systems are unnatural and broken, and they can be improved by the same technologies and practices that have actually undermined global ecology.

I would encourage everyone not to ignore this as it will not affect us, and these new genetic units and living organisms enter the environment in the food chain. And draw the line any time you see these comments, push back to make sure that people aren't drawn into that.

Lastly, just a quick story with a happy ending. The bros that I have complained about in the past who had loudly stated that organic is meaningless and refused to get certified are now knocking on my door saying hey, I've lost my direct sales to restaurants and food service, and I now need to reach out to larger markets. I wish I had a trusted seal that ensured that a third-party knew that my practices were valid and audited, and safe and compliant.
And then I'm just quiet for a second,
and they literally say oh, okay, I get it now, I
need to get certified. Organic of course in on
a tier of retail, and if you can get through the
logistics and get it on the shelf, it's just blowing
through as fast as you can get it.

And that's certainly at natural
retailers as well as conventional retailers are
actually having significant shortages in organic
produce. Even though it may be available a few
miles from a retailer, that supply chain and
logistics have been broken.

So that's my comments. I appreciate
everyone, and let's look for those silver linings
and those opportunities, hold the line against
genetic manipulation, keeping it out of organic
and the food supply in general. And continue
keeping on. Thank you very much.

MR. ELA: Thank you, Alan. And sorry
about that little distraction in the middle. Are
there any questions for Alan? All right. Thank
you very much, as always.

Okay. We're going to take a ten-minute
break. We will come back at the top of the hour.
of whatever hour and whatever time zone you are.

So when the big hand -- or I mean little hand hits the 12 we will resume. And when we come back, we're going to start with Robert Rankin, move on to Marcelo Girotto, and then go to Dave Carter.

So a 10-minute break, and then we will be back. Thank you, everybody. We'll see you in 10 minutes.

(Whereupon, the above-entitled matter went off the record at 10:51 a.m. and resumed at 11:00 a.m.)

MR. ELA: Okay. We'll call it back to order. And we'll see if people can, have minded their watches correctly.

So, everybody on the webinar, we will start again with the public comments. We're running just about 20 minutes behind. But we've had some cancellations. So I think we're doing pretty well. But we'll keep our eye on the clock. But for the Board, feel free to keep asking questions.

Our next commentator is Robert Rankin, followed by Marcelo Girotto and then Dave Carter after that. Robert, are you there?
MR. RANKIN: Yes. Can you hear me?

MR. ELA: Yes, we sure can. Please go ahead.

MR. RANKIN: Thank you. My name is Robert Rankin. And I'm Executive Director of the International Food Additives Council.

IFAC is a global association representing manufacturers and end users of food ingredients, including a number of substances permitted in organic food production. So thank you for the opportunity to comment today.

IFAC supports relisting waxes, wood rosin at 205.605(a), calcium phosphates at 205.605(b), and colors, inulin-oligofructose enriched, and cornstarch at 205.606. All of these ingredients are safe, are used in accordance with organic principles, and are essential to organic food production.

Several questions were raised in the handling subcommittee materials and written public comments regarding the production of, the production process of wood rosin and byproducts such as glycerol ester of wood rosin.

As noted in our written comments, the
initial extraction solvent used in the production of wood rosin is a flavor extraction solvent that is permitted by U.S. regulation and additive regulations worldwide. However, all solvents are completely removed when producing the final material.

We also agree with the comment that, while this material may not be used all the time or by a large portion of the organic market now, it is important to have options.

Calcium phosphates provide critical technical functions in numerous organic foods. They also serve public health by providing two essential nutrients, calcium, which is underconsumed by most Americans, and phosphorous.

Calcium phosphates may also be used to replace sodium phosphates in foods and lower the sodium content.

Phosphates have a history of, a long history of safe use in food globally. And historically, the NOSB has agreed that claims associating phosphates with negative health effects are not supported by the majority of the scientific literature.
The 18 colors derived from agricultural products at 205.606 are all essential to organic production, as most, if not all of them, lack sufficient supply over organic alternatives to meet demand.

Organic juices are not standardized across the entire market for shade. And most are weaker in strength and 30 to 50 percent more expensive than non-organic alternatives.

In order for a company to fully implement a fully organic juice color, they would need to evaluate the juice for batch to batch uniformity for color and strength, contract for this juice to be grown to meet shade demands, and, of course, use more of the organic juice color to meet the color strength that would have been provided by the non-organic alternative. This process would take at least one year and could increase cost by 89 percent.

We also reiterate there is no organic purple potato juice or organic paprika currently and very limited supply of organic carrot juice, black and purple carrot juice, grape skin extract, grape juice, and elderberry juice.
Inulin-oligofructose enriched is used as a source of dietary fiber and 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.

Finally, cornstarch provides many important functions in organic foods, including as a thickener, a formulation aid to make corn syrup, and as a bulking and moisture absorption agent.

There are not enough certified organic acres for corn planted in the U.S. today to meet the demand by the organic market. However, per NFU regulations, only cornstarch derived from non-GM corn may be used in organic food production.

Thank you for the opportunity to comment on these important organic handling materials. That's all.

MR. ELA: Great. Thank you very much. Does anybody on the Board -- looks like Asa has a question.

MR. BRADMAN: Yeah, I have two questions. As you know, we've been addressing,
evaluating many of these materials in the handling subcommittee. And, you know, a challenge in the organic arena is when do materials come off of 606 and when do we have enough material available for organically-sourced material?

And I'm curious about what your members are doing to increase the organic supply of many of the additives, colors, products that you just referred to. And do you have a program to encourage that within your organization? And if so, how is that functioning?

MR. RANKIN: Sure. Thanks for the question. I would say that the answer to, one answer, the answer to one of your questions is, no, there's not a program we have within IFAC to advance these types of objectives. I think the member companies and maybe their competitors or partners may have those types of objectives.

I do know that with regard to the color industry, I got a little bit more information from the color industry because there's a lot of interest and work around, you know, natural food colors, including organic food colors.

It does appear that those companies
are, or at least some of those companies within IFAC's membership are actively pursuing a larger supply of organic natural food colors.

But it sounds like, and based on some of the things that I mentioned in my testimony, there are just some things related to the timing and the ability to get those contracts set up and do the necessary due diligence around ensuring consistent shading and getting the land and diversion of the product to devote to the color side of it that it's going to take a little bit of time to get that together.

It's my understanding that the large majority of organic fruit that could be used or vegetables used to make the colors are used for consumption as the fruit or vegetable. So it's kind of a get in line type thing.

But my understanding from some of our members is that five years would be a good timeframe to allow companies in the industry to get that sufficient organic supply together and help mitigate some of those cost impacts that I mentioned around switching.

This isn't speaking on behalf of all
of the color manufacturers or necessarily IFAC. But I do know that at least one of our member companies has said that they believe that working within that five-year sunset period, that they think it will be a different story in five years.

MR. BRADMAN: Thank you for those comments. And I appreciate the mention of a timeframe. I think that's very helpful to the Board.

MR. ELA: This is Steve. I had a question as well.

So I hear you say about the five-year timeframe. I guess part of my concern is from reading notes from the previous sunset review of this, that was exactly the same comment made at that point.

During that review, there were a number of colors that were very close to a Board vote for being delisted. And in the end, the Board did vote to relist them.

And I also noticed in your comments, you know, you said please relist all these colors. But then you gave a specific list of five or six colors that were particularly problematic. And
that list kind of echoed some of those same colors that were problematic five years ago.

And you also mentioned cost. I guess I'm concerned that this just, you know, we keep hearing five years, five years. We had another company that gave written comments that said we have a supply of paprika, that there's plenty of organic supply.

How do we suss out, you know, this kind of, until it's really required or that these colors are delisted, how do we move this forward instead of it just being continually kind of put off?

MR. RANKIN: Sure. That's a good question. We have a lot of stakeholders around the phone I assume and in the organic community who I assume have interests there and potential roles to play.

As far as I'm concerned with my organization, I can only tell you what I'm hearing from our member companies. And I'm happy to just as a sidebar between now and the fall meeting, if that's a good timeframe, to really dig into some of these details around each individual color and timeframes and kind of what's holding that back.
I can say that on behalf of the IFAC members that make natural colors and can respond to that. I can't speak on behalf of all the companies that might be out there that may say they have some form of supply or some ingredient.

That's something where commercially available comes into play. And that's a tough situation for you all to deal with. But it's not -- you know, I don't know that I can fully answer that question for you.

But I can, all I can say is that, you know, I'd be willing to go back to our members and work with other associations that I could maybe try to find in the community around additives and colors to try to find a little bit more detail around each of the individual colors that we talked about and those which are probably most important or furthest way I should say maybe from an organic supply. That's all I can probably say at this point.

MR. ELA: Yeah, I think that information would be extremely helpful to the committee. And I think the questions we posed with this round, if you were able to kind of go down
those and be really as specific as possible, it
would really, really help us with that information.

So, yeah, please do that. And thank you for your
testimony today.

MR. RANKIN: Sure. Just one last
question. May I -- is that something we should
wait to submit in advance of the fall meeting or
do I, is it that the subcommittee would find that
information helpful sooner?

MR. ELA: I think the subcommittee
would find that information helpful sooner. So
you can go by the questions we already posted.
And we usually, within several weeks or less than
a month after this meeting, we open our public
docket. And so you can easily submit comments that
way that would give the subcommittee a little bit
of a lead time to, you know, take those into
account.

MR. RANKIN: Okay. We'll follow up
with Michelle about that. Thank you very much.

MR. ELA: Great. Thank you so much.

MR. RANKIN: Thank you.

MR. ELA: All right. We will move on
to Marcelo Girotto. And, Marcelo, I know I
butchered your name. And I very much apologize. After that, we'll have Dave Carter and then Blayne Mozisek. So, Marcelo, please go ahead.

MS. ARSENAULT: Steve, we're not sure Marcelo is on the line with us. He left an international number. And I'm not seeing anyone on the list with that name or number.

MR. ELA: Okay.

MS. ARSENAULT: Maybe --

MR. ELA: All right. Marcelo, we're going to skip over you unless we hear from you very quickly here. All right. We will come back to him at the end of the webinar if he is here.

So, Dave, you are going to be up. Dave Carter is up next, then Blayne Mozisek and then Alice Runde. All right. Dave, please go ahead.

Do we have Dave, Michelle?

MS. ARSENAULT: Yeah, Dave, I'm going to unmute you, so nobody else can --

MR. CARTER: All right.

MS. ARSENAULT: We'll just be --

MR. CARTER: You should be able to hear me now.

MS. ARSENAULT: We got you.
MR. ELA: We've got you, Dave. Please go ahead.

MR. CARTER: Okay. Happy Earth Day eve, everyone. Chairman Ela and members of the NOSB, I'm Dave Carter, alumni of this Board, a bison rancher and principal of Crystal Springs Consulting.

And as an alumni, I want to thank all of you, particularly the five new members, for your dedication and your willingness to serve the organic community.

I'm here today on behalf of Merck Animal Care with whom I've worked to submit the petition to expand the approval of fenbendazole as an emergency livestock treatment for laying flocks and replacements.

The initial approval of fenbendazole as an emergency livestock treatment in 2012 was a step forward in the continuous improvement of the National List.

Fenbendazole's benign environmental characteristics provided dairy producers, now fiber animal producers, with a resource to address emergency infestations without negative impacts
on dung beetles, earthworms, and beneficial soil microorganisms. It allowed the NOSB to ultimately delist a previously allowed parasiticide which was harmful to those organisms.

Now, as organic management practices and the expectations of consumers are moving more birds outdoors and in direct contact with the soil, fenbendazoles and the program resource for those growers to have available to utilize in emergency situations.

One of the first questions asked in approving any material is whether natural or organic alternatives exist. And as explained in our petition, diatomaceous earth has not been shown to be effective on young turtle parasites and poultry, neither have been 13 other materials that have been studied ranging from peppermint to tobacco, again all listed in our petition.

Humane husbandry is paramount to any organic animal management practice. Freedom of movement and the ability to exhibit natural behavior are at the core of organic practices, so too is protecting the health of the animals under our stewardship.
While management practices, species selection, and other steps are important, we are not perfect. Emergencies arise and growers need to be able to respond with a resource that restores the health of the birds without harming the health of the soil and that ensures consumers are receiving a healthy, wholesome product.

I know there's concern regarding what constitutes an emergency. And our next speaker will talk about that.

We look forward to receiving the technical review that was requested following the last meeting and for your consideration of our petition at the fall meeting. Again, thank you for your service.

MR. ELA: Are there any questions for Dave? Sue has a question. Sue, we're not hearing you.

MS. BAIRD: Okay. Thanks, Dave, for your comments. We've had several people who've expressed concerns about the residual 2.4 ppm in the eggs. And I want you to address that.

Secondly, concerns are that, and we heard somewhat of that this morning, that there
might be a problem with these birds that have been used for laying hens now ending up as slaughter animals. And so could you address those two issues for me, please?

MR. CARTER: Well, you know, I will address the laying hens that end up as slaughter animals, because I know that has been an issue. I worked with, in the pet food business before trying to look at sourcing those. And I think that's about it. I don't have the answer to that. But I think it's a valid consideration in terms of a withdrawal time prior to slaughter.

In terms of the issue on, in the eggs, I'm just going to ask that you delay that because Blayne has got some information that really talks about that. And then I'll be available for some questions. But maybe it would be more appropriate to ask both of us after he gets done.

MS. BAIRD: Steve, could I follow up with another question?

MR. ELA: Go ahead.

MS. BAIRD: Okay. So you are saying, in fact, several certifiers said that none of their operations are having problems or have requested
a use of a, of fenbendazole or any other parasiticide. And they're saying that if we do enough rotation, then that will be sufficient. We didn't see that with mammals. Could you comment that on poultry?

MR. CARTER: No, the environment is not static. And particularly when you think of particularly so much poultry, you know, being done in environments where it's warmer and wetter, and then when you run into situations where maybe a drought hits or, you know, things like that where you can't, you know, follow an assessed scheduled.

And that's why emergencies do arise.

If the world stays static, heck, if the world stayed static, we'd all have been out at Expo West in Anaheim in March or having an NOSB face-to-face meeting, you know, next week.

But emergencies arise and, you know, growers really need to have the resources to address that so that their flocks don't suffer.

MS. BAIRD: Okay. Thank you. I think I'll wait for the next speaker to ask further questions. Appreciate it.

MR. ELA: Great. Any other questions
for Dave? Thank you, Dave. We appreciate it.

So next up we have Blayne Mozisek. And then after that we have Alice Runde and then Garth Kahl. So, Blayne, please go ahead. And it's my understanding you have a PowerPoint. And we'll try and get that pulled up for you here, so let them do that. But please go ahead and state your name and affiliation.

DR. MOZISEK: Thanks, Steve. This is Dr. Blayne Mozisek. And I'm with Merck Animal Health. And I have four slides to show you today.

The first, here we go. I just want to show the five new Board members. You haven't seen this, but those who were at the previous meeting have. But what you have there on the left -- and let me back up a little bit.

But I'm a veterinarian in the field servicing, you know, both organic and conventional flocks. And this is what I see in the field, so actually boots on the ground.

And what you have there on the left, those are birds with outdoor access and what I would refer to as an extremely heavy worm burden. And that's an animal welfare issue. And as a
veterinarian, this is something that I've been tasked to protect, right, the rights of these animals and keep them healthy. So that's grossly what you see.

And actually, while that looks like a large burden, the vast majority are actually in the tissue phase. And what you see at the top center there are these small larval stages that are migrating through the tissues and causing inflammation and damage.

Next, below that is the bottom center. Sue Baird brought it up earlier. But this is a bird with blackhead caused by a protozoa called histomonas meleagridis. And it, in turkeys, it's a very severe disease causing 90 to 100 percent mortality. In chickens, it's also a severe disease.

And really there's no cure for it. And fenbendazole is also not a cure. However, it does control the worm that serves as a vector for this disease. So it is a tool in the toolbox should producers need it.

And then on the right is one thing that we're really trying to provide a tool, again, for
these producers to protect themselves, protect the organic egg market. That is an ascarid, a roundworm inside of an egg. And this happens by, you know, the cloaca of a chicken is basically the common sewer is what that is. And you've got the reproductive tract, the GI tract, and urinary tract all emptying in that one space.

And when that worm, a live worm has the ability to migrate out of the GI tract and can migrate upwards into the reproductive tract, it can be incorporated in the eggs.

And this is something that, as the organic industry is becoming more prevalent, we're seeing this more often. Consumers are finding these eggs, if they're not found prior to entering market. So, if we could advance the slide, please, Devon?

The next thing that I'd like to talk about is the emergency use. And there are two things. One is the emergency use and one is the residues.

I think these should be based on data. There's really no room for opinion here. There are plenty methods available. But, and it's my
understanding, and there's literature, and I'll send this on to the Board.

But the Wisconsin, or the Modified Wisconsin Technique is a means of analyzing fecal material to look for these worm eggs and actually measuring the burden within. It's extremely sensitive. It's reproducible. It's very accessible, being provided by several labs within the country. Merck Animal Health can provide it as well. And it's auditable.

So we've got, you know, potentially a producer could have a report that says I have X amount of eggs within these fecal samples. And dependent on a potential threshold that was set, I would suggest 50 eggs per evaluation would be the emergency threshold coming from the sample that I've suggested here. But this is a means of providing good data, actionable data, should an emergency arise. Next slide, please.

So next is the residues determination.

I'm short on time. But I just want to point out the guidance to the industry that the FDA released, it really speaks volumes to what is done to go through to provide the information to consider
something acceptable.

And then lastly, the, in my conclusions, really would like to say that any deviation from an FDA regulation in terms of safety, it's -- if we could advance one more slide, please, the last slide. Any deviation --

MR. ELA: Blayne, I think -- Michelle, was that the time?

MS. ARSENAULT: It was the time. Thanks.

MR. ELA: Yeah, Blayne, we're going to have to cut you off. And I apologize. But --

DR. MOZISEK: No worries.

MR. ELA: -- we do have a couple questions for you. Sue has a question for you.

DR. MOZISEK: Yes, Sue.

MS. BAIRD: Okay.

MR. ELA: Sue?

MS. BAIRD: Thank you for this. Yes, I'm sorry. I forget to unmute every time. Blayne, thank you for this.

As we discussed it as a committee when we were discussing this petition, there were two sides being expressed from our members, and one,
and both of them impacting human health, them was residual and in the egg, of course, and how it might impact any kind of health issues, especially people who were, these -- and it was brought up today.

These eggs are being used for vaccines. They'll be used in potential cancer treatment. And how would perhaps that fenbendazole residual impact those studies?

The other side -- and there's not this side or that side. But the other concern that was issued was that we were seeing some data that showed that the oocyte from hookworms were entering the bloodstream, crossing the blood-brain barrier and actually causing worms to grow in the brain, which is a horrific thought in my brain.

So I know we can see the worm if we saw, cracked an egg and saw a worm in it. But we certainly could not see the oocyte. How do we address those two different concerns from the public?

DR. MOZISEK: Well, in terms of residuals or residues in the eggs and the vaccine supply, I can assure you that any vaccine or the vaccines being produced for human and actually
animals are produced in what we call SPF eggs at least to my knowledge. They're a specific pathogen-free. And they're in extremely tightly regulated environments. They're not necessarily organic.

And so they can't even have a specific -- there's a whole list of diseases they can't even be exposed to. So worms would be very highly controlled in that environment. So I don't believe that to be a problem.

But also in terms of residues and safeties, Merck Animal Health has published all this. And this information was included in the technical review, a poultry-specific technical review. And so I'll kind of let that speak for itself.

And then hookworms are not actually a parasite of poultry. And in that particular case, I think we're talking about aberrant migration of that particular parasite. And that's something else that I wouldn't, I'm not aware of that occurs in or outside of the GI tract.

In the case of the eggs that, or the worms that are found in eggs, you know, that's not
migrating through the tissues to find like the brain in the example that you gave. But it actually stays within, goes into the GI tract and back up into the reproductive tract. So it stays in the tube essentially. So --

MS. BAIRD: That's comforting --

DR. MOZISEK: Sue, I'm not sure I answered all your questions. But, okay.

MS. BAIRD: Well, that's comforting at least. Thank you.

DR. MOZISEK: Yeah.

MR. ELA: Emily has a question.

MS. OAKLEY: Hi. Thank you, Blayne.

Were the photos that you showed on your first slide from organic chickens?

DR. MOZISEK: The one on the left, so the heavy burden is. The one in the center top is. And the right side with the worm and the egg I believe is a pastured chicken but not grown under organic situations. And then the blackhead picture is also not organic.

MS. OAKLEY: Okay. And do you know the number of square feet per bird for the organic photos?
DR. MOZISEK: I do not know that number off the top of my head, sorry.

MS. OAKLEY: Thank you.

DR. MOZISEK: So, you know, I will make a comment, too, that was made earlier. Dave commented on it.

You know, these eggs are in the environment, and they can last years. And, you know, for some cases, they're transmitted or they can be carried by insects, right, so whether it be flies or beetles, or they can migrate from pasture to pasture and introduce the eggs.

You know, obviously, the sun has an effect on them. And rotation can help. But that's not always an option in every scenario. So --

MR. ELA: All right. Thank you very much. We do appreciate it.

DR. MOZISEK: Thank you.

MR. ELA: Sue, I'm going to go ahead and move on --

MS. BAIRD: Okay.

MR. ELA: -- because we're running a little bit behind time. So sorry.
MS. BAIRD: Okay. No worries. Thank you.

MR. ELA: But please reach out to Dave or Blayne if you have further questions.

MS. BAIRD: I will. Thank you so much.

MR. ELA: Yep. Next we have Alice Runde and then Garth Kahl and then Bjarne Pedersen. Alice, please go ahead.

MS. RUNDE: Good afternoon, everyone. My name is Alice Runde. I'm the Coalition Manager for the National Organic Coalition or NOC. My comments today pertain to the strengthening organic enforcement rulemaking and advocating for racial equity in the organic movement.

So, as my colleague Steve Etka mentioned earlier, despite the pandemic we should not delay congressionally mandated action on the origin of livestock and strengthening organic enforcement rules. These rules are critical to the economic viability of organic farmers and businesses and are critical to maintaining the integrity of the organic table.

NOC strongly encourages the certification, accreditation, and compliance
subcommittee to pursue the work agenda item of inconsistencies between certifiers. This is a recognized issue that is addressed many times through NOSB meetings, in published materials, and during discussions regarding the anticipated proposed rule on strengthening organic enforcements.

NOC is also requesting that the CACS review and analyze peer review audits, track progress made by the organic imports interagency working group, ask the NOP to explain its risk-based approach to accreditation, request more information about how funding increases are being used to strengthen the NOP's capacity to fight fraud, and identify gaps that would require further action.

We are encouraged by the NOP's work in this direction and feel that the NOSB can better support this work in a way that promotes transparency and input from all organic stakeholders.

We recognize that access to the organic movement and organic certification has not been equal across racial groups. Systemic racism has
kept our movement from reaching its full potential. The organic movement can only be stronger and better positioned to meet future challenges if it represents diverse participation.

NOC would like to see the NOSB prioritize research into both the barriers of participation in organic certification for farmers of color and technical assistance needs for underserved and underrepresented communities.

While we appreciate the added research priorities of increased access to organic foods and barriers to transitioning into organic production, we do not feel that these go far enough to address the issues at hand.

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 materials should be translated into and then work to identify the appropriate means of acquiring and sharing those translated materials.

Finally, thank you, NOP and NOSB
members, for moving from an in-person meeting to a remote one on such short notice. We understand that this was likely a challenge, not just for you but for many of the participants as well.

We want to express how important it is for us to return to in-person meetings when it is safe to do so. The in-person meetings are used as an opportunity to connect with other industry, Board, and NOP members in a more meaningful way that can occur during remote meetings. Thank you.

MR. ELA: Okay. Thank you, Alice. Are there questions for Alice? Thank you very much.

I just have one comment that I would love to see NOC and all our stakeholders be engaged with the, the nominations are out for NOSB members to be appointed later this year.

And I would really like to see, as you said, some of our underrepresented populations apply, because I think it's just critical for the Board itself to express some of that diversity that we see in our stakeholders as well. So anything NOC can do to help with that would be greatly appreciated.
Emily has a question.

MS. OAKLEY: This is just a quick comment that I definitely had written as barriers to certifying organic amongst smaller scale producers when language is an issue and if materials could be translated into a broad number of languages.

I am pinpointing those that are most likely to be used by producers. I think it would greatly increase the number of producers of different language backgrounds that would become certified organic.

MR. ELA: Great. Oh, A-Dae would like to make a comment as well.

MS. ROMERO-BRIONES: Yes, Alice and NOC, thank you for your comments. I think this is a critical part of our community to find ways to be more inclusive. And I think I really appreciated POC's comments in the beginning because I think it speaks to the fact of our, the fact that we need to be resilient especially in these trying times.

So I really appreciate the inclusivity of your thoughts. And I hope that it eventually
reflects in the NOSB makeup. So thank you.

MR. ELA: Thank you. Thank you very much, Alice, for your comments. We're going to move on.

And Garth Kahl is up. And then we have Bjarne Pedersen and Christie Badger after that.

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

MR. KAHL: Hi. My name is Garth Kahl. Together with my wife and daughter I run Common Treasury Farm, a small, diversified, certified crop and livestock operation. We have been certified organic since 1993. We also run Independent Organic Services, a small, diversified company offering organic inspections and consulting.

As usual, I want to thank the members of the Board for their tireless service and Michelle, voice of the NOSB, for her amazing work behind the scenes. I also want to give a big virtual hug to all the other friends and NOSB junkies I see on the webinar. Can't wait to see you again in person.

You already have my written comments,
particularly on ion-exchange membranes, paper crop production aids, and especially native fish and liquid fish products. I don't want to add anything else to those except that I think it's an easy low bar to eliminate liquid fish products that are not derived from either fish waste or bycatch.

Instead, I want to use some recent anecdotes from my experience as a small organic livestock producer in recent weeks to talk about the sunset process.

Way back in the first week of March, we hauled several hogs to our USDA and organically certified slaughter and meat processing facility. When I got to the facility, I will not mention the name since I haven't asked permission, one of the owners came out and helped me offload my hogs.

It's the kind of place where the owner also raises heritage hogs. Yes, Portland hipsters turn meat processor.

He explained to me the measures they were taking to stay in production in the face of COVID-19. These include keeping customers out of the facility, giving workers extra sick leave, requiring masks for all employees, and even
providing onsite child care options to the USDA inspector and other employees as the schools closed.

Two days later the processing facility sent out one of the most inspiring emails I have seen in the midst of the whole COVID-19 crisis. In addition to committing to staying open as long as possible, they pointed out that, as Americans face the prospect of empty store shelves, this was a potential time to bring new customers to the local food movement so that when, quote, things go back to normal, unquote, more people will be comfortable buying meat direct from producers.

This sentiment highlights the potential changes that come out of the current crisis if we are willing to imagine and implement a more resilient and organic food system, as Aimee Simpson at PCC just highlighted.

In the last week of March, as restaurant clients cancelled their orders in the midst of a statewide lockdown, one of our long-term customers in Portland wrote us and explained that she had contacted three other households of friends and together they wanted to buy three-quarters of a
Two days later, after picking up my meat at the processor, I drove 20 minutes to a Home Depot parking lot in suburban Portland. As our masked customer and her housemate rolled up, I masked up, opened my coolers, and started selling meat out of the back of the pickup. Welcome to the new normal.

It is in this context that I want to come back to 2022 sunset and ask that you let processors and growers know that right now they can count on continuing to have access to the tools they are using.

Organic growers and processors now experiencing disruptions in their supply chains will face significant changes in sourcing inputs and processing aids for months to come. Please leave them options on the list.

Thank you all for your time and effort. Please stay safe. And I very much look forward to seeing everyone in person.

MR. ELA: Thank you very much and very well timed. We appreciate those comments. Are there questions for Garth? We wish you the best
of luck. And thank you for taking the time to comment. It's always good to hear from producers.

Next we have Bjarne Pedersen. Bjarne, go -- after Bjarne, we'll have Christie Badger and then Terry Shistar. Bjarne, go ahead and please state your name and affiliation.

MR. PEDERSEN: Hi. Can you hear me?

MR. ELA: We can hear you. Go ahead.

MR. PEDERSEN: Great. I'm calling all the way from Denmark. I'm a consultant working for Ellepot in Denmark. And I'm now commenting on the motion for paper pots.

Ellepot thinks the motion is actually fine. However, we would recommend more to alter the limit of biobased to no less than 80 percent at this stage. Using non-biobased materials that are actually truly biodegradable will be more difficult but still possible within the remaining 20 percent limit that we suggest.

We could actually be forced to use biobased plastics that is not biodegradable to replace some non-biobased materials that is actually biodegradable. We think --

(Off mic comments.)
MR. PEDERSEN: Pardon me?

MR. ELA: Go ahead, Bjarne. Other people, if you could make sure and mute your mics please so that we don't interrupt the speaker. We'll give you a few extra seconds here, Bjarne. Sorry about that.

MR. PEDERSEN: We think this is an important issue for future evaluations. Again, it is important for us to state that biodegradability is the most important thing for us, we think even more important than the origin of the materials.

Depending on the final ruling on the accepted level of non-biobased material, we recommend that the growers will be allowed to use materials in start for this season even if the material is not quite in compliance with the final ruling.

And actually we've discovered that, due to this COVID-19 situation, we are now waiting for the lab to open up again for 6866 testings. And we suggest that the paper pots will be accepted for this season. And then hopefully we can get the tests sometime in the autumn.
There is an additional motion for any available 100 percent biobased products. And I see two issues on this.

Some 100 percent biobased products in the market will not biodegrade in the sun. And two, using 100 percent biobased wood fibers is fine, but only if it works for the grower. If the product dissolves too quickly, the grower should still be allowed to use the 80 percent biobased ones.

We do have 100 percent biobased products. And it's holding up for six to eight weeks. This is also usable for mulch covers actually. But it's not for everyone to use.

We encourage the Board to continue the work on the future definitions on paper. And the extensive work by the crop subcommittee will now open up for automatization of plant propagation for many growers. And we think this is an important step towards more organic grown crops.

So this is the comment that I would like to submit this time.

MR. ELA: Thank you very much. Are there questions? If not, I actually have one.
So, if we stuck with the 85 percent in terms of your company, that would eliminate some of your products from being included. Is that correct?

MR. PEDERSEN: That would eliminate one of them, yes.

MR. ELA: And in terms of just from your side of things, so how would we best make an annotation, if we were going to go back to the drawing board, to really try and keep like cellulose-based materials in there? We know most of them are synthetic just from the processing of the paper itself.

You're saying that there are non-biobased materials that would biodegrade better than biobased, ones that don't biodegrade. How would you propose that we would word that annotation?

MR. PEDERSEN: Well, they are, I think there is a standard for testing biodegradation of a product stating for how long time it would take for this product to fully biodegrade.

And that could perhaps provide actually a good notion on, say, a limit of 90 percent in two years, which is most standards you use for
biodegradation, not really considering whether the material would be biobased or non-biobased but more looking at the biodegradability that would be documented by this testing. I think it's 17556 in the ISO standards. But I'm not sure of the number.

MR. ELA: So, if we -- could we stick with let's say 80 percent biobased and then not, and then like to the remaining 20 percent push for biodegradation?

MR. PEDERSEN: So that could be a way to move it in the future. Yes, sure, definitely.

MR. ELA: Well, thank you very much. We appreciate your input. We'll move on, seeing no further questions. But thank you for calling in from Denmark.

MR. PEDERSEN: Yeah, thank you. Thank you.

MR. ELA: Next up we have Christie Badger and then Terry Shistar and then Emily Brown Rosen. Christie, please go ahead.

MS. BADGER: Thank you. Good afternoon. My name is Christie Badger. And I'm with the National Organic Coalition. Many thanks
for all of the work that you do on behalf of organic integrity.

Inerts, there continues to be an unconscionable delay in implementing existing NOSB recommendations for replacing the obsolete references to EPA List 3 and List 4 inert ingredients on the National List with listings of actual approved non-active ingredients in pesticide products.

Further, the NOSB should not delay in evaluating NPEs. According to the TR, virtually every environmental compartment can be contaminated through the use of NPEs.

In our written comments, we outline a detailed process for moving forward based on the outstanding NOSB recommendations from fall 2012 and 2015. NOC is recommending that the inerts working group be reestablished with membership consisting of NOSB members with support from an NOP staff person.

Paper pots. We are pleased that there is the differentiation being made between paper materials used with the intention of degrading in the soil versus paper materials that are intended
to be removed after use. We support the proposed definition of a planting aid and are generally supportive of the proposed annotation. While we appreciate having an annotation that represents the market’s current reality, we strongly urge the Board to keep at the fore the goal of moving towards 100 percent biobased content in future sunset reviews and suggest a way to achieve this in our written comments.

Biodegradable biobased mulch film. We thank the NOP for acknowledging in their memo to the NOSB dated October 16, 2019 that the 2014 rule and preamble establish the requirement that all polymer feedstock be 100 percent biobased. We fully agree.

To be clear, both biobased and biodegradability are equally important. In organic agriculture, the origins of the materials are important, as well as what materials, excuse me, as well as what happens to them in the ground.

Biodegradability must be considered in a very broad way and must be shown across many regions, soil types, and climate types.

NOC acknowledges that a biodegradable
biobased mulch film would be a great asset to producers. However, we harbor great concerns regarding the agronomic, environmental, and health effects of the breakdown.

For almost every argument made for the use of biodegradable biobased mulch film, we could find a counterargument noting that more research is needed. We maintain that this product is not ready for prime time.

Fenbendazole, NOC opposes the use of fenbendazole in poultry as proposed. There needs to be a withholding period because fenbendazole eggs of treated chickens at zero day withdrawal shows the 2.4 parts per million residue. While the FDA may consider 2.4 parts per million to be safe, organic is not set up to mimic conventional production.

To be clear, the FDA does not require a withdrawal time on the label for milk from dairy cattle either. But within the organic program, we follow a precautionary principle that guides our decision making, not what the conventional market requires.

Organic dairy producers are already
working from uneven ground when it comes to standards for livestock living conditions, pasture requirements, and outdoor access that are not in place for poultry.

We have heard the NOP and the NOSB continually express a desire for a level playing field for all producers. And we agree.

The withdrawal period for fenbendazole for use in organic poultry needs to be at the same high standards set for all other areas within organic production. Finally --

MR. ELA: Christie, I think your time is up.

MS. BADGER: Oh, I'm so sorry. I didn't hear it.

MR. ELA: Well, you know, it's, our timer is sometimes not being heard well. So I apologize for interrupting.

MS. BADGER: Okay.

MR. ELA: And you can finish one sentence if you want.

MS. BADGER: Oh, I was just -- okay. Finally, if organic allows fenbendazole for treatment of laying hens, there will be producers
both organic and conventional who will not need or allow the use of this. And it will become a label claim, another label claim and marketing tool stating no parasiticides and no chemical residue in our eggs.

MR. ELA: Great. Thank you very much. Are there questions for Christie? Thank you as always, Christie. We appreciate it. And I'm sorry. We're a little glitchy on some of the timing here. So sorry I had to step in. Oh, it sounded like there was a question from Asa.

MR. BRADMAN: Yeah, I'm sorry, Steve. I had a couple of questions. About --

MR. ELA: Go ahead.

MR. BRADMAN: About the biobased mulch, did I understand correctly that you would limit the use of biodegradable mulch solely to 100 percent biobased, because you said biobased and biodegradable mulch were equally important for the mulch --

(Simultaneous speaking.)

MR. BRADMAN: Biodegradability.

MS. BADGER: That's right, that both biobased and biodegradability are equally
important. Our members feel that is the case. And, yeah, we don't think that considering just biodegradability is sufficient.

MR. BRADMAN: So it should be 100 percent biobased.

MS. BADGER: That's what our member groups, that's the consensus, yes.

MR. BRADMAN: Uh-huh. And how do you consider that when you look at other petroleum products that we use in organic and get applied to plants and soil like, you know, horticultural oils?

MS. BADGER: We haven't talked about that. But I will make sure that we do, Asa, between now and the fall and bring that up for our crops specialist and try and get some thoughts for you on that.

MR. BRADMAN: Thank you. And then on your comments about NPE and inerts, I just want to echo that there's a lot of concern among the Board about the situation we have with inerts. And I know personally I agree with many of your concerns, and that in some ways the situation we have right now is broken. And I'm really hoping
to help fix that.

MS. BADGER: Thank you, Asa. We are really hoping that the NOP recognizes that they have such a wonderful resource in you, and then all of the fellow NOSB members, that they put you to work on that. We know that you have been eager to do that. And we certainly hope that they will take advantage of that.

MR. BRADMAN: Thank you.

MR. ELA: Thank you very much, Christie. We do appreciate it.

MS. BADGER: Thank you.

MR. ELA: We're going to move on. We're running a little bit behind. But I think we can, we're not too far off from what we can make up, but just as a time check to the Board. But please feel free to ask pertinent questions.

We next have Terry Shistar and then Emily Brown Rosen and after that Michael Sligh. Terry, please go ahead. Terry, we've got your slides, but we're not hearing you.

MS. ARSENAULT: Let's see. Terry, Terry, Terry, make sure you're unmuted here. Terry, I'm going to unmute you.
MS. SHISTAR: Okay.

MS. ARSENAULT: There we go. You're unmuted now. And it looks like Devon has your slide, yep.

MS. SHISTAR: Okay. You can hear me.

MS. ARSENAULT: Yep.

MR. ELA: Yes, we can. Please go ahead.

MS. SHISTAR: Okay. My name is Terry Shistar. And I'm on the board of directors of Beyond Pesticides. I'm willing to field questions on any of our comments. But I might need to get back to you with the answer. Next slide, please.

This meeting has a notable lack of voting issues. While it concerns us that the NOSB may not be moving forward on some important issues, it also gives the Board an opportunity to look at some broader issues that may receive inadequate attention in their rush to complete voting.

Some of these issues have been raised repeatedly by public comment. Some have been on and off the NOSB working agenda. Some have even been the subject of repeated recommendations that have not been implemented by NOP. These include
inert ingredients in pesticides, rain materials, contaminated inputs, sanitizers and disinfectants, and products of fermentation. Next slide, please.

Today I would like to focus on the need to look collectively at options for sanitizing and disinfecting. Some sanitizers and disinfectants are on the National List. Others have been petitioned for listing. They do not all appear on the National List as required by OFPA, itemized by specific use or application.

Even when the use is specified, it is not always possible to determine from the National List whether they are adequate, whether there are adequate sanitizers and disinfectants to meet the requirements of organic protection for a specific use. For this reason, we and others have requested a comprehensive review of these materials. Next slide, please.

Disinfection is a topic that's on the mind of many people as we protect ourselves from COVID-19. We at Beyond Pesticides are reviewing disinfectants used for coronavirus because of the concern that some disinfectants affect the
respiratory and immune systems and, therefore, may increase the risk of COVID-19 to users.

We believe that our experience may be helpful when it comes to reviewing sanitizers and the disinfectants used in organic production. Next slide, please.

The first step in such a review is identification of the needs for sanitizers and disinfectants. In this case, we were looking at the need to remove the coronavirus.

The second step is identification of available materials. We were lucky to have EPA's List N that lists products that are approved for removal of coronavirus.

The third step is reviewing these materials according to OFPA criteria. We reviewed the list and according to our criteria, our health-based criteria and producer recommendations for them.

The process for simpler for us because we had a defined singular need. We have a list of effective materials. And we have a simple criteria. But the process for the NOSB review is conceptually the same. Thank you. Next slide.
MS. ARSENAULT: Steve, if you're -- I think you might be on mute.

MR. ELA: Try that again. Thank you, Terry. Particularly where I hold the arrow and the space bar. Are there questions for Terry? All right. Thank you very much, Terry. We appreciate it.

MR. BRADMAN: I'm sorry, Steve. I had one comment. It takes me a while --

MR. ELA: Go ahead.

MR. BRADMAN: I just want to say, Terry, that I really appreciate your input on these issues on review of these materials and also the prior report that you and BP worked on with respect to inerts.

I think that's one of the best documents out there evaluating issues and challenges around inerts and paths forward. And I just want to give a shout out to that and really appreciate your input on these issues.

MS. SHISTAR: Thank you.

MR. ELA: It looks like Rick has a question as well.

MR. GREENWOOD: Yeah, just a quick
question for you on your COVID review. Is that all strictly paper review or is any, are you responsible for any lab testing?

MS. SHISTAR: No, we're not doing any lab testing. We're looking at the EPA's List N for, in terms of efficacy and then basically doing paper review of the health effects and with a focus on respiratory effects and immune system effects.

MR. GREENWOOD: Okay. Thank you.

MR. ELA: Thank you, Terry. Appreciate it. We're going to move on to Emily Brown Rosen. And then we'll have Michael Sligh and Cynthia Fabian. Emily, please go ahead.

MS. BROWN ROSEN: Okay. Can you hear me?

MR. ELA: We can.


I'd just like to welcome all the new members and thank you to all the existing members for your ongoing work and your service to the Board. It's a tremendous amount of work. And we all appreciate it.
I'd also like to thank the NOP for having this virtual meeting that we can all listen in on. It's a great thing to be able to do in times like these.

I am just going to make a few comments about the crops committee sunset review of List 4 inerts used in pesticides.

As many of you know, I was an NOP staff member from 2010 to 2016. And I was glad to be the facilitator of the efforts of the inerts working group. This group included members of the NOSB, members of the NOP staff, and also EPA.

We ultimately developed a proposal, which transmitted to the crops committee, and was reflected in the final 2015 NOSB recommendation for an annotation of the current listing of List 4 inerts.

This change, if it is, you know, made into a regulation, will provide for collaboration with the EPA Safer Choice program for a review of inert ingredients and pesticides.

I noticed there's been quite a few questions raised by commenters and by the NOSB as to what the wording means exactly in the proposed
new annotation when it says point 2, little 2, substances included on the EPA Safer Chemical Ingredient List.

People question whether this means all substances on the SCIL list or noting that there's a lot of different substances there like fragrances, degreasers, all different kinds of cleaning products, et cetera.

I think this could have been worded more precisely. But it was meant to mean that all substances on the SCIL list that also had EPA approval for use in pesticides, either they have a tolerance for such use or an exemption for tolerance.

I think the reason that that language was not included at the time was we thought it was redundant since you can't legally manufacture a pesticide product with inert ingredients that are not legal for use.

Therefore, I think -- and also in our conversations with Safer Choice, they could easily identify which ingredients on their SCIL list are approved for, as inert ingredients. And I think they're very open-minded about trying to make it
easier for organic producers and manufacturers to recognize which ingredients would be appropriate.

NOSB also asked a question, number 3, how should the NOSB establish review criteria based on the Safer Choice program while also ensuring it's consistent with OFPA criteria.

I'd just like to point out that the NOSB did a side-by-side comparison of the OFPA criteria and the Safer Choice program criteria, which is appended to the 2015 recommendation, and found a very good match for most of the criteria.

The working group thought that as part of the five-year sunset review the crops committee could then re-review the overall SCIL program, the criteria in use, make sure they're concurrent with OFPA, and also review any additions to this SCIL list for any red flags.

We also felt the petition process could be used if any undesirable substances made it through the SCIL screen. And those petitions would be given priority by NOSB for removal.

I'll just close by saying I'd like to say we, when I worked on the project, we found the EPA staff to be very supportive and very interested
in collaborating with NOP on this project.

And if you have any further questions about the work we did at the inerts working group and the recommendation back in 2015, I'd be happy to answer them. Thanks very much. I'm done.

MR. ELA: Thank you. It looks like Emily has a question for --

MS. OAKLEY: Yeah, thank you. Emily, you're such an amazing resource. And I was wondering what your answer to our fourth question, what would be the consequences of an NOSB recommendation to delist for inerts might be.

MS. BROWN ROSEN: All right. I sort of formulated some answers to that, but I didn't know I wasn't going to have time. But what I would like, I think the answer there is there are really no terribly good answers.

Number one, you could do nothing, which is where we stand right now, which obviously is not desirable since it's out of date and it is possibly allowing products that you don't want to see on the organic market. And it doesn't allow for innovation.

Second choice would be to allow all
inerts that have a tolerance exemption by EPA or a tolerance, basically go along with whatever EPA is currently allowing for inerts in pesticides, which would be more coherent with other agencies.

It would, you know, make no work for NOSB. And it would be consistent with a lot of other countries in the world that are allowing their environmental agencies to review inerts.

Or three, you could fall back on the 2012 recommendation, which would require you to review I guess according to OMRI it sounds like a huge amount of different inerts now that are not, that are in products. I think she said over 200 that have to be reviewed either singly or in groups.

There would have to be petitions. There would have to be additions to the National List. And every five years you'd have to re-review all those chemicals.

So, as I say, there's not any terribly good option. I would say, you know, trying to work with EPA and the SCIL program would be, obviously, your, you know, the best bet forward if it does, you know, if you can do that.

MS. OAKLEY: Thank you.
MR. ELA: Any other questions for Emily? All right. Thank you very much, Emily. That is very helpful.

MS. BROWN ROSEN: You're welcome.

MR. ELA: Next up we have Michael Sligh and then Cynthia Fabian and then Kelly Taveres. And so, Michael, please go ahead.

MR. SLIGH: Good afternoon. I'm Michael Sligh representing the Global Alliance for Organic Integrity. And I am a founding member of this Board.

We are working with government regulators, conformity assessment communities, producers, traders, and international NGOs to strength the organic assurance worldwide.

We are working on best practices and greater harmonization of organic oversight and working to develop better tools for preventing fraud. We welcome the new NOSB members. And we thank all of you for your service.

I want to try to touch on three topics quickly. First, during this time of pandemic and the need for remote surveillance, we strongly urge increasing cooperation and collaboration between...
accreditation, certifying, and inspection bodies on conducting remote surveillance to ensure consistent oversight and to create more timely communications regarding potential early warning of hot spots of potential fraud.

Secondly, we strongly support organic oversight globally shifting toward greater focus on risk and where the greatest risk resides. And we strongly urge the use of consistent criteria for risk assessment to help guide our program during these very tricky remote times.

Determining high risk should include at least histories of non-compliance and problems, volatile areas, supply chains that are long and complex, high demand commodities, and scale of potential impacts if fraud is found.

Thirdly, given our current need to rely on more and more remote oversight, hopefully for not too long, it is critical and more critical than ever that the proposed organic import rule get out for public comment ASAP. We must not allow this urgently needed rule to get lost during this current crisis. We ask all on the call to please continue to urge this.
We also don't want to see that the rule comes out partially, and it may get caught during a potential change of administration, which also could hang up the rule going forward. So getting this rule out is probably one of the most significant things we could do to prevent fraud in the short term.

And finally, we strongly support calls for addressing racial equity and inclusivity in organic. Thank you very much.

MR. ELA: Thank you, Michael. Are there questions for Michael? We appreciate your thoughts.

MR. SLIGH: Yep, thank you.

MR. ELA: We are going to move on. Yep, take care. We're going to move on to Cynthia Fabian. And then we'll have Kelly Taveres after that and Mark Keating after that. So, Cynthia, please go ahead.

MS. FABIAN: Okay. Okay. So I'm Cynthia Fabian. And I --

MS. ARSENAULT: Cynthia, your mic just cut out. And I think you're on mute now. I'm going to unmute you. Oh, somebody --
MS. FABIAN: Can you hear me?

MS. ARSENAULT: Yep, we got you now.

Start again.

MS. FABIAN: Okay. So I have a patented product that uses gamma rays in order to be changed into different forms, even pellets for feed. And I'm in the process of getting a USDA certified organic certification. I do not have it yet.

But it's highly effective in killing many of these worms. And it uses DE, diatomaceous earth, which is a key element. And as it is processed in different forms, it can help the agricultural market as well as the livestock. And I'm working on the, helping to eradicate from the livestock screwworms and things of that nature, which are a key part in saving our livestock and our agricultural industry.

And I need to work still. But it has been tested. It is patented. And right now I'm at the stage where I need to get it to market so that it could help who it needs to help. Thank you.

MR. ELA: All right. Thank you very
much, Cynthia. And I would just encourage you on that to, if you need to, just talk with Devon and submit a petition to the program and look through those criteria. So are there any questions?

All right. We're going to move on to Kelly Taveres, then Mark Keating, and then we'll go to John Foster. We have Amber Pool on the list, but she has cancelled. Just so, John, know that you'll come after Mark Keating. So, Kelly, please go ahead.

MS. TAVERES: Thanks. Hi, everyone.

Good afternoon. My name is Kelly Taveres. And I serve as the digital specialist for the Organic Trade Association.

On behalf of OTA, I'd like to welcome the new Board members, and thank you so much for beginning the five-year journey of critical and greatly appreciated service to the organic sector.

My colleagues will speak later on specific agenda topics. And you have our detailed written comments. So my remarks will focus on an introduction to OTA and our membership, our NOSB comment process, and the work we've been doing as it relates to sunset material review.
To begin, I'd like to thank NOSB and National Organic Program, just echoing what others have said, for offering this virtual opportunity not only for public comment but for the NOSB meeting itself. This is a great service and opportunity for the entire organic sector. And it ultimately has increased accessibility to this public process.

We certainly have a strong preference for in-person meetings. But it's also great to know that we now have a virtual option if it's needed.

So a bit about the Organic Trade Association, one of our strongest assets is the diversity and breadth of our membership. Unlike many trade associations, we are uniquely structured to include the full value team for the organic industry, ensuring that all segments from farm to marketplace have a strong voice within our organization.

We bring farmers and growers, ingredient suppliers, processors, manufacturers, distributors, certifiers, retailers, and many others together to promote and protect the growing
organic sector.

We represent over 9,500 businesses in all 50 states. And half of OTA members are small businesses reporting less than a million in organic sales per year.

OTA's members are represented either through direct membership of the association or through strategic partnerships with regional organic farmer organizations across the U.S. through our Farmers Advisory Council, or what we call FAC.

Smaller organic farms who have current membership in one of our participating FAC organizations are able to obtain full OTA membership for a minimal fee through our farmstead membership category.

The comments that we submitted are on behalf of our membership. In order to do this, our regulatory staff carries out an extensive process of membership engagement so that we can understand how NOSB recommendations will impact certified farmers and handlers on a day-to-day basis.

Although it was very challenging to
conduct membership outreach during a pandemic, OTA was able to facilitate a task force addressing all things fish and seaweed related. And all of our members were provided with an opportunity to weigh in and inform all of our final comments.

To help facilitate a thorough comment review process for sunset materials, we created electronic surveys for each individual input under review. The surveys are confidential, user-friendly, available to every NOP certificate holder, and include seven to ten questions that address the necessity or essentiality of a National List input under review.

You have our written comments, which include all the survey responses we received to date. We were able to collect a total of (telephonic interference) unique responses from organic physicists across the country.

This is a particularly low response rate for us. And we recognize that that's largely, if not completely, due to the COVID-19 pandemic and the priorities that organic operators are facing during this comment period. But we'll continue to collect responses to inform the vote
that's going to take place in the fall.

Thank you to the Board for your hard 
work and your commitment to furthering organic. 
And that's all for me.

MR. ELA: Thank you very much. Are 
there questions from the Board? All right. Thank 
you very much.

And we will move on to Mark Keating. 
After that, we will have John Foster and then Tom, 
sorry, Tom, Honigford I assume. So, Mark, please 
go ahead. And, Mark, we're not hearing you. 
Mark, still don't have you.

MS. ARSENAULT: Mark's on the line. 
Mark, Mark, Mark, there you are. Mark, I'm going 
to unmute you. There you go. Your mic should be 
open now. And your slide is, slide deck is up.

MR. KEATING: Are you hearing me now? 

MS. ARSENAULT: We got you.

MR. ELA: We've got him.

MR. KEATING: Great.

MR. ELA: Please go ahead.

MR. KEATING: I'm humbled to be part 
of this community. My name is Mark Keating. And 
I operate Wheel of Life Consulting.
I want to thank the NOP and the NOSB for making this unique forum possible. And I want to thank Michelle for being such a pleasure to work with.

Between 1999 and 2002 I served as the lead agricultural marketing specialist at the National Organic Program on crop and livestock standards and the corresponding National List materials. This was during a period in which the NOP responded to the 275,000 public comments, published both the second proposed rule in March of 2000 and the final rule of December.

With the exception of the pasture standards, that is essentially the same crop, livestock, and handling standards that we're working with today. The National List, you know, changes. But I was there, amoeba on the food chain, working on those 275,000 comments.

Over the past ten years, I have conducted more than 1,000 crop, livestock, and handling inspections. I know how the standards were written. I know why they were written that way, and how they're being applied.

Earth Day, a good day to remember one
of our heroines, Rachel Carson. Michelle, if you could forward to the next slide. That's way more about me than I really wanted to get into.

Very quickly, just two issues that I think I'll have time to address. Fenbendazole, first and foremost, I want to compliment Dr. Mozisek for his knowledge and comment on this subject. I think, as we all talk about what people think or consumers think or what I think, he projected a very, very thorough, did an in-depth understanding of the subject matter.

We do have to include turkeys up front in this conversation. If you go to any organic slaughter facility in this country that handles poultry, they will tell you that worms are a recurring phenomenon in all sources of organic poultry. And this is because increasing outdoor access leads to increases in exposure to pathogens.

We should bear in mind that the farmers and the companies that have petitioned for this material are the ones who for ten years have voluntarily complied with the animal welfare standards which the USDA has proven incapable of making law. Those are the people who, and those
are the type of operations, that specifically need these materials.

It is unethical to leave the birds out there without this. And I think for consumer expectations it's a very false premise. I do not agree with the comment from NOC that this is somehow inconsistent with what the consumer thinks or what the OFPA should allow.

We have registered pesticides that are used in organic production that have tolerances. EPA runs that show. FDA runs this show. There is no difference. And if a consumer, consumers -- is that my time?

MS. ARSENAULT: That was the timer.

MR. KEATING: Unreal, because the next subject, organic seed practice standard, I will urge anybody who wants a contrarian opinion, please reach out to me. It's an issue that has been just poorly managed. I hate to say that. But that's for another time.

MR. ELA: Thank you very much, Mark. Are there questions for Mark? It looks like Sue has a question for you.

MS. BAIRD: Thanks, Mark. I really
appreciate this. And we have not even considered turkeys when we were discussing this fenbendazole.

But just to comment, I suppose, I agree with you. The producers that I see in Missouri that are having real issues with the worms in the laying hens are the ones that are not only certified to the current standard of organic, but also those that are voluntarily adhering to the enhanced livestock proposal. Supposedly, it was passed at one point.

And they are -- and I've reached out to them. And they are seeing a lot of worms in their eggs. So thank you for bringing the turkeys to our minds as well as we discuss this.

MR. KEATING: May I have a follow up comment?

MR. ELA: Yes, quickly, please.

MR. KEATING: Sometimes the organic poultry sector gets painted with a broad brush, the smaller scale and the larger scale.

There are actually three clear categories. There is small scale. There is large scale with humane compliance. And there's large scale without humane compliance. And I won't go
any further right now.

But that large scale with humane compliance is one of the sectors in the organic community which I'm most proud to work. And they've done an exemplary job and made an enormous financial investment.

And we're not talking about going to hedge funds to put the money together. We're talking about people who put the family farm on the line to put up these houses.

And exploring that in a little more depth and detail I think would really be beneficial. And thanks, everybody, for their service.

MS. BAIRD: Just as a further comment, my people that I deal with are the small, mainly Mennonite communities. And they are smaller scale. And I have reached out. And they absolutely say they're seeing a lot of worms in their eggs.

MR. ELA: Asa, you have a question.

MR. BRADMAN: Yeah, my question, it seems like there's kind of two takes on this material, one, whether, in principle whether it
should be allowed, and then, two, if it's allowed, should there be a withdrawal period and what that should be.

You made the analogy to the EPA food tolerances, which we have for some organically approved pesticides. Are you -- do you have opinions on the withdrawal period and what that might be?

MR. KEATING: I would not favor a withdrawal period. I'm somewhat of a contrarian I guess in the sense in the organic world that I'm not as materials or residue driven as many are. I don't -- I think from a compliance standpoint the withdrawal period would be a very complicating factor.

And personally, I am confident that the food safety network in this country -- I don't agree with all the decisions that they make on food safety oversight in this country. I don't obviously agree with all the decisions. But I do not see a reason for an extended withdrawal period on an FDA medication.

MR. BRADMAN: Thank you.

MR. ELA: All right. Thank you very
much. We appreciate your comments, Mark.

Just as a note, I think we've lost Michelle temporarily. But we have others taking over. So bear with us a little bit here.

We next have up John Foster and then Tom Honigford and then Maricela Adrian. So, John, please go ahead. And I will -- Michelle's not here. I will take over the timing. So --

MR. FOSTER: All right. Can you hear me okay?

MR. ELA: We have you.

MR. FOSTER: Great.

MR. ELA: Go ahead.

MR. FOSTER: My name, John Foster. I'm Director of Business Development for EarthKind, a pretty longstanding member of this (telephonic interference), worked on the Board 2010 to 2015 in a handler role. So welcome to the third of you who are new, and thank you all for your service. It is no small feat I can assure you.

Here today, first talking about the subject EPA List 4, inerts of minimal concern, or just inerts to use the parlance of our times.
I believe that these inerts continue to be essential for organic production and handling by virtue of the regulatory extension by every relevant regulatory definition present and should be continued to be included until a suitable alternative method for inclusion is determined.

So, first up, I just urge members to recommend continuation of these materials as written just to keep them in the pipeline. I have more detail in written comments I submitted online.

But so for context, EarthKind, we develop and manufacture EPA-registered and 25(b) exempted repellents. We use agricultural carrier oils, almond and sunflower oil, upcycled corn cobs, and botanical essential oils in deterring rodents, moths, ants, and spiders for now.

They're pretty effective as an independent tactic or in concert with IPM practices in and around structures. These are primarily geared for structural use.

They're included on OSP's multiple certified organic operations. And their rationale there is under 205.271(d).

And then, so my position is primarily
Director of Business Development. But I am also quite involved with innovation and commercialization. So I did want to follow up to those four questions from 2015.

So, answer to question 1, yes, development of better products has been stifled because of the disconnect and regs in the EPA listings. And to be very clear, these are products that could easily reduce the need around structure for synthetic poisons that are known to be a significant toxicological concern, humans, livestock, and wildlife, which is a particular interest of mine.

Number 2, the answer is we're aware that NPEs are of some concern. EarthKind products don't use it. But we know that that is one type of material that is of concern on other EPA lists, current EPA lists.

Number 3, I really encourage -- I couldn't echo Emily's thought, Emily Brown Rosen's thoughts on this more. I encourage implementing the 2015 recommendation. I was on the Board during those conversations. I recall them clearly. Emily Brown Rosen captured them just right. It
was a lot of hard work that I think just needs to be implemented.

Having taken part in the panoply of those sunset reviews myself, individual review of every inert I believe is untenable. I can go into a long list of whys, but untenable is the right word. And without --

MR. ELA: John, your time is up.

MR. FOSTER: All right. Thank you all for your time.

MR. ELA: Thank you for your comments. Are there questions from the Board? John, I have one. So, if we were to go to the Safer Choice program and move away from List 4 to Safer Choice, would that, how would that affect the business environment?

MR. FOSTER: Twofold, one, it would provide clarity and consistency. And that intrinsically has value. That's a -- just knowing that that's what we can count on, it would help.

Having, I've done some formulations with things on the SCILs, on SCIL, and also with 25(b) materials, 25(b) as used in, for inert purposes, as well as active ingredients.
And there are many good options. But where I find the value would be is being able to go to my CEO and my board and say, hey, you know all that stuff I asked to do on the side because there wasn't an immediate avenue to commercialize it, now we can take advantage of all of that work and actually bring these things to market with some certainty that it's going to be okay.

So, for EarthKind, it would have dramatic effects because we've done a ton of the work for alternatives to poisons or sprays that are much more toxic that would target additional pests that are of both public health and non-public health concern.

MR. ELA: Great. And it looks like, Asa, a quick question.

MR. BRADMAN: I would like to know your comments on question 4.

MR. FOSTER: Oh, I -- so, without an alternative that we just talked about, I think a number of tools would leave the market and for producers and livestock, but by extension, handlers as well, because handlers are, you know, they don't have a 601(m), you know, under, anywhere
under 605 or 606.

So we refer through 272, 271 to the National List. So handler are also on the hook for this even though inerts aren't listed, you know, per se for handlers.

So I think as materials would leave the market, there would be fewer materials kind of in the organic sphere. And without alternatives I really believe that very small toolbox that's available to producers and livestock, as well as handlers, but certainly producers and livestock operators, that would get smaller.

And without clarity on what to develop next, there's very little incentive for folks who have the resources to go out and develop new stuff to go do that.

Organic, like in my world, organic is all I do. Like that's my whole world. And to a lot of people on this call and in this virtual room, it's the same.

But it's a very small portion of what chemical manufacturers make. And so any lack of clarity on what's coming around the corner, particularly in the context of greater lack of
clarity, pandemic, et cetera, is going to be harmful for development. It has to be, because people aren't going to throw money at uncertain things. Generally speaking, they won't.

MR. ELA: All right, John. Asa, did you have one quick follow up?

MR. BRADMAN: I have just one great comment. I think your mention of the importance of lower toxic materials for structural pest control is really important.

I do a lot of work in child care and schools, not quite relevant to this Board. But certainly a lot of markets and grocery stores and other indoor environments are using a lot of materials that we wouldn't necessarily want in an organic setting. And structural pest control is another part of the picture in environments where food passes through.

MR. FOSTER: Couldn't agree more. And I would say on the schools particularly, that's a particular concern of mine. I'd love to connect with you at another time on that.

MR. BRADMAN: Thank you.

MR. ELA: Thank you very much, John.
We appreciate that.

MR. FOSTER: Thank you. Thank you all very much.

MR. ELA: Yep. Next up we have Tom Honigford, then Maricela Adrian. And then we will take a short break. We're running a little bit behind. So we might just take a five-minute break. And then we'll move on to Beth Rota right after the break. So, Tom, please go ahead.

MR. HONIGFORD: Can you hear me? Hello?

MR. ELA: Yeah, go ahead. We can --

MR. HONIGFORD: All right. Great. Okay. Good. I'm actually a farmer. So I'm going to get off the, I hate to call it this, but the geek talk a little bit and give you a slightly different perspective on what it's like to be here in my field. As I'm speaking actually, I'm in my truck. Rainy day here in Vermont, by the way.

I got a kick out of the woman from the OTA referring to small farmers as being around a million dollars. I'm substantially under that. But up here in Vermont, there's one of us around every corner. So we probably have more organic
farmers than any place in the nation per capita.

So I'm going to speak about two things.

The first thing is I'm not going to talk to you about the technical merits of it. But the paper pot transplanter is a critical tool for my operation, my size operation, when you have live startup in the springtime. I don't even employ enough people to run a water wheel transplanter, which requires three people.

And this thing plants faster than a water wheel transplanter. It's cheaper. It's just a great system. So I think when you're looking at a paper pot system, it is a very sustainable system.

The other thing I want to do is put a bug in your ear about the use of plastics. I've been at this for 25 years. And I am seeing a growing use of plastic in the egg sector. Whether it's a dairy farmer or a vegetable farmer, people are relying on plastics more and more and more.

We have a big conference in Manchester, New Hampshire every two years. There's literally thousands of growers there. And there must have been six workshops on how to use plastic in your
field.

So we pride ourselves in the organic world of being, you know, sustainable. We're thinking about outlawing Chilean nitrate because it is not sustainably mined. And here we're using plastic up the ying-yang and running towards plastic more and more.

So we need to start a conversation. And people need to start thinking about how we can reduce our use of plastic, not how we can increase our use of plastic. We're heading the wrong way on this one.

So I just wanted to give you that kind of perspective. That's all I had to say.

MR. ELA: Thank you very much, Tom. We always appreciate hearing from somebody out in their field. Some of us share that sentiment. So are there questions for Tom? It looks like Emily has a question.

MS. OAKLEY: Hi, Tom. Thank you so much for calling in. I wasn't clear then. Are you advocating for the biobased biodegradable mulch film or not advocating for it?

MR. HONIGFORD: I don't know enough,
Emily, to say one thing one way or the other. I'm not advocating necessarily for anything except for the fact that we can't keep on the path that we're on.

I mean, we've abandoned the use of silos up here so we can wrap all of our bales of hay to marshmallows. And we just throw that plastic away. And when we had appropriate technology of putting stuff in silos, we're no longer using it because it's inconvenient for us.

So I'm not necessarily advocating for anything. I'm just saying we need to start a conversation. We need to start thinking about it. And if it's biodegradable mulch, if that's where we start, then that's where we should start.

MS. OAKLEY: Thank you.

MR. ELA: Mindee has a question for you, Tom.

MS. JEFFERY: Tom --

MR. ELA: Mindee --

MS. JEFFERY: -- paper pots in your field. Did I hear that correctly?

MR. HONIGFORD: That's correct.

MS. JEFFERY: How many years?
MR. HONIGFORD: Oh, I got on it as soon as I heard about it. So I've been using it, I don't know exactly how many years, eight to ten.

MS. JEFFERY: And any observation on the impacts to your soil?

MR. HONIGFORD: None, zero. It doesn't look like it has any impacts. The second year, like I was out there tilling today in some of the places where I've used paper chains last year, I can see the remainder of chains, just little like two-inch pieces of paper. Places that I planted it two years ago I don't see anything. So, within a season it's gone.

MS. JEFFERY: Thank you, Tom.

MR. HONIGFORD: You're welcome.

MR. ELA: Thank you very much, Tom. Good luck in this growing season.

MR. HONIGFORD: All right. Thank you. We need it.

MR. ELA: Yes, we know that feeling. All right. We're going to move on to Maricela Adrian. We're going to take a very short break. And then we'll have Beth Rota and Diana Castillo after that. Maricela, please go ahead. We're not
hearing you.

MS. ARSENAULT: Sorry, Steve, it's Michelle. I don't believe Maricela is with us. We haven't seen her up until this point.

MR. ELA: Okay.

MS. ARSENAULT: Double check --

MR. ELA: Maricela, if you are with us, please try and let Michelle know, and we'll come back to you.

Otherwise, we're going to go ahead and move on to a five-minute break. So, if everybody could come back at, well, we'll just, we'll call it 1:40. We'll give you two extra minutes. So, well, 1:40 Mountain time, so 40 minutes after the hour of whatever time zone you're on. So we'll be back, be back shortly. I hope you enjoy the break. Take care.

(Whereupon, the above-entitled matter went off the record at 12:33 p.m. and resumed at 12:40 p.m.)

MR. ELA: Okay. Well, we'll call this meeting back to order after a short recess. Sorry that it was a little short for everybody, but -- I think we're a little bit behind, but I think we're
in pretty good shape.

So coming up we have Beth Rota and then Diana Castillo and then Carlos Chinchilla. So, Beth, you're up and please state your name and affiliation for the record.

MS. ROTA: All right. Can everyone hear me?

MR. ELA: We can. Please go ahead.

MS. ROTA: Great. My name is Beth Rota. I'm the policy and quality assurance manager for Quality Certification Services. QCS currently certifies over 1,250 USDA organic operations.

Thank you for everyone present for engaging the public comment process, despite the current travel limitations. I'd like to add a special hello to the newest NOSB members.

And while I appreciate the option of a remote meeting due to circumstances, I also want to stress the significance of in-person meetings, which allow organic stakeholders to share ideas, collaborate and find solutions in ways that remote meetings cannot facilitate. For these reasons, I truly hope that future meetings will continue to be held in-person.
I will use my time today to expand on our written comments on paper. QCS continues to support adding paper-based crop planting aids to the National List. The benefits of these materials, and their compatibility with OFPA, have been clearly laid out in the petition, the discussion documents, and public comments.

There is broad support from both organic producers and certifiers to codify their continued use in organic production. This is the fourth consecutive NOSB meeting addressing this petition, and I hope it will resolve in a long awaited recommendation for the NOP to add paper-based crop planting aids to the National List.

We appreciate the crop subcommittee's continued engagement with the organic community. And while we support the intent of your proposal, we're concerned with its complexity. We offer these suggestions in hopes of finding language that can be clearly and consistently applied, while maintaining your intent.

The definition should allow for all types of paper-based crop planting aids that
decompose into the soil, and not be limited to the examples in the proposed definition.

Please clarify the meaning of cellulose-based paper, including what types of cellulose will be allowed. We support limiting the amount of synthetic adhesives and non-bio-based fibers, a minimum of 85% bio-based content and a maximum of 15% synthetic adhesives and strengthening fibers seems appropriate. But the NOSB should verify that this threshold matches what is currently available to it and used by organic producers.

The definition and annotation should enable organic certifiers and mid-tier review organizations to determine if a paper-based crop planting aid is allowed based on ingredient composition alone, without burdensome bio-based testing that may be subject to margins of error.

We support increasing the bio-based fiber content requirement over time. We encourage the NOSB to use the sunset review process to re-evaluate the appropriate minimum content and eliminate a complex commercial availability requirement, and the potential for inconsistent
We support the addition of paper-based crop planting aids to the National List because they're in line with OFPA criteria. These materials embody the organic principles by reducing reliance on plastic containers, promoting recycling of paper products and increasing soil conservation through reduced tillage.

We urge the NOSB to pass a simplified National List motion to meet producer needs and ensure consistent application of the organic regulation.

MR. ELA: Thank you very much. Are there questions from the Board? All right, Beth, thank you very much.

MS. ROTA: Thank you.

MR. ELA: We will move on. We have Diana Castillo up next. And it looks like maybe -- Diana, are you out there? I'm not sure if we can find your number. There's somebody talking on mute. Is that you Diana?

Devon, Michelle's computer just went offline again. So, Angelyque or Devon, we may need you to step in here.
MS. PEGUES: So I'm not actually seeing Diana on here.

MR. ELA: Okay. Yes, Michelle gave me the heads-up that she couldn't see her either so. Well, if Diana you're there, we'll come back to you. The same is true for Carlos. I think we might be missing him. Angelyque, do you happen to see him?

MS. PEGUES: I do not see him, either.

MR. ELA: Okay. Then we'll move on to Keith Jones. Next is Cynthia Smith, who we're not seeing right now. So, Cynthia, if you're there, give us a heads-up. But we'll do Keith Jones then Lee Frankel and then Jenna -- I'm sorry, Jenna -- Pugliese. Okay. So, Keith, please go ahead.

MR. JONES: Hi. Can you hear me?

MR. ELA: Yes. We've got you. Go ahead.

MR. JONES: Great. Thank you. My name is Keith Jones. I am 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 safe and effective biological products, including biopesticides, biostimulants and biofertilizers.

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.

BPIA is a vibrant 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 and agricultural forestry, home gardens, horticultural, ornamental, public health, turf, 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 NOSB 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 some of those comments.

Regarding the March 11, 2016, NOP Document 3011 entitled, Procedure - National List Petition Guidelines, BPIA respectfully requests the following.

Confirmation that it is not necessary to disclose confidential business information as a requirement for obtaining an NOP listing to permit use in organic agriculture.

The addition of a definition of the terms heavy metals or other contaminants, and publication of the associated maximum permitted concentrations for such material.

The addition of a definition of the word essential, and clarification that useful new resistant management tools and/or integrated management tools are not precluded by the existence of one or a short list of currently allowed organic
options.

The addition of a provision that would allow the NOP and the NOSB to accept the results of studies that one, meet the requirement of good laboratory practice as defined in 40 C.F.R. Part 160 and two, have been accepted by the U.S. EPA.

The addition of a requirement that the NOSB regulatory recommendations be based upon clearly stated objectives and criteria.

Inclusion of a realistic best case timeline that includes the entire NOP process from petition, receipt, published final rule.

Regarding the April 11, 2012 NOP document entitled, National Organic Standards Board Policy and Procedure Manual, we respectfully request the following.

The addition of disclosure of the areas of technical expertise of the authors of a new technical report, and an NOP confirmation that areas of technical expertise are sufficient to address the scientific theories addressed within each new technical report.

The addition of an opportunity for comments and proposed corrections by the
petitioner before the technical report is finalized.

An update on Page 48 of the 2012 NOSB Policies and Procedures Manual regarding the submission of confidential business information to be consistent with the 2016 NOP procedure document.

And, finally, BPIA respectfully requests an expansion of the interpretation of 7 U.S.C. Section 6517 to permit inert ingredients that have a current, relevant, U.S. EPA exemption from tolerance with new limits.

And, again, I would just like to thank you all for the work you do and the opportunity to offer these comments.

MR. ELA: Thank you, Keith. And are there any questions for Keith? All right. Thank you very much, Keith. We appreciate it. Next up -- go ahead, Devon.

MR. BRADMAN: Sorry. I have a couple questions.


MR. BRADMAN: You talk about CBI. I just want to state, you know, in principle, I think
all ingredients in pesticide formulations should be publicly available, and there should be an ingredient list.

And you said it was not necessary to disclose CBI. I know that's often the case, but can you clarify what your reference to -- you mentioned metals. You went very quickly through that.

MR. JONES: Yes. So my understanding is there is a provision on heavy metals, and it just says heavy metal or other contaminants. And we're actually requesting that those terms be defined and if possible that it be indicated what the maximum levels of such materials or concentrations that would be permitted.

We're just seeking clarification and possibly definition of those terms.

MR. BRADMAN: Okay. Thank you.

MR. JONES: Yes.

MR. ELA: Thank you, Keith. We're going to move next to Cynthia Smith. We're not sure we can find Cynthia on the phone list. But if Cynthia is not there, then we'll go to Lee Frankel, Jenna Pugliese and Adam Seitz. So,
Cynthia, are you out there?

MS. PEGUES:  She's not here.

MR. ELA:  Yes.  Not hearing from

Cynthia, we're going to move on to Lee Frankel.

Lee and then Jenna and then Adam Seitz.  So, Lee, please go ahead.

MR. FRANKEL:  Okay.  Thanks.  My name is Lee Frankel, and I'm speaking today as executive director for the Coalition for Sustainable Organics.  And I would like to thank the members of the Board for their devotion to the organic community, and welcome the new members to the Board.

I did have some slides.  I'm not sure if they're available, or not.

MR. PATTILLO:  Lee, I'm trying to pull them up right now.  I'm fighting with some windows.

MR. ELA:  Devon, do you want us to do the next speaker and then come back to Lee?

MR. PATTILLO:  They're coming up here.  Sorry.  Bear with me.

MR. ELA:  No worries.

MR. PATTILLO:  Okay.  Do you see it now?
MR. ELA: Yes. You got it. Okay.

Good. Lee?

MR. FRANKEL: The next slide. The CSO represents growers of all sizes from around the country who incorporate containers into their organic production systems and on their farms.

Next slide. Sustainability is fundamental for all agricultures as we try to feed a growing population. Organics should be no exception.

Next slide. Climate change will relocate, and, in many cases disrupt crop production. Containerized growing uses sanctioned techniques to open new and reliable production possibilities for a variety of site specific conditions while also helping to produce local and urban agriculture.

Growers report using up to 90 percent less water per pound of vegetable produced, while growing up to 10 times more product within the same footprint.

Next. Organic agriculture in the United States is built on three main principles, freedom from artificial chemicals and fertilizers,
recycling of nutrients where the waste from the previous group production cycle nourishes the next crop, and the recognition the growers must respond to their unique site-specific conditions when developing their organic systems claim. Containers follow those pillars.

Next slide. Organic policy is built on the combination of Congressional oversight, USDA regulation enforcement, and the NOSB, with all bodies receiving public comment from the organic community.

Next slide. Unfortunately, a lawsuit filed earlier this year is intended to have the court overrule the will of Congress, the National Organic Program and the National Organic Standards Board.

The CSO disagrees with the aim of the lawsuit to de-certify all organic operations and incorporate containers, hydroponics or aquaponic as well as other requirements.

Next slide. Can you keep hitting it a couple more times? Increased consumption of fruits and vegetables to correspondingly increase the availability with additional supplies coming
from organic producers using containers.

Next slide. In fact, supplies to many organic products from seedlings used by fruit and vegetable producers, to tomatoes to berries to herbs to living plants rely on container production methods.

Next slide. Please do not hesitate to contact me if I can provide any other information or data you need to help make informed decisions of this topic or related issues to return to your work agenda. Thank you for your attention.

MR. ELA: Thank you, Lee. Are there any questions for Lee? I'm not seeing any. We'll move on. Thank you, Lee, for your presentation.

MS. SMITH: This is Cynthia Smith. Can you hear me?

MR. ELA: Yes.

MS. SMITH: You passed me up and my phone was unfortunately muted, and I didn't realize it.

MR. ELA: Okay. We'll come right back to you, Cynthia. Let me finish up with Lee here.

MS. SMITH: Sure.

MR. ELA: Okay. No questions for Lee?
Yes. So we will come back to you right now, Cynthia. Thank you for jumping in. And then after Cynthia, we will go to Jenna Pugliese -- I'm sorry, Jenna -- and then Adam Seitz. So, Cynthia, please go ahead.

MS. SMITH: Thank you very much. Good afternoon. My name is Cynthia Smith. I am a pesticide registration consultant and a partner with Conn & Smith, Incorporated. I have 35 years of pesticide registration experience, 28 years registering green and other reduced-risk products. I am a successful past NOP petitioner and am currently working on a new petition. I am also a BPIA member.

I wanted to expand on some comments that I had before but were not expressly included in the BPIA comments, and this has to do with inert ingredients.

The law associated with organic foods was passed 20 years ago. And there has been 20 years of development of pesticide formulations for use in organic crops.

If the rules were to change now, we would effectively lose 20 years of development.
Companies who are currently registrants of organic formulations, if they could no longer sell their products, would need to make a return of investment decision. Do I or do I not invest more money so that I can keep this product on the organic market? And there clearly will be products that will be lost.

If the decision is positive to go forward, then there would need to be formulation development followed by toxicology testing, followed by efficacy testing, followed by amended EPA registration, followed by an amended California registration, followed by amended organic certifier registration, and then finally you would have a new product perhaps under a new brand name.

That whole process will take multiple years. And that is specific to each cross-pest combination, due to the efficacy requirement. I would propose that it would be better to expand the definition to allow all inert ingredients to have a tolerance exemption. Because whether you're on 4A or 4B, which is now an outdated mechanism, everything that has a tolerance
exemption does comply with EPA's requirement for a reasonable certainty of no harm.

I would encourage the opportunity for greater competition than what is in the organic marketplace. If that were to happen, then costs for organic products would go down, farmers would have more choices, and they would also have access to some beneficial inert ingredients that are currently locked out of the marketplace.

I would like to emphasize the idea of realistic and transparent timelines, and the absence of that information is very problematic to even make a business decision to pursue an organic petition.

I thank you for your attention. I would be happy to take any questions.

MR. ELA: Thank you, Cynthia. Are there any questions from the Board? I have one and then we'll go to Asa.

I guess my question is, we know that List 4 is outdated and cannot be updated at this point so that in itself is an inhibition to developing new products or new materials, would you be comfortable if we migrated to the Safer
Choice Program? Would that satisfy your goals?

MS. SMITH: I would say it depends on how this is done. If you eliminate List 4A and 4B and then go to some other program, I would say that it would be a huge disservice to the organic community.

If you offered some other program in addition that, you know, would certainly allow opportunities for new products to come online. But I wouldn't throw away what has already been achieved.

MR. ELA: Okay. Asa, you had a question.

MR. BRADMAN: Yes, I think, Steve, you really asked what I was going to ask. But I would put a little bit -- I would extend a little bit and say, you know, there may be some materials on List 4 that don't meet OFPA requirements and are really not acceptable for organic.

So there's kind of a tension there between, you know, transferring that list to an SCL-approved process would still result in probably losing some materials. And, you know, that process, it's hard for me to see how that would
be damaging to the existing formulations if we retain those materials which are reasonable under organic production and, you know, organic standards.

MS. SMITH: Well if you were to say that inert ingredient one, it doesn't meet your criteria, but inert ingredient one happens to be in current organic products, then you're disallowing those current organic products.

So you either have to reformulate or take them off the market.

MR. BRADMAN: I understand that. But there may be some inerts that should be taken off the market for organic. And, I mean, I know there's a lot of complexities here because, you know, we've heard from other commenters and there's a concern that it's not tenable to go one by one. But there are, you know, some materials on List 4 that many people feel are not compatible with organic. And so there has to be some process to streamline that and, you know, maybe --

MS. SMITH: What I would suggest is a phase-in period of 10 years. It needs to be long to allow for transition, because when you think
about all of the organic products and then all of
the crop/pest combinations associated with them,
each needing to be tested in field trials, you could
say its untenable to go inert by inert, but it's
also untenable to go for each crop/pest combination
for the entire organic world.

So time is the critical factor, to allow
time for a phase-in of a new program, whatever that
new program is.

MR. ELA: All right. Fair comments.

Thank you, Cynthia. I'm glad we were able to get
back to you. Are there any other questions? All
right. We will move on to --

MS. SMITH: Thank you.

MR. ELA: -- thank you, Cynthia -- to
Jenna and then Adam Seitz and then Jill Smith.
And, Jenna, I know I butchered your name. I really
apologize. Would you please edify me on how to
say it?

MS. PUGLIESE: No troubles. This is
Jenna Pugliese. It's simpler than you think, like
the dog and what you sign for an apartment. Can
you hear me okay?

MR. ELA: We can hear you. Please go
ahead and thank you for that.

MS. PUGLIESE: All right. Well thank you for your time today. Again, I'm Jenna Pugliese, director of programs at NativeEnergy. I would like to take this opportunity to provide our support for the petition that was submitted by Nutrien to amend the listing for ash from manure burning. It currently excludes biochar from use as a non-synthetic material in organic production.

Next slide. I'm going to take this opportunity to talk about who NativeEnergy is, what biochar is, why we're interested in it, and why we believe it should be an eligible non-synthetic substance for use in organic production.

Next slide. On behalf of NativeEnergy, thank you again for this opportunity to present comments. We are a carbon offset project developer and retail company that has been investigating pyrolysis as part of a system to reduce greenhouse gas emissions on farms.

Next slide. The output of pyrolysis or heating with limited oxygen of dairy manure is biochar. It is our understanding that biochar currently is included in the listing of ash manure...
burning as a prohibitive substance for the use in organic production.

We maintain that biochar is not itself ash. In fact biochar has significant opportunity to contribute to the sequestration of greenhouse gases on farms and elsewhere, and has soil building properties that could be leveraged for sale as an organic product and provide an additional revenue stream for farmers. In fact biochar from other non-manure sources is already able to sold with an organic label and is proving to be beneficial in a wide range of applications.

Next slide. Ideally for the climate, all dairy would be pasture-grazed with manure deposition naturally decomposing in fields. Until such time as most farmers adopt or are required to fully graze, greenhouse gases released from the storage of manure will be a contributing factor to climate.

Separation of solids has shown significant benefit to reducing greenhouse gases from manure storage. And the addition of pyrolysis has the potential to be the lowest greenhouse gas emission practice for farmers that
must store most or all of their manure.

Pyrolysis of separated solids converts the carbon in manure to a more stable form, and when used as a soil amendment can sequester the carbon and add significant value as part of an overall carbon reduction strategy on farms.

Next slide. Not only does biochar show potential as part of a greenhouse gas reduction strategy on farms, there's also significant research showing its soil building properties.

If farmers are able to leverage the sale of biochars as a soil amendment, it has a potential to also contribute as an alternative income stream and an offset to costs of greenhouse gas reduction projects.

Considering the soil building properties, carbon sequestration capabilities and the function in methane reduction on dairy farms, biochar presents substantial opportunity to be part of the organic supply chain.

Thank you. And I'm happy to take questions.

MR. ELA: Wood, it looks like you have a question.
MR. TURNER: I do. Can you hear me, Steve?

MR. ELA: We've got you. Go ahead.

MR. TURNER: Jenna, thanks for your comments. Can you tell us anything about NativeEnergy's perspective on the energy use required to pyrolyze manure? Thanks.

MS. PUGLIESE: I can't specifically, but I'm happy to get back with comments.

MR. TURNER: Thanks. It would be great to have that to get a full picture of what your perspective is.

MS. PUGLIESE: Absolutely.

MR. ELA: Any other questions? I guess I have one question. So would you make the claim that the biochar from the animal products is not ash?

MS. PUGLIESE: Correct. So pyrolysis generates both biochar and some small amount of ash. But the biochar itself we would contest is not actually ash.

MR. ELA: So in that case, the petition is really just for clarification of that, or to change the prohibition to something different?
MS. PUGLIESE: So being very new to both carbon markets and this process, you know, we support Nutrien's claim to amend the listing so that ash for manure burning with the exception of when it's made by pyrolysis. Ideally, I'm not sure how to approach the listing differently with the assertion that we truly do believe that biochar is not itself ash.

MR. ELA: All right. Well, thank you.

That brings up an interesting question. With that, we will move on. Thank you for your testimony and thank you for helping me with your name.

MS. PUGLIESE: Yes. Thank you for the time.

MR. ELA: You know, my last name of Ela gets mispronounced even with three letters so at least I have compassion. But let's go next to Jill Smith and then we'll go -- but wait, I'm sorry, Adam Seitz and then we'll go to Jill Smith and then to Jessica Shade. So, Adam, please go ahead.

MR. SEITZ: Good afternoon. My name is Adam Seitz, and I'm happy to be joining virtually for my first ever public comment.
I serve as the policy specialist for Quality Assurance International, an international certifier based in San Diego, California.

First, I'd like to address the situation the organic community finds itself in during these challenging times. The current organic regulation requires that certifiers perform an onsite inspection prior to granting certification and at least once a year thereafter.

The COVID-19 pandemic poses a great challenge to this requirement. Stakeholders, including certifiers, are struggling to find the right balance between following the letter of the law and avoiding health risks for inspectors and operators.

The good news is we live during a time when the technology for conducting virtual inspections like meetings is available and effective, unlike when the NOP Organic Regulation was published in 2000.

QAI would like to respectfully request that the NOSB submit an emergency motion to encourage the NOP to allow virtual inspections, at least during the pandemic. This action is
necessary for the viability of the organic industry, enabling its continuous supply of organic food during the pandemic and creating a foundation for the post-pandemic recovery of the organic food sector.

L-malic acid. We support the reclassification of L-malic acid as an allowed synthetic. We understand that traditionally fermentations have been considered a sausage machine of sorts. The substrate goes in, and a material with non-synthetic classification comes out, regardless of the type of fermentation or the classification of the substrate.

However, we believe the line can be drawn to distinguish whether the classification with the substrate impacts the classification of a final fermented product. If the substrate is directly acted on to produce the product in question, the classification of the substrate does dictate the classification of the fermented product.

If the substrate is used to support the overall metabolism and growth of the microbe that is, or produces, the product in question, the
classification of the substrate does not dictate the classification of the fermented product.

I will keep my comment on ion exchange much shorter than my written comments and state that QAI's allowance of ion exchange filtration is entirely consistent with all NOP guidance and training materials issued prior to the May 7, 2019 notice, and is consistent with the facts that the FDA regulates ion exchange resin as food contact substances. Please see our written comments for more information.

Finally, I would like to personally comment on the 2020 research priorities topic of increasing access to organic foods. I support this research priority and would like to kick it off by stating that the number of organic staples in my home has decreased over several years. Yes, decreased.

As an adoptive parent and active foster parent, two of the children in my home receive benefits under the federal WIC program. The program states its mission is carried out by providing nutritious food to supplement diets.

However, opening up my Pennsylvania WIC
food list and shopping guide, I see organic under the cannot-buy heading for all of the allowed wet foods except for the small fruit and veggie benefit. No organic cheese, yogurt, milk, juice, cereals, whole grains, legumes, infant formula, eggs, or peanut butter. Further, the PA WIC Guide notes in a highlighted fashion, quote, organic fruits and vegetables can be purchased but tend to be more expensive. You will get more food with non-organic items, end quote.

Not a great advertisement, but truthful and those words have meaning given the food insecurity of many WIC participants. For WIC to permit the purchase of organic foods, it would better fulfill its mission and contribute another potential $3.1 billion per year to the organic market.

Thank you all, NOSB and NOP, for your dedication and work and for the opportunity to comment.

MR. ELA: Emily, we'll come to your question. But first, Scott, do you have a thought on his first question?

MR. RICE: Yes. Sure. Thanks,
Steve. Adam, thanks for your comments. I wanted to circle back to your initial comment on some concerns around how we as certifiers conduct certification and inspections in light of the pandemic.

And there is quite a bit of work happening now with the Accredited Certifiers Association and the International Organic Inspectors Association to ensure that we keep those certification activities moving forward, and keeping both our certified operations and our certification staff safe.

And I heard you asking for some action to allow for inspections to not happen or to happen, maybe I didn't quite understand. But I just wanted to be sure that you were aware that there is a lot of work happening to keep things kind of open and running and that those inspections keep happening in, admittedly, some slightly different ways.

MR. SEITZ: For sure, definitely. And I'll clarify that the comment was to allow virtual inspections. That was probably the fastest I've spoken ever in my life.

Yes. I'm definitely aware of all of
the work that's being done. But this is a very unique situation for my time at least, you know, not unique in the history of the world. But, you know, we don't necessarily know whether or not that work is going to go far enough.

And I'll state that, you know, we have new organic operations that are lining up to get their products out in the organic marketplace. And we are currently hindered by any limited guidance currently received by the National Organic Program on that front.

And I'll be very clear that organic integrity is a priority and, you know, it's unprecedented to even consider a virtual inspection. But these are, again, unprecedented times at the moment. So we'd like to see some further action on that front.

MR. ELA: Sure.

MR. RICE: Thank you.

MR. ELA: Emily, you had a question?

MS. OAKLEY: Yes. It was actually regarding this point as well. I think that while virtual inspections might have a role to play right now during this pandemic period, I think any
virtual inspection that took place now would need to be subsequently followed-up by an in-person inspection later.

And I just want to express some concern about new producers coming under a virtual inspection. Just because I think that initial inspection is so critical, I don't quite see the potential for replacing it virtually.

Of course, if this persists and the time period goes, you know, into many, many, many more months that might need to be revisited. But for the time being, I would hope that those could simply be paused and come back to an in-person inspection for those initial applicants. I just wanted to express that.

MR. SEITZ: Yes. And I'll admit it's uncomfortable. That said, you know, organic foods are flying off the shelves at grocery stores. And we think that we should be doing everything that we can to ensure a continuous supply of organic foods.

And I won't speak to any efforts that the ACA is currently working on in conjunction with the IOIA. I'm not sure if others will be
commenting on that front. But I will say that it's a standard practice for QAI now to follow up with all new applicants with an unannounced inspection within six months, I believe, of their being granted certification. So, yes, from our perspective we would certainly revisit as soon as possible in a physical manner.

MR. ELA: We have another question, I believe, from A-Dae.

MS. ROMERO-BRIONES: Yes. Thank you, Adam, for your comment. I just wanted to point out and just emphasize your comments about WIC and, I guess, the prohibition on purchasing organic products with those dollars.

I think that's a really super important point, especially when we had several commenters point out that we're trying to be more inclusive of underrepresented communities. And the fact that we have institutional barriers that are in place by federal food purchasing programs is a critical barrier that I think should be addressed.

And thank you for bringing it up. I never thought about it that deeply, but once you said that, I was, like, thinking about tribal
community's purchase programs. And it's also federal purchasing dollars, which do follow the same regulations that WIC perhaps does.

And, again, those organic products are not allowed in those programs either, which seems amiss. So thank you, Adam, so much for that comment. And I'm really going to take up that baton, if I can. Thank you.

MR. SEITZ: Yes, thank you. Yes, it would be great to subsidize organic producers and processors with those federal dollars, for sure, and get those organic products to the people that need them.

MS. ROMERO-BRIONES: Absolutely. Thank you.

MR. ELA: I think we'll just go to, I think -- Jenny, did you have something to say before we move on to the next speaker?

DR. TUCKER: I thought given the comments on inspections, I wanted to share what we have said actually to certifiers on this. I'm getting a little feedback. Stand by.

Okay. So first we want to remind everybody, including certifiers, that ultimately
the USDA Organic Regulations drive compliance. And this is what I've also shared with certifiers, so everyone has the information.

We are encouraging critical thinking about ways to ensure compliance in the current environment, but certifiers must remain true to the regulations.

So one question we did get several times was if the onsite inspection requirement could be modified for new applicants. And our response was, no. The initial onsite inspection at 205.403(a)(1) is a fundamental requirement. A virtual inspection cannot replace an initial onsite inspection. We know that some certifiers are not happy with that answer, but we believe it's both consistent with the regulation and necessary for organic integrity.

Once certified, an operation remains certified until it surrenders or is suspended or revoked. And so 7 CFR 205.406 addresses different approaches to managing continuation of certification. And this is where different risk-based oversight approaches may be appropriate to ensure ongoing compliance until an onsite
inspection can be conducted.

That does not remove the need for an onsite inspection but does allow some different oversight approaches.

We are concerned that some certifiers have expressed that they plan on or want to continue to do virtual inspections for new applicants. That is not compliant.

We will be following up to make sure that certifiers are not taking that action. So I just wanted the whole group to hear what we have shared with certifiers on the inspection topic.

MR. ELA: Thank you, Jenny. Emily, one quick last thing and then we need to move on.

MS. OAKLEY: Yes. No I just wanted to thank Jenny for that clarification and those reassuring words. Thank you.

MR. ELA: Thank you very much, Adam. Next we have Jill Smith and after Jill we have Jessica Shade and then Megan DeBates. Jill, please go ahead.

MS. SMITH: Hi, everyone. Again, I'm Jill Smith representing the Western Organic Dairy Producers Alliance, also known as WODPA. And...
WODPA represents approximately 285 dairies across the Western United States.

I want to thank you all for the chance to comment today and for the work you've done to adopt the meeting platform for our current situation.

I'm also an organic dairy producer and processor in Washington State and have experienced the ups and downs in the marketplace as a result of the current pandemic.

And I really liked the term Adam used, I guess, calling it uncomfortable because that really describes where we're at at the moment.

We submitted a comment on the sunset review of livestock substances. I won't go through that list, but I'm happy to answer any questions on those substances or their necessity in organic livestock production.

We also provided written comments on the Petition to Remove whey protein concentrate from the National List. We're in support of its removal given the commercial availability of organic products.

In addition this supports organic dairy
product utilization and the use of organic ingredients, especially dairy-related ones, are expected by our consumers at this point in time.

We look forward to a final rule on origin of livestock as soon as possible as well as a clear path to its implementation. It's not only key to fairness in organic dairy but the credibility of organic milk hinges on enforcement of these standards.

The remainder of my comments largely center around continuing to support our organic producers through the enforcement and adherence to organic standards and maintaining the integrity behind the organic seal as well as the value our organic products offer.

Now more than ever we need to ensure strict adherence to these standards and that full accountability takes place with clarified rules and consistency among certifiers. It's essential for fairness across all sizes of operations. And we need to maintain this under our unusual circumstances.

Our smaller scale organic producers have been even more essential as we've navigated
the ups and downs of the marketplace. We've continued our production, kept people employed, provided high quality products and have adapted to meet the needs for food supplies.

So it's essential that we support organic dairy producers by leveling the playing field and it's essential that we help with the sustainability of these operations as we move forward.

We also support continued work on addressing climate change head-on in organic production. I think how we face these challenges speaks volumes to our consumers. Our organic story really is a compelling one as it shows our work toward the highest land stewardship standards and the welfare standards and the goal to improve the world around us.

Together these standards bring even greater value to our organic products and encourages our consumers to vote for organic with their food dollars at time when food budgets are tight, but they must be confident in the integrity of the organic seal and the many layers of value that organic production provides.
In summary, at the heart of everything we're discussing is organic integrity supporting our organic farms with fairness of rules and in helping consumers understand why organic is a choice that brings layers of value to them in the environment.

Thank you again for the opportunity to comment today. And I do have to say I really look forward to future in-person meetings like we used to have.

MR. ELA: I think you speak for all of us, Jill. Other questions for Jill? Thank you for your comments. I think we all miss the social and personal aspect of in-person meetings.

MS. SMITH: Absolutely.

MR. ELA: It's also nice to have access to everybody in this case, too. So next we will move on to Jessica Shade and then Megan DeBates and then Johanna Mirenda. Let's go to Jessica. Jessica, you're up. Would you please say your name and affiliation?

MS. ARSENAULT: Jessica, give me one second. You are still muted here. I've unmuted you. Go ahead.
MS. SHADE: Great. Thanks. So, hi, everyone. My name is Jessica Shade. I am the director of Assigned Programs for the Organic Center. We're a nonprofit organization (telephonic interference) research on organic and collaborates with academic and government institutions to fill gaps in our knowledge.

MS. ARSENAULT: Jessica?

MS. SHADE: Yes?

MS. ARSENAULT: Jessica, can you just hang on for one second. We're getting a bit of feedback on your line. I'm just checking to make sure nobody else is open. It doesn't look like it. Okay. Go ahead. Start again. And I'll see if it continues. Is everyone else hearing that? There's a little bit -- there's some feedback.

MR. ELA: Yes. I'm hearing it, too, Michelle.

MS. ARSENAULT: Okay. It was a little hard to pick up what you were saying so.

MS. SHADE: Great. Thanks. Is this any better?

MS. ARSENAULT: That's better. Thank you.
MR. ELA: So much better. Thank you.

MS. SHADE: Great. No problem.

MS. ARSENAULT: I've paused your time so please start again.

MS. SHADE: All right. Hi, everyone.

My name is Jessica Shade. I'm the director of Assigned Programs for the Organic Center. We are a nonprofit organization that communicates research on organic and then we also collaborate with academic and governmental institutions to fill gaps in our knowledge.

And first of all I want to say thank you to the material subcommittee for its recommendation on research priorities. I'm going to 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 list.

So we're really happy to see that plant disease management and invasive insects were on the list. Insects creating disease is an issue that's been highlighted in the NOSB research priorities for several years.

And we're 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 system based approach to combat that situation is creating in organic growth.

And we'll be applying for a full OREI proposal in the next funding cycle so it's really helpful that NOSB is highlighting the importance of this issue through the research priorities.

We were also happy to see pathogen prevention on the list. There's an unfortunate myth out there that some biodiversity maintenance strategies employed by organic farmers might increase the risk for introduction of human pathogens on the field despite research showing the opposite.

And the Organic Center has recently published some of the literature disproving that fallacy. And we also have a project looking at how soil health on organic farms can help suppress pathogens.

Climate change is a matter item on the list that we're deeply engaged with. We hosted a conference last year focusing on mitigating and adopting climate change in the organic sector.
And we've released and continue to work on several projects looking at aspects of climate change mitigation (telephonic interference) sequestration, energy use, et cetera.

We have a lot more projects, but to keep this short I'm going to move on to our suggestions for additions to this year's NOSB research priorities.

Based on feedback that we've received during our own outreach efforts, we'd like to suggest that the areas of soil health, protection for organic farmers in certain pesticide residues and comparison of pesticide antibiotic and synthetic growth hormone residues in organic and conventional products be considered for inclusion in the 2020 research priority.

We also think that the focus on alternatives to conventional celery powder for curing organic meat that was included in the 2019 research priorities should be included in this year's priorities because while there's research underway and we've got this great project going with the OTA and the University of Wisconsin, we still need to flag the importance of the issue as
the research happens.

So thank you all so much for giving me this opportunity to comment.

MR. ELA: Are there questions? It looks like none. Thank you very much, Jessica. We appreciate your thoughts on the research priorities. That always helps us.

Next up we have Megan DeBates and then Joanna Mirenda and then Doug Currier. So, Megan, please go ahead.

MS. DEBATES: Can you hear me all right?

MR. ELA: We have you.


I want to say welcome to the new Board members. You will play a critical role in advancing the organic standards during your service on the Board.

And as the leading trade association representing the organic industry, we are committed to protecting the NOSB and elevating our important work in supporting the organic sector.

The National Organic Program is dependent upon consistent standards and a verified
and enforced claim. Organic is the most closely regulated and transparent food system in the U.S., which is why consumers trust the seal.

A large majority of the challenges that we struggle with today are a result of not having clear standards. And for many of those same challenges, we have NOSB recommendations to address them. However, the National Organic Program has failed to implement a vast majority of NOSB recommendations to advance practice standards and ensure consistency in how the regulations are applied.

This body was not meant to exclusively focus on the National List and materials review. In order to achieve through excellence in food and agriculture, we, as stakeholders, all have a responsibility to advance the standards and continuously improve.

This is why we are working with Congress on bipartisan legislation to bring transparency and accountability to the process by which NOP responds and implements NOSB recommendations.

There have been several important recommendations developed by the NOSB at the
request of industry that have collected dust for more than 10 years.

Just in this meeting, NOP was asked by a Board member about the timeline for implementing production standards for greenhouse containers and the response that they are still gathering feedback. So it's been 10 years now that they are still gathering feedback.

And on inerts even OMRI had to reference comments that they submitted from 2015, five years ago. This is unacceptable, and we must do better to meet the expectations of the consumer and create new opportunities for growth in the market.

This legislation will require NOP to formally respond to NOSB consensus recommendations and to implement them within a defined time frame or communicate publicly with Congress and stakeholders as to why they haven't implemented the recommendations that have vast support from the industry and stakeholders.

Thank you again for your service on the NOSB.

MR. ELA: Thank you very much. Are there questions? Not seeing any, thank you so
much, Megan. Johanna Mirenda and then Doug Currier and then Jackie DeMinter. Johanna, please go ahead.

MS. ARSENAULT: Johanna, let's check you here. I'm unmuting you now. Oh, somebody -- there you go. We're battling it out.

MS. MIRENDA: Okay. Hi. Can you hear me?

MS. ARSENAULT: Yes, we can hear you.

MR. ELA: Yes, we can hear you.

MS. MIRENDA: Great. Thanks. Hi. I'm Johanna Mirenda, the Organic Trade Association's farm policy director. And I'll be commenting on paper, inerts and marine materials.

First on the crop subcommittee's proposal for paper-based crop planting aids, we appreciate the process and the patience you've had with the petition, and we support many aspects of the proposed definition and listing.

Outstanding questions indicate there might be a need for some fine tuning of the proposal. So remember that NOP approved continued use of these materials while you deliberate so you've got time to do those finishing touches
without compromising farmers' access to these tools.

Second, on the sunset review for inerts, this is the fourth sunset review of inerts and again we are looking at List 4, which was abandoned by EPA 15 years ago. It's time to prioritize implementation of the NOSB's 2015 recommendations to update this listing.

As my colleague Megan just commented, it's essential for our industry to advance organic standards. The issue with inerts is a prime example of the industry harm that is created by stalled implementation.

We are excluded from using EPA's current program for approving the least toxic inerts. And manufacturers are unable to invest in developing safer pesticide products.

Modernizing the system for reviewing inert ingredients is the priority of the organic industry, and we urge NOP to prioritize this work.

Lastly on the broad topic of seaweed and fish-based inputs, our concern isn't about whether NOSB can or should evaluate environmental impacts of sourcing marine materials for input
rather our concern is how NOSB is going about it.

The approach has become disjointed and siloed within subcommittees. The history is all laid out in OTA's supplementary information submitted through our written comments.

Four subcommittees have worked on 16 topics using varying levels of scrutiny, technical information and annotation approaches. This approach creates a risk of inconsistent or conflicting requirements for the same harvested material used for different inputs.

It creates duplication and inefficiencies in NOSB's resources. And at its worst, it won't achieve meaningful progress in protecting marine environments.

So we are encouraging NOSB to create a new mechanism for coordinating efforts amongst subcommittees. NOSB needs to collaborate on an approach to establish a common baseline understanding about what it means for harvested marine materials to be harmful to the environment.

From there, each subcommittee calibrates their evaluation of environmental harm to that baseline, leading to consistent and
balanced decisions across scopes and uses.

Thank you for considering our comments.

I look forward to returning to the in-person meeting format so I can fully express my Italian instincts of talking with my hands. I hope everyone stays safe and well until then. Thank you.

MR. ELA: Thanks, Johanna. Yes, I think we all talk with our hands. Thank you for your comments. Emily, you have a question.

MS. OAKLEY: Yes. This is a question for the program based on Johanna's comments about a comprehensive approach to looking at marine materials.

It's something that the Board had wanted to do and was hoping to achieve that through a task force. But I'm wondering if the program might have changed their minds on the feasibility of exploring a task force for this subject across livestock handling and crop uses of these materials.

DR. TUCKER: So this is Jenny. Can you hear me?

MS. OAKLEY: Yes.
MR. ELA: Yes, we can, Jenny.

DR. TUCKER: Okay. So at this point we have not approved the stand-up of a task force. I think there are likely other ways for better collaboration and coordination across subcommittees. But I'm very interested in continuing that conversation with the Board at this point. We have not approved a task force moving forward.

MS. OAKLEY: Would it be okay to just make a follow-up to that, Steve?

MR. ELA: Go ahead, Emily.

MS. OAKLEY: Just a quick one. It definitely is possible to collaborate across subcommittees in many creative ways. But I think that the technical expertise that a task force could provide and the additional time allotted for it would be beneficial.

It's difficult to carve out time within the subcommittees meetings themselves to address these cross-cutting issues although I do think it is helpful.

And then I will just say that even if we continue down the current path of exploring the
crop option first, I think we do address some of the inconsistencies that are already out there because livestock uses of seaweed are certified organic required and many of the handling uses are also certified organic required.

So it's this fertility use that we have that's sort of -- I don't want to say slipping through the cracks, but it is not getting the same level of attention.

And we did address looking at it from a cross-perspective first as sort of a pilot sort of test case perspective knowing that we need to go back and then try to apply this broadly to all the subcommittees. But thank you so much for your comments, Jo.

MR. ELA: Thank you, Emily. Thank you, Johanna. We appreciate it. Next we will go to Doug Currier and after Doug, Jackie DeMinter and then Leslie Touzeau. Michelle, you were thinking that you may not be seeing Doug on the line. Doug, are you out there?

MS. ARSENAULT: Yes. We don't see his name on the list. But there's several numbers with his area code so maybe he called in from a different
line. Doug, are you out there? Send me an email or chat in the Zoom chat if you're there.

MR. CURRIER: Am I coming through?

MS. ARSENAULT: Yes, there you are. Excellent.

MR. CURRIER: Okay, good. Great.

MR. ELA: Yes, go ahead, Doug.

MR. CURRIER: Thanks so much. Good afternoon, NOSB, members and NOP staff. My name is Doug Currier. I'm the technical director at --

MR. ELA: Doug, we just lost you.

MS. ARSENAULT: Yes. We just lost you. Are you on a 785 number?

MR. CURRIER: Yes. I'm on a phone. And it keeps going on mute, and I unmute it again.

MR. ELA: Yes, you're back now.

MR. CURRIER: All right.

MR. ELA: So why don't you go ahead and start over.

MR. CURRIER: Okay. So my name is Doug Currier. I'm the technical director at the Organic Materials Review Institute. I'm presenting comment today on the synthetic,
non-synthetic classification of L-malic acid.

I'm in support of the classification of L-malic acid produced through the enzyme conversion of synthetic fumaric acid as synthetic.

A good amount of debate occurred during the writing of the technical report --

MS. ARSENAULT: Hang on one second, Doug. If you can see me.

MR. CURRIER: Okay.

MS. ARSENAULT: There's a noise coming from a different line. And I don't know if they're both yours or not.


MS. ARSENAULT: I muted one, and it muted you as well.

MR. CURRIER: Okay. So --

MR. ELA: Go ahead, Doug. Continue.

MR. CURRIER: So, yes, there was debate regarding the reclassification as discussed in the report whether L-malic is produced through the enzymatic conversion of synthetic fumaric acid is classified as synthetic or non-synthetic. It depends on how the decision track is read and
Whether L-malic acid is derived from the natural source is the first question to answer in the decision tree, and it's the issue at the center of the classification debate. How this question is answered impacts the classification of other materials, including those already on the National List.

So natural source is defined in the guidance as a naturally occurring mineral or biological matter. We know that L-malic acid is commonly produced using synthetic fumaric acid as a starting material.

One answer then to the decision tree question is the substance manufactured/produced extracted from the natural source is no. L-malic acid is produced from a synthetic fumaric acid.

Answering this way puts the focus on a specific material from which a substance is derived. Taking this further the TR examined how viewing the starting material from which a substance is derived could impact most synthetic classifications.

One example of that examination is the...
consideration of microbial first media, starting materials and how much of a microbe organism or a microbe product is derived.

Reviewing the gross media leads to complications and some gross media components do not meet the definition of natural source in the guidance and yet the final microorganism or microbial products are generally considered to meet this definition of non-synthetic.

So instead of equating or otherwise extending natural source to growth media OMRI instead puts forth a reading that considers any microorganism or microbial product produced the fermentation to meet the definition of natural source. In other words, the fermentation process is the biologic --

MS. ARSENAULT: I'm sorry. Can I interrupt you just for one second? We are getting some noise on somebody else's line. So if you are not talking, if you could mute yourself?

MR. ELA: Particularly if you are washing dishes.

I think -- go ahead, Doug. Oh, it might be your line actually. I'm not hearing you now. No. All right. Doug, unmute this line. Doug, are you there?

MR. CURRIER: Here I am again.

MS. ARSENAULT: There. We got you.

MR. CURRIER: Okay. Thanks for that. Thanks for your patience. Am I good?

MS. ARSENAULT: We're good. Thank you.

MR. ELA: Go ahead.

MR. CURRIER: Okay. Really quickly, while the enzyme conversion of synthetic fumaric acid mimics a natural biologic pathway cell in microbial free production, it should not be viewed as synonymous with the same enzyme conversion which happens during natural microbial fermentation. Thank you for your time today and your patience.

And thank you to all the Board members for their work on these matters.

MR. ELA: Thank you, Doug. And I truly apologize for the technical issues there. I know it's always hard to give a presentation when you're interrupted multiple times.
Are there questions for Doug? I'm not seeing any. Thank you, Doug, for sticking by us here. Next up we have Jackie DeMinter and then Leslie Touzeau and then finally, it may not be on some of your sheets, but Alex Strauch at the very end here.

So once we go through these, we're going to circle back around to anybody that we skipped over. So we'll do that. But, Jackie, go ahead.

MS. DEMINTER: Hello. This is Jackie. Can you hear me?

MR. ELA: We've got you. Go ahead.

MS. DEMINTER: Awesome. Great. Good afternoon. My name is Jackie DeMinter. I am the certification policy manager at MOSA. We certify about 2,155 organic operations throughout the United States, including over 500 with vegetables or transplants and more than 200 with laying hens.

I will be commenting on mulch, paper pots, fenbendazole and sunset materials.

First, I'd like to take the opportunity to thank you all for your work. While I do enjoy seeing you all, this meeting is an interesting opportunity for the wider organic community, and
I will be curious to hear how it worked.

I also want to thank the NOP again for their work on the Organic Integrity Learning Center and especially the Organic Dairy Compliance Course, which helps resolve significant discrepancies in enforcement of days on pasture and temporary confinement.

Moving on to NOSB recommendations. We appreciate the discussion to reconsider the annotation for biodegradable, bio-based mulch film. This material is a difficult one to explain to clients since there are no products that can meet the annotation.

Mulch is a very common input among our operations, and it seems illogical to have a listing that's impossible to meet. We know our clients would appreciate an alternative to plastic mulch.

Paper pots. We continue to support a listing of paper for use as a plant production aid. However, with this proposal we have some new questions.

Does the new definition including production aids beyond those listed? Is the
intention to allow materials composed primarily of paper, with up to 15% of other materials, like adhesives and fibers, to require bio-based testing for the entire product or testing for just the fibers? And what is meant by cellulose based?

This new language in addition to bio-based testing is confusing and needs further discussion. So does commercial availability documentation specifically pinpointing the bio-based content of the fibers, which are used as a minor ingredient in paper-based crop production aids.

Please read our written comments for specific clarification requests and suggestions for revision.

Fenbendazole. The addition should not be a replacement for good management practices.

We request additional guidance on what is meant by emergency for a poultry flock.

We understand that emergencies are urgent and non-routine and exist only when all other measures have been exhausted. Can the NOSB provide situations that would lead up to whole flock treatment?
We have requested the same basic guidance for all species of livestock during the NOSB's work on defining emergency. With little or no withholding period for milk, meat or eggs, we would expect to see the use of parasiticides increase.

And last please refer to all of our written comments for further details. I'll draw attention to our comments on L-malic acid and sunset materials, especially those on excipients and inerts, two very important categories of materials.

Again, thank you for your work and the opportunity to comment. I am happy to answer any questions you have.

MR. ELA: Thank you, Jackie. Anybody have any questions? Sue has a question. Sue, you're still on mute.

MS. BAIRD: I am so sorry. I do that every time, don't I? Thank you, Jackie, for your comments on fenbendazole. I read your written -- you said you had 200 laying operations and you have very few requests for any kind of a parasiticide.

I'm really interested because some
certifiers are saying they have quite of few of them. Some of them are saying no. And I know that you certify a lot of operations here in the Midwest. And yet when I talked to some of my MOA members here in Missouri and in Arkansas, they say they are seeing a lot of worms in the eggs. I guess I'm just confused about why we're seeing such differences of opinion. Maybe you can shed some light on that?

MS. DEMINTER: You bet I can. I am not specifically talking about the cited cases of worms in poultry flocks. I'm saying as a certifier, we haven't gotten a request to use parasiticides. So we don't have the knowledge of what's going out there in reality. But we do know that we're not getting phone calls from clients. It's not something that clients are calling and requesting, likely because they know it's not an allowed input.

But I did talk to one of our clients that is down in Missouri, Sue. And he said it would be a nice tool for the toolbox. I expressed that in our written comments. But he also agreed that it shouldn't be a replacement for good management practices.
But I encourage you to read the entire written comments and have the whole group read it.

And we certainly didn't mean to represent what is happening out there. We know that there are issues, and it's not being requested to use parasiticides to us.

MS. BAIRD: Right. And I certainly appreciate your comment that we need to clarify emergency because I think all of us on the Board agree with that same comment.

MS. DEMINTER: I think in our comments we encourage you to continue the solicitation of comments from producers and handlers until you guys feel really substantial feedback has been received to evaluate that necessity.

And as certifiers, we definitely would appreciate that guidance for poultry because we're talking whole flock treatment. It's not where you can individualize animals and treat just them as you can with other livestock species.

MS. BAIRD: Yes. I absolutely agree.

Thank you.

MS DEMINTER: Thanks.

MR. ELA: Thanks, Jackie. Any other
MS. DEMINTER: Thank you.

MR. ELA: Moving on -- yes, thank you.

Leslie Touzeau and then Alex Strauch and then we're going to circle real quickly back around. I know we're getting towards the end of things here. So go ahead, Leslie.

MS. TOUZEAU: Hi. Can you hear me?

MR. ELA: Yes, we can. Go ahead.

MS. TOUZEAU: So good afternoon, everyone. My name is Leslie Touzeau and I'm the material review specialist for Quality Certification Services. Thank you for this opportunity to provide comments and thanks to all for committing to the public comment process during this difficult time.

I hope you and your loved ones are well, healthy and safe, and I hope that future meetings, when it's safe to do so will continue to be held in person.

I would like to use my time today to discuss inert ingredients in pesticides. QCS applauds the NOSB's collaborative work with the EPA and NOP to develop a new system for inert
ingredient review that would no longer rely on the now defunct EPA List 4.

To continue approving inert ingredients for organic production based on a system that has long been obsolete is detrimental to the integrity of our organic program.

This is now the fourth sunset review of EPA List 4 inerts and we strongly urge the NOP to prioritize the implementation of the 2015 NOSB recommendation to change the annotation for EPA List 4 inerts to language permitting substances included on the EPA safer chemical ingredient list as well as minimal risk products under FIFRA Section 25(b) and inerts exempt with tolerance at 40 CFR Part 180 for passive pheromone dispensers.

QCS believes that reviewing each individual inert ingredient would be overly burdensome and time consuming and the updated language utilizes the EPA's current scheme for approving the least toxic inert ingredients.

We also support reserving a section of the list for other inerts that may be individually petitioned and found to meet the OPA criteria, which would allow for some flexibility for the
organic industry to meet the demands of organic products while adhering to the new annotation.

Inert ingredients are necessary components of a variety of pesticide products, and they are important ingredients in the limited toolbox of pesticide products available to organic producers.

QCS currently reviews and approves 23 pesticide products containing allowed inert ingredients and our clients also use hundreds of pest control products approved by OMRI, PCO, WSDA and CDFA.

We understand that removing the allowance for inert ingredients on EPA List 4 would lead to the prohibition of some currently allowed pesticides.

According to comments from OMRI, there are currently 365 distinct inert ingredients that are used in OMRI listed products and only 153 of those ingredients appear on the safer chemicals list or the 25(b) minimum risk inert list.

A goal of the 2015 recommendation was to make the transition to a new inert review system as seamless as possible for organic producers.
And we believe this should still be a priority of NOP.

We support the inclusion of a reasonable implementation time in order to allow manufacturers the opportunity to either petition the NOSB for specific inert ingredients and/or to reformulate their products so they're compatible with the regulation.

It is critical that we have a reliable system in place to thoroughly evaluate inert ingredients with compatibility of organic materials and that these materials continue to be available for our organic producers.

Thank you for your time and dedication to our organic community.

MR. ELA: Thank you, Leslie. Are there questions? All right. We do appreciate it. Okay.

We will go to Alex Strauch and then if we happen to have Marcelo Girotto, Diana Castillo or Carlos Chinchilla we passed over earlier, we could go to them. But, Alex, please feel free to go ahead. And if you'd state your name and affiliation.
DR. STRAUCH: Wonderful. Testing. Can I be heard?

MR. ELA: You are being heard.

DR. STRAUCH: Wonderful. My name is Dr. Alex Strauch. I am a veterinarian that primarily treats poultry with three years of experience working in the field, and I service various operations in the Midwest.

I see the differences in conventional, organic, free range, non-GMO and cage free operations.

I'm specifically speaking briefly today about fenbendazole and its usage in laying hen operations in organic agriculture emergency settings.

In short fenbendazole works. It works in conventional. I've seen it work in conventional. And there is a definite need in organic for "emergency situations" to actually be handled instead of kicking the can down the road.

It is not only an animal health issue that causes intestinal inflammation and steals nutrients from the birds, but I consider it a "kitchen table" issue when consumers find worms
in their eggs and are upset and lose confidence in the wholesomeness of their product.

I personally deal with the public relations aspect of upset consumers when they send their concerns in regarding worms that are found in their eggs.

Organic by design, unfortunately, puts the birds at a higher of contracting these worms. And our current alternatives are absolutely ineffective.

I've witnessed the ineffectiveness of diatomaceous earth and I've witnessed the ineffectiveness of other herbs. All they do really is burn money.

Using fenbendazole as part of an elevated force continuum or emergency purpose seems like a logical progression given that we do not have effective alternatives currently. I would embrace alternatives when they're made available in the future.

Those are all of my thoughts. Thank you very much.

MR. ELA: Thank you, Alex. Are there any questions from the Board? All right. I'm not
seeing any.

MS. ARSENAULT: We just put -- oh, there we go.

MR. ELA: So no Marcelo?

MS. ARSENAULT: All right. So we're going to loop back now, Steve, and check with folks that we skipped over. Is that correct?

MR. ELA: Yes, if we could. Yes, yes.

MS. ARSENAULT: Okay.


Thank you, everybody, for participating today. We're going to have another public comment webinar on Thursday following the same format starting at the same time. There is a different Zoom sign-in for this.

I want to thank the Board and all the stakeholders. A five hour webinar is a very long time, but I appreciate everybody hanging in there to the end and giving great comments and asking good questions.

Michelle, Jenny, any of the program
staff, do you have anything to add before we sign off until Thursday?

DR. TUCKER: Well done, Steve. Congratulations. That was beautifully executed. Thank you so much for doing such a great job chairing this webinar.

MR. ELA: Well, thank you very much. And thank you for the staff. I'm glad we had multiple hosts. And Michelle had some off and on computer issues so for the NOP that was a very seamless transition back and forth. So we do appreciate it.

So thank you, everybody. Have a great evening or rest of the day. And we will see you on Thursday for more public comments. Take care. Have a good day. Bye.

MS. BAIRD: Thank you all. I agree. Great job, guys.

MS. ARSENAULT: Thank you, everyone.

(Whereupon, the above-entitled matter went off the record at 4:59 p.m.)
The Board met telephonically at 12:00 p.m. EDT, 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, NOSB Advisory Board Specialist, National Organic Program
DAVID GLASGOW, Associate Deputy Administrator, National Organic Program
DEVON PATILLO, Materials Specialist, National Organic Program
ANGELYQUE PEGUES, Management Analyst, National Organic Program
DR. JENNIFER TUCKER, Ph.D., Deputy Administrator, National Organic Program; Designated Federal Official
SHANNON NALLY YANESSA, Assistant Director, Standards Division, National Organic Program
PENNY ZUCK, Accreditation Manager, National Organic Program
MS. ARSENAULT: All right. Well, welcome everyone. This is the second day of NOSB comment webinars for the spring meeting. Or welcome back if you were with us on Tuesday.

We are going to just remind you of a few things. You should see the slide on the screen if you are with us on the computer. With some information about logging on, numbers to dial into and a few tips to remember while we're on the call.

So, if you're not on the computer with us I'll just summarize some of those points that you may not be seeing.

So if you're having technical problems, you can go to zoom.com and click the support button. It should be in the upper right. There's a contact us button. And you can either call them or live chat with them.

With the caveat that Zoom is really busy these days, as probably all of you know, and so they do have a little disclaimer on their website that says that may be a little delayed.

We have a transcriptionist on the call
with us as well. And she is, as always, doing a great job recording the meeting, which will be, the transcript will be available a couple of weeks after the in-person meeting, or what would have been the in-person meeting, next week. And we'll post that on the website when it's available.

Make sure you please mute your microphone until it's your turn to speak. We have the capacity to mute and unmute you from our end as well.

If you're on your phone you should be able to hit *6 and use it as a toggle to unmute and mute yourself. But we'll figure it out. We didn't have too many issues on Tuesday so I trust we'll do a great job here.

Speakers had to sign up in advance and will be called on when it's their turn to speak by Steve Ela, the Chair. All other people on the line will be in observation mode only and listen only mode.

And then when Steve opens it up to questions, it's questions from the NOSB members to the speaker.

And speakers, we ask that you please
state your name and affiliation for the record so our transcriptionist can capture that and associate your comment with the right person.

We're going to try the timer again. We had some issues with the timer on Tuesday. I'm going to demonstrate it for you guys now. Let me see if you guys can hear it.

PARTICIPANT: Loud and clear.

MR. ELA: Loud and clear.

MS. ARSENAULT: Excellent. We think that Zoom was filtering out the previous beep that I was using and that's why nobody could hear it on your end. So, unfortunately, it seems like a doorbell doesn't bother Zoom, so great.

Now I'm going to turn the mic over to Jennifer Tucker, the Deputy Administrator of the National Organic Program. Jenny.

DR. TUCKER: Thank you, Michelle. Hello everyone. This is Jennifer Tucker, Deputy Administrator of the National Organic Program.

Welcome to all of our National Organic Standards Board members. I would particularly like to acknowledge our five new Board members who are now in the second day of their first public
meeting with us. That's Nate Powell-Palm, Kimberly Huseman, Gerald D'Amore, Mindee Jeffrey and Wood Turner.

To all of our Board members we thank you for your insights, your engagement and your flexibility as we identified new ways to connect for this meeting.

To all of our public commenters, thank you as well. The public comment process is an important part of the Board's and the program's work.

These webinars have become a standard part of the NOSB meeting over the past few years, smoothing the transition this time.

We thank all of you for signing up to have your voices heard. I also thank our audience. You always serve as important witnesses to this public meeting process, and we are grateful that you are here.

This webinar is part of a series of virtual webinars that will occur over four days, through next Thursday, April 30th. Meeting access information for all meeting segments will be posted on the NOSB meeting page on the AMS website.
Transcripts for all segments will be posted once completed. 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.

I will act as the Designated Federal Officer for all meeting segments. To close, I thank the National Organic Program Team for their amazing work in getting us here today.

The webinar was very smooth on Tuesday, and we're expecting the same today. So many, many thanks to Michelle Arsenault, Devon Pattillo, Shannon Nally Yanessa and David Glasgow.

I also want to thank Steve Ela, Chair of the Board, who did a fabulous job on Tuesday and who I am sure will do a fabulous job chairing the webinar today.

Steve, you are a wonderful collaborative partner. We are all very grateful for you.

I'm going to now hand off the mic to Shannon Nally Yanessa, Standards Division Director, who is going to do the roll call of NOSB
members and NOP staff. Thank you very much.

MS. NALLY YANESSA: Thank you, Jenny.

I will start off the roll call with the National Organic Standards Board members and then move on to the National Organic Program staff who are on the call.

Sue Baird?

MS. BAIRD: Yes, I'm here.

MS. NALLY YANESSA: Thank you. Asa Bradman?

MR. BRADMAN: Yes, I'm here.

MS. NALLY YANESSA: Great, thank you.

Jesse Buie?

MR. BUIE: I'm here.

MS. NALLY YANESSA: Great. Jerry D'Amore?

MR. D'AMORE: Here as well.

MS. NALLY YANESSA: Steve Ela?

MR. ELA: Present and accounted for.

MS. NALLY YANESSA: Rick Greenwood?

MS. ARSENAULT: I am searching --

MS. NALLY YANESSA: Rick Greenwood?

MS. ARSENAULT: -- Shannon, let's see. I'm not seeing Rick by name. He may be dialed
MS. NALLY YANESSA: Okay, we'll check back, back to confirm later.

MS. ARSENAULT: Yes.

MS. NALLY YANESSA: Kim Huseman?

MS. HUSEMAN: Present.

MS. NALLY YANESSA: Thank you. Mindee Jeffrey?

MS. JEFFERY: Good morning.

MS. NALLY YANESSA: Good morning.

Dave Mortensen?

MR. MORTENSEN: I'm here.

MS. NALLY YANESSA: -- calling late, oh, you're here. Okay, great, thank you. Emily Oakley?

MS. OAKLEY: Present.

MS. NALLY YANESSA: Nate Powell-Palm?

MR. POWELL-PALM: Good morning.

Present.

MS. NALLY YANESSA: Good morning. And Scott Rice?

MR. ELA: Scott had sent me a text saying he was having some technical difficulties getting on, so I expect he will be on very shortly.
MS. NALLY YANESSA: Okay.

MR. ELA: But it doesn't sound like he's on quite yet.

MS. NALLY YANESSA: Okay. All right, thank you for that.

A-Dae Romero-Briones?

MS. ROMERO-BRIONES: Present.

MS. NALLY YANESSA: Dan Seitz?

DR. SEITZ: I'm here.

MS. ARSENAULT: We heard you, A-Dae, just so you know.

MS. NALLY YANESSA: Wood Turner?

MS. ARSENAULT: Wood, if you're --

MR. TURNER: I'm here, thanks. Did you hear me? Sorry.

MS. NALLY YANESSA: It looks like he's on.

MS. ARSENAULT: Got you.


MS. ARSENAULT: Present.

MS. NALLY YANESSA: Devon Pattillo?

MR. PATTILLO: Present. I'm here,
thanks.

MS. NALLY YANESSA:  Jennifer Tucker?

DR. TUCKER:  Present.

MS. NALLY YANESSA:  David Glasgow?

MR. GLASGOW:  Present.

MS. NALLY YANESSA:  And Penny Zuck?

MS. ZUCK:  Present.

MS. NALLY YANESSA:  All right.

MS. ARSENAULT:  And Shannon, Angie should be on the line with us?

MS. SCHRIVER:  Yes, I'm here.

MS. NALLY YANESSA:  Oh, great, okay. Thanks, Angie.

MS. ARSENAULT:  You're doing a great job behind the scenes managing everything, so thank you.

MS. NALLY YANESSA:  Yes, thank you. And now I'll hand the mic off to Steve Ela, who is the Chair of the National Organic Standards Board.

MR. ELA:  Thank you, Shannon. And thank you, Jenny.

Once again, welcome to our second round of public webinars. And I, again, want to thank
everybody for being flexible and for the oral commenters who are normally scheduled to be at our public meeting in Crystal City to be willing to sign up for these webinars. That we really appreciate that flexibility.

And we all know these are indeed very different times for all of us, so thank you to the community on that.

I would again like to welcome our new members. This is a new experience for them. And we're a little bit sad that we can't meet everybody in person but we hope that will happen in the fall.

But Jerry D'Amore, Kim Huseman, Mindee Jeffery, Nate Powell-Palm and Wood Turner, welcome to this new experience.

And as you saw last Tuesday, our stakeholders are very involved people and have lots of great information that really does help inform our decisions.

Just as a reminder, our public comment policy comes from our policies and procedures manual. I will recognize all the speakers who signed up during the registration period.

We will call upon them in the order of
the schedule. Each has three minutes. And then after that we will have time for questions from only NOSB members.

When everybody, each speaker starts, if you would give your name and affiliation for the record. And also, it would help if you were speaking as a consultant for a company, we would like it if you would identify what company you are speaking for. Proxy speakers are not allowed.

And especially important, out of respect for everybody that is giving comments, individuals that are providing public comment, refrain from making any personal attacks or remarks that impugn the character of any individual. And if that happens I will step in and ask you to do it differently. And if it happens twice we will just move on.

We want to make sure, this is such a respectful community, we want to make sure we maintain that respect and get information but not point fingers at anybody.

As we go through I will announce the speaker that is up, and then I will also announce the next speaker and the person after them so you
all will have time to get ready.

Michelle demonstrated the timer. And when you start speaking she will start that timer. And so when the timer beeps, if you would complete your sentence and end your comment, then we will open up the question period for the Board members.

Board members, if you can raise your hand on the, from the participant menu, I will call upon you in turn. And of course, if for some reason you can't raise your hand please just interject yourself before we move on and I will recognize you for your questions.

With that, does the Board have any questions? If so, we will dive right into our public comments.

First up we will have Kyla Smith. After that we will have Maddie Kempner and then Robin Hadlock Seeley after Maddie.

So, Kyla, start us off if you would. Please state your name and affiliation.

I am not hearing you, Kyla. Do we have her on, Michelle?

MS. ARSENAULT: So, sorry, Steve, Kyla cancelled. And so we will --
MR. ELA: Oh, thanks --
MS. ARSENAULT: -- go right to Maddie.
MR. ELA: I missed that, I apologize.

I think you let me know that.
MS. ARSENAULT: That's okay.
MR. ELA: So, Maddie Kempner will be up. After her, Robin Hadlock Seeley and then Harry Rice.

So, Maddie, you have the floor. Please state your name and affiliation.

MS. KEMPNER: Great, thank you so much.

Hi everyone, my name is Maddie Kempner and I am the policy director for the Northeast Organic Farming Association of Vermont, or NOFA Vermont.

NOFA Vermont is one of the largest organic farming associations in the country. We have over 1,200 members around our region. Our mission is to promote organic practices, to build an economically viable, ecologically sound, and socially just food system.

Vermont Organic Farmers is a USDA accredited certifier representing 775 certified organic farmers and processors. VOF has been certifying producing since 1985 and has been
I appreciate this opportunity to comment on the NOSB agenda items and I really thank the members of the NOSB for your critically important work.

I would like to comment today on the proposal for paper-based crop planting aids as well as research priorities. On paper-based crop planting aids we really want to thank the NOP for extending the allowance of paper pots for use on organic farms, and we thank the crop subcommittee for submitting the proposal in a timely manner.

Based on the many written and oral comments that NOSB has received and the input we have received directly from our producers, it is clear that the paper pot transplanting system saves time and labor significantly for small organic vegetable producers like those here in Vermont.

The inability to use the system would have an immediate negative effect on those organic farmers.

We agree with the subcommittee's findings that the adhesives and synthetic fibers in the paper pots are also in recycled paper and
mulches and should therefore be allowed in paper planting aids as well.

Regarding the non-paper synthetic fibers we agree that these should be restricted, however, we're concerned that the requirement to include at least 85 percent bio-based synthetic non-paper fibers will result in the unintended prohibition of these paper pot systems as well as the unintended prohibition of other paper planting aids like seed tape, collars and cloches.

We do support this proposal overall but we would like to hear from the manufacturers of these materials to ensure that the criteria listed in the proposal are achievable.

Secondly, we appreciate and support the research priorities provided by the materials subcommittee. And in addition to the important priorities listed, we recommend that the NOSB take up the issue of phthalates in organic dairy equipment. Primarily in milking inflations and dairy hoses.

Our initial research a couple of years back showed that they are relatively affordable. Non-phthalates alternatives available to many of
these products. And we would like to see the NOSB conduct additional research in order to move toward, toward these alternatives due to concerns about the human health impacts of phthalates.

Thank you.

MR. ELA: Thank you very much. Do we have questions from the Board for Maddie?

Maddie, I have just one question. We have received a number of comments similar to what you said for paper production aids of making sure that seed tapes and other such paper materials are acceptable under the sanitation.

We really haven't heard from anybody, that's one of the reasons we put this out for public comment. Do you have any sense that these materials would not be acceptable under our criteria?

MS. KEMPNER: Are you referring to specifically the seed tape and the other materials I mentioned?

MR. ELA: Yes.

MS. KEMPNER: I personally am not familiar, but I can certainly reach out and see what input we've gotten, if any on that, and follow
up with the Board on that.

MR. ELA: That would be very helpful, I'd appreciate that because we, I think in the public comments I was hoping that we would hear from some of those and we didn't. So any information would be very instructive to us.

MS. KEMPNER: Okay, great, I will share whatever I can find. Thank you.

MR. ELA: Okay, thank you, Maddie. Are there any other questions from the Board? All right, we will move on.

Next up is Robin Hadlock Seeley, followed by Harry Rice and Michael Crotser. Robin, you have the floor, please go ahead and state your name and affiliation.

DR. HADLOCK SEELEY: Thank you. Good morning, good afternoon. I'm Robin Hadlock Seeley. I have no current academic affiliation but I'm recently retired from Cornell University as a senior research associate. And I still teach at the Shoals Marine Laboratory.

Thank you for the steadfast work over the years on the use of marine algae seaweeds in organic production. We are making progress.
Thank you especially for organizing the marine panel of experts in Pittsburgh last fall.

Today I want to take a 30,000 foot view of what the NOSB and NOP should be doing, I believe, with respect to wild marine species and then end with some specific recommendations.

Here is the 30,000 foot overview. I suggest that NOSB, NOP need guiding principles with an ecosystem view of wild marine species used in organic.

Guiding Principle Number 1 would be, first, do no harm. Recommended protection of wild native marine ecosystems in the sea, including marine forests, as you have already recommended protection of wild native ecosystems on land.

Guiding Principle Number 2 would be, to end the fragmented review and different treatment of wild marine species used in organic products. Whether inputs or food, they are wild crops and should be held to the wild crop harvest standard in 205.07.

An example of fragmentation is the wild seaweed rockweed, or Ascophyllum, being considered under different subcommittees in different rules.
The organic producers' wholesalers coalition recommends facilitating "a more integrated and comprehensive approach to the topic," of marine source materials.

And OTA is recommending "cross committee discussions to calibrate decisions on environmental impacts of marine source raw materials across inputs and scopes."

My specific recommendations are for fish oil liquid fish products and kelp. I support the beyond pesticides comment on fish oil. "The proposed annotation is inadequate to protect the marine ecosystem."

And on supporting kelp delisting. "De-listing kelp from 606 would -- required kelp to be organically produce which would require that harvesters comply with 205.207(b)." And NOC says on liquid fish products, "harvesting wild caught fish for the exclusive use of fertilizer is a misuse of a resource from the ocean and should not be supported by organic production."

And on aquatic plant extracts I believe, I would agree with BPs, conclusion, "synthetic aquatic plant extracts are unnecessary
and incompatible with organic practices."

The slide you are seeing summarizes recommendations of the marine expert panel, and MOFGA from last fall in Pittsburgh, which support the route of annotation with guidance for marine materials using a cautionary approach. Thank you.

MR. ELA: Are there questions from the Board? Emily has a question.

MS. OAKLEY: Thank you very much for your comments and thank you for the slide. I was wondering if there any specific suggestions that you recall from the panel that you think that we should particularly consider as we move forward on trying to develop standards for potential annotation that might try to address the environmental impact of harvesting wild seaweeds for fertility inputs?

DR. HADLOCK SEELEY: Yes. The two that I've highlighted on the slide for the Panel I think are very important.

One is the cautionary approach, or as it's termed in the ecological literature, precautionary approach to this given the rates of ocean change, the paucity of data and the tendency
for overexploitation.

And also, the second one that I would really recommend is putting protected areas off limits to harvesting. That means conservation areas, which are already designated for conservation, off limits to harvest.

For example, in Maine we heard from a producer who uses an organic seaweed in harvests that way, that there was actually an incentive to go into the nature conservation and preservers, that include the intertidal zone because they could be assured that conservation rockweed was organic.

And I think that's one of the things that we want to really stress, that that should not be possible.

MS. OAKLEY:  Thank you.

MR. ELA:  Any other questions from the Board?  All right.

And, Emily, right now I can't lower your hand, I'm going to work on that. So if you could lower your own hand that will help me keep track of things. Thank you.

MR. BRADMAN:  Steve, sorry, I had a question.
MR. ELA: Yes, please go ahead.

MR. BRADMAN: Can I chime in?

MR. ELA: Yes.

MR. BRADMAN: My question would be, when evaluating marine materials that are essentially bycatch from other purposes, do you have an opinion or thoughts on whether those should be considered differently from taking a primary organism specifically like, the rockweed is being harvested specifically for fertilizer, what if we had a source of fish oil or something else that, where liquid fish products seems to be an issue where it's only bycatch. I'd be interested to hear your thoughts on that,

DR. HADLOCK SEELEY: Well, that's why I was advocating a holistic approach. Because even if something is listed, for example, in fisheries, if something is listed as a byproduct, it may be, people may be worried about that as a byproduct just because it's a, sorry, a bycatch.

Just because its bycatch doesn't mean it's not important. And in fact, the fisheries regulations may not be accounting for that bycatch.

So, simply calling it bycatch doesn't
really tell you enough information to be able to evaluate. But that's why I was suggesting this comprehensive approach to it.

MR. BRADMAN: Thank you.

MR. ELA: Thank you. And just for the record, that was Asa asking the question.

All right, thank you again, Robin. We will move on to Harry Rice, followed by Michael Crotser and Bill Wolf. Harry, please go ahead and state your name and affiliation.

MR. RICE: Thank you. My name is Harry Rice and I'm with the Global Organization for EPA and DHA Omega-3s. GOED for short. Which represents the wide industry for EPA and DHA, the primary and long chain Omega-3 fatty acids found in fish oil.

Our membership is built on the quality standard unparallel to the market. And our mission is to increase consumption of EPA and DHA and to ensure that our members produce quality products that consumers can trust.

I'm going to address the handling subcommittee's proposed modified fish oil annotation. Though it's important --
MS. ARSENAULT: Harry?

MR. RICE: Yes.

MS. ARSENAULT: Harry, I'm sorry. This is Michelle from NOP. I think we're getting some feedback from your line and I'm having a hard time hearing you. So if you could maybe get a little closer.

MR. RICE: I got earbuds on. Can you hear me better now?

MS. ARSENAULT: All right. I'm curious it's not somebody else's line.

MR. RICE: Can you hear?

MS. ARSENAULT: I can hear you a little better, yes. Okay, and I -- so you know.

MR. RICE: Should I go ahead, do you want me to start over or --

MS. ARSENAULT: Yes. No, go ahead, continue.

MR. RICE: Okay. All right, thank you.

MS. ARSENAULT: Sorry.

MR. RICE: Nope. GOED supports sustainable fishing practices. While fish oil human consumption is always a value added product
to fishmeal or seafood production because the proteins value is much greater than that of oil there are those that remain unconvinced.

For this reason, GOED views a modification to fish oil annotation as an acceptable solution to its sustainability concerns and ensure that fish oil is compatible with organic practices.

At the same time, GOED has concerns about the proposed modifications specifically referenced to NOAA and FAO. I'll elaborate briefly.

While NOAA's work is very important, the reality is that it's impact on the fish oil industry, as it applies to the sustainability, is limited to menhaden and salmon oils. And due to the low amount of these oils used, the fish for human consumption, the overall impact is minimal.

More specifically, GOED has estimated that only approximately one percent and approximately two percent of the salmon oil and menhaden oil, respectively, produced from salmon caught in the United States, is used for food or human consumption.
As GOED mentioned in its written comments, we apologize for the confusion concerning the appropriateness using exploitation data of the FAO.

Unfortunately, the most recent report with figures for state of exploitation is from 2011, which means the data is too old to be accurate and thus of utility to address its sustainability. Also, it's unclear how organic certifiers can verify the sustainability of the fish used to produce this fish oil.

Given that most of the fisheries through which fish oils for human consumption are sourced are either certified or are currently pursuing certification by a number of well-respected programs and organizations, GOED recommends fish oil used in products labeled as organic be required to have third-party certification and thus the annotation should reference third-party certification as a requirement.

Not only does third-party certification address the environmental concerns is timely unlike the FAO data. And would not
create an undue burden for organic certifiers.

In closing, GOED proposes the existing fish oil annotation to be modified to include the following text. Sourced from fishing, pardon me.

Sourced from fishing industry byproduct only and certified as sustainable by a third-party certifier. As always, thank you for your time and tireless effort. I will take questions if anybody has any.

MR. ELA: Does any of the Board have questions? Wood, it looks like you have a question.

MR. TURNER: Thanks, Harry. Can you restate that point you made about the amount of percent of salmon and menhaden that is consumed for human, by humans?

MR. RICE: Yes.

MS. ARSENAULT: Wood, sorry. Wood, I just lost the end of your sentence as well, I did not hear what you asked.

MR. TURNER: Okay. Can you hear me now?

MS. ARSENAULT: Yes, better.

MR. TURNER: Harry, can you just
restate the percentage of salmon and menhaden that's been consumed by humans?

MR. RICE: Yes. So, with respect to that which is caught in the United States, we've estimated that approximately one percent salmon oil and approximately two percent menhaden oil is caught, is from the respected species caught in the United States.

I'm sorry, I kind of jumbled that, does that make sense?

MR. TURNER: It does. Thank you.

MR. RICE: Okay.

MR. ELA: Asa, it looks like you had a question?

MR. BRADMAN: Sorry --

MR. ELA: If you're talking -- yes.

MR. BRADMAN: I have two questions. One, one issue of discussion we've had as a Board is relying on third-party or other kinds of certifications that are external to the National List. And those standards can change and may not be reliable in terms of implementing the kind of principles we want under the organic laws.

And then there are some plant-based
sources of some of these fatty acids, or at least precursors. And I'm wondering why other sources of these fats which are considered so healthy, can't come from plant sources?

And again, I understand that there is not necessary, they may be precursors to some of these products, but still it may achieve the same nutritional goals that are touted for these materials.

MR. RICE: So, with respect -- for plant-based Omega-3s, they're good but they unfortunately don't convert very efficiently to EPA and DHA. Very low percentage.

I'm going to get the percentage mixed up. But for like alpha-linolenic acid, I think it's less than one percent will convert to DHA. And I think it's less than five percent to EPA. And obviously they're individual because, so that's just an average.

So, in order to achieve the outcome, the health outcomes, cardiovascular, that have been seen with EPA and DHA, you actually need to get a direct source of EPA and DHA. And fish oil would be one of them.
And I apologize, I heard the first part but I didn't understand the question about the third-party certification.

MR. BRADMAN: This is kind of a general issue that, or concern we have on the Board is having a standard that relies on somebody outside of the organic community to define what's acceptable or not acceptable. So --

MR. RICE: Yes. And --

MR. BRADMAN: -- that's kind of, maybe a perhaps more general philosophical issue than a question.

MR. RICE: Yes. And no, I understand the concern. All I can say is I know that the top third-party certifiers are very good. They have a very good reputation and they always get better.

There are obviously third-party certifiers that probably wouldn't meet the standards that you're looking for, so I think the challenge is, is figuring out which third-party certifiers to rely upon.

And I know that in GOED's comments, we solicited a handful of the ones that our members are using and that have the best reputation in the
industry right now.

MR. BRADMAN: Thank you.

MR. RICE: Thank you.

MR. ELA: I may have inadvertently lowered somebody else's hand. Was there anybody else from the Board that had a question?

All right, thank you very much, Harry.

MR. RICE: Thank you.

MR. ELA: Next up we have Michael Crotser, then Bill Wolf and then Stephen Walker. Michael, please go ahead.

MR. CROTSER: Good morning. Can you hear me?

MR. ELA: We can hear you loud and clear.

MR. CROTSER: Oh, thank you. I'm Michael Crotser and I'm the certification manager at CROPP Cooperative. We appreciate the work of the NOSB and the NOP to support organic agriculture.

Thank you for the opportunity to speak today. My first comment will be about sunset review of whey protein concentrate, WPC. We support removing WPC from 205.606.
CROPP Cooperative is a major supplier of whey protein concentrate. We produce liquid whey through our organic cheese production.

Our whey is condensed and sent to co-packers to be processed into WPC. WPC is used to add protein to food such as infant formula, bakery, bars, sport drinks and adult nutrition.

Dairy whey is no profitable and maximizes the value of our supply chain. Both international and domestic markets are important.

Sixty percent of our whey is processed into whey powders with plans to utilize our entire whey stream. Our supply could produce 1.4 million pounds of WPC annually.

Today organic WPC is fully available in farm and volume and the supply will grow. In fact, our WPC supply is greater than market demand where large volumes are sold on the conventional market.

There is the processing infrastructure in place and it has grown dramatically since WPC was placed on the National List. There is no need to list WPC on 205.606.

My second comment will be about the fish
oil annotation. We use fish oil in our Omega-3 supplemented whole and reduced fat milks.

Omega rich products are preferred by a large sector of our consumers. We use 606 listed fish because there is no organic alternative available.

It is difficult to determine if the new annotation would mitigate environmental concerns. The referenced FOA classifications are out of date.

The six fish population categories have now been reduced to three. This three category system uses data from 2011, which cannot assess current sustainability.

NOAA jurisdiction is only relevant to U.S. managed waters. The fish oil industry predominately harvests fish outside of U.S. waters.

Limitations to using these sustainability categories should be addressed prior to NOSB recommendations. Utilizing third-party fishing standards such as the Marine Stewardship Council, Friends of the Sea and Responsible Supply of Fishmeal and Fish Oil can
verify that production maintains or improves aquatic ecosystems.

Finally, our fish oil is a secondary byproduct of fishmeal production. We support adding an annotation that the fish oil is sourced from fishing industry byproducts only.

And thank you for your time.

MR. ELA: Thank you very much. Are there questions from the Board? Emily has a question. Go ahead, Emily.

MS. OAKLEY: Thank you. Thank you for your comments.

For example, the Marine Stewardship Council sustainability standard addresses more than environmental concern, it also looks at economic impact and social justice issues. I'm wondering if you think that that is something that would be relevant or something that the NOSB could even look at in an annotation given that it is beyond the scope of current organic certification requirements?

MR. CROTSER: Your question, if I have it correctly, was talking about economic sustainability, fair trade issues, those types of
concerns?

MS. OAKLEY: Yes. Just that other third-party sustainability standards while addressing environmental impact also have other tiers that they're standardizing to or certifying to.

MR. CROTSER: Yes. They don't, as you know, they don't directly relate to other standards. But any time there is additional attributes to third-party verification, us, as a CROPP Cooperative, look at those sustainability and economic on a social level are important to us as a cooperative.

And we do look for those additional attributes in some of our ingredients that we use throughout our portfolio.

MS. OAKLEY: Thank you.

MR. ELA: Are there any other questions from the Board? All right, thank you very much, Michael.

MR. CROTSER: Thank you.

MR. ELA: Yes. Have a good day. We're going to move next to Bill Wolf and then Stephen Walker and then Sam Welsh.
Bill, please go ahead.

MR. WOLF: All right, can you hear me?

MR. ELA: We can hear you now.

MR. WOLF: Can you hear me now?

MS. ARSENAULT: Yes, we got you, Bill.

MR. ELA: We can hear you. Please go ahead.


I've been active in the organic community for 49 years farming organically and helping to develop organic products and standards.

Slide 2. Thank you for your work continuing to improve organic standards. Earthworms are a guide to the best practices.

Even in a pandemic, earthworms and healthy soils, like people, need air to live. Finding a mask for this earthworm wasn't easy, but he really wanted to come to this meeting and share an important point with you.

When considering what should be allowed in crop production we suggest that you imagine what
encourages earthworms. They are pretty good biomonitors and they don't let the perfect be the enemy of the good.

Slide 3. Biotic systems are complex and farmers need a robust and diverse toolbox to manage organic crop production.

Not just one choice or tool per problem but having several choices for different situations.

Slide 4. To protect that toolbox I ask that you vote to allow paper pots, renew listing of aquatic plant products, insecticidal soap, Vitamin B3 and EPA List 4, at least until it is replaced with a new program.

Slide 5. And as an advocate of continuous improvement, the Board should establish a consistent method of reviewing National List materials.

Every action and product has an impact. And a carbon footprint. And there is no such thing as no impact.

But the benefits of input, such as fish emulsion and seaweed, outweigh those impacts.

I also ask that you take a more
strategic approach to studying inputs. Why not take a step back and prioritize which inputs most need to be reviewed for their lifecycle impacts.

Another improvement would be to apply commercial availability to the entire list. Requiring organic, when available, to the sections 601.603 and 605.

And finally --

MR. ELA: Michelle, was that the time?

MR. WOLF: -- please change the rules to actually allow the use of biodegradable --

MS. ARSENAULT: It was.

MR. WOLF: -- mulch film.

MS. ARSENAULT: Sorry, Bill.

MR. WOLF: Slide 6.

MR. ELA: Bill, your time is up unfortunately.

MR. WOLF: I'm done? Thank you.

MR. ELA: You're done. Are there questions for Bill? Emily, you had a question?

MS. OAKLEY: Yes. You didn't quite get a chance to get to it but I saw you had prohibited sodium nitrate and I was wondering if you could elaborate on your thoughts on that?
MR. WOLF: Certainly. The Board voted upon the response and request from the NOP, many years ago, to remove the 20 percent allowance for sodium nitrate on 602.

That was done in order to align the U.S. NOP standards with international standards. IFOAM, EU, Canada, many other countries. Because sodium nitrate has always been controversial and does have a pretty high salt index. And earthworms don't like it. So, that vote occurred at the request of NOP, but then it got stuck in regulatory bureaucracy, to put it simply.

The five year review has been ignored, so sodium nitrate has not been brought up each time that the five year's timeline came up. It's still posted on 602 with an allowance for up to a 20 percent nitrogen. But it's a pretty confusing situation.

And NOSB could take a vote again to put it on NOP's work plan to remove the 20 percent allowance.

MR. ELA: Are there other questions for Bill? Thank you very much, Bill, we appreciate your time.
MR. WOLF: All right, thank you.

MR. ELA: We're going to move on to Stephan Walker, then Sam Welsch and then Joel Kelly.

Stephen, please start and state your name and affiliation.

MR. WALKER: Hi, I'm Stephen Walker, Accreditation and Industry Affairs Manager at MOSA.

I'll draw attention to our written comments on the 2020 research priorities and this new pandemic perspective. So, yesterday was the 50th anniversary of the first Earth Day.

Forward thinking Greta Thunberg said, "whether we like it or not, the world has changed. It looks completely different from a few months ago and will probably not look the same again. We're going to have to choose a new way forward."

Organic research directs our new way forward. For 2020, we appreciate the call toward integrated research, considering the interplay of agroecology, the environment beyond our fences and native biodiversity.

Our comments note how priority setting
means putting some needs aside. And that sounds like this COVID-19 crisis.

This month the International Panel of Experts on Sustainable Food Systems released a COVID report which notes global food system vulnerabilities on three fronts.

Industrial ag is driving habitat loss and creating the conditions for viruses to emerge and spread. Varied disruptions are testing supply chain resilience and revealing vulnerabilities.

And hundreds of millions of humans are living permanently on the cusp of hunger, malnutrition and extreme poverty and very vulnerable to global recession.

Yet, this pandemic also offers a glimpse of a desired new normal. With more resilient food systems.

Communities have come together to plug gaps, and some public authorities have taken extraordinary steps to secure food production and distribution. Global recognition of the short sidedness of the conventional path creates fertile ground for a new food system. But crisis can be misused to accelerate unsustainable, business as
usual approaches. We need the kind of resistance and new hope inherent in our organic movement.

At a Texas NOSB meeting a while back I recalled Helen and Scott Nearing's influential book, Living the Good Life: How to Live Simply and Sanely in a Troubled World.

The Nearings sought economic independence, well-being and social and ethical ideals. They wrote, the Good Life is more than a yearning, it includes decision, will, determination and effort.

They also warned, keep out of the system's clutches and you have a chance of subsistence, even if the oligarchs disapprove of what you think and say and do. Accept the system and you become a helpless cog in an impersonal machine operated to make rich men richer.

The forward thinking organic research priorities help us choose a good new normal of resilient agroecological food systems, which address climate change, ensure fairness and protect the vulnerable. Now is planting time for necessary seeds of change.

MR. ELA: Thank you very much. Are
there, it looks like Emily has a question. Go ahead, Emily.

MS. OAKLEY:  This is a comment.  I just wanted to thank you for your articulate points. Thank you for bringing them to us.

MR. WALKER:  You're welcome. Thank you.

MR. ELA:  Dave Mortensen has a question. Go ahead, Dave.

MR. MORTENSEN:  Yes. Mine also is a comment. And I also wanted to just echo what Emily just said.

I've been sitting out here in space listening to the comments and the perspectives. That was very helpful to hear, so thank you.

MR. WALKER:  Thank you. And thank all of you for your work.

MR. ELA:  Are there any other questions from the Board? All right, thank you very much, Stephen.

MR. WALKER:  Okay.

MR. ELA:  We'll have, up next is Sam Welsch and then Joel Kelly and Patty Lovera.

Sam, please go ahead.
MR. WELSCH: All right, hello. My name is Sam Welsch. I represent OneCert, an accredited certification agency.

The theme of my comments today is consistency and clarity. Remember, if it can be misunderstood, it will be misunderstood.

My first example is the confusion about the correct classification of malic acid. The synthetic, nonsynthetic decision tree in NOP 5033-1 is not being used consistently.

The technical evaluation report prepared for the NOSB discusses the inconsistent interpretations in 5033-1 in the section, status of L-malic acid from synthetic fumaric acid production.

It appears that some are incorrectly considering the microbes to be the sourced substance. It should be obvious that the microbes do not create malic acid by themselves, there must be a source substance for the microbes to act on. Microbial action is the cause of the chemical change from fumaric acid to malic acid.

I urge the NOSB and NOP to revise 5033-1 considering the confusion about how it is being
interpreted.

Remember my theme, if it can be misunderstood it will be misunderstood. The proposal for listing, for the listing for paper and paper pots is another example.

Certifiers who reviewed the proposal concluded that they need more clarification before they could consistently verify compliance. It needs to be rewritten before it is published.

Discussion on paper pots has revealed that paper is a more complex synthetic substance than just chemically altered cellulose. Paper can also include binders and synthetic fibers.

When those non-cellulose substances include plastic or other non-biodegradable substances, we must consider the effect those substances have on the living organic matter in the soil.

Microplastics are accumulating throughout the world, including our soil. The effects of microplastics are now known to be detrimental to microbial life in the soil, organic matter.

I like the photo Bill Wolf had of the
earthworm. You've all seen pictures of plastics that are consumed by marine life or even terrestrial life where it gets in their stomachs, it essentially starves them to death. There is research showing that earthworms are smaller when there's microplastics in the soil.

Think of earthworms like the microplastics and earthworms are analogous to the larger life forms and the bigger pieces of plastic we see in oceans and in the soil.

Keep that in mind and be cautious about believing claims of plastics and other synthetic substances are biodegradable. That's more of a marketing claim than a genuine feature.

MS. ARSENAULT: Great.

MR. ELA: Thank you, Sam.

MS. ARSENAULT: A second left on the timer.

MR. WELSCH: Wow.

(Laughter.)

MR. ELA: Terrific.

MR. WELSCH: I practiced.

(Laughter.)

MR. ELA: Well done. Are there
questions from the Board?

I have a question, Sam. In terms of you're saying that we need to revise the annotation for paper pots, how would you propose that we actually word that?

MR. WELSCH: I was afraid you might ask that and I did not prepare a proposal. I'd be happy to put some thought into that, but currently, the way it's written with references to other standards, it really creates a situation where certifiers would have a hard time evaluating that.

And that's what I hear from my colleagues, is that we're not sure how to evaluate it, or if we really are able to evaluate it, to those standards. I like the annotation that if it's 100 percent biodegradables available, use it. And I think there's a lot of potential for --

MR. ELA: We just lost you, Sam.

MR. WELSCH: All right, I was just -- can you hear me now?

MR. ELA: Yes.

MR. WELSCH: Okay. I think there are some --

MR. ELA: You said --
MR. WELSCH: Yeah, there are some things that can be made from hemp and other fibers that are going to be more fully biodegradable.

I think the stricter you make the rule, and the clearer you make the rule, the more incentive there will be for people to make things that comply with it. When there's ambiguity about how to enforce it or what it means, there's less incentive for people to develop substances or products that can meet a more strict and clearly written rule.

MR. ELA: And thank you, Sam. And I guess I would personally appreciate if you would give some thought to how we would actually write that, because it's a -- you know, the devil is in the details always, so I would love it for you to send us your thoughts on the exact wording of that.

It looks like Emily has a question.

MS. OAKLEY: Yeah, I was actually going to just say the same thing, and just to let the community know that this issue has taken a tremendous amount of the Crop Subcommittee's time. Which might not surprise people, but it is much more complicated than one might at first think.
So, any detailed suggestions or comments would be great, to be either given to Michelle or to the open docket when it opens back up again, because we can use all the help we can get.

MR. WELSCH: Right, well noted.

MR. ELA: Is there any other questions for Sam? Sam, as always, thank you very much.

MR. WELSCH: All right, thank you.

MR. ELA: We're going to move on to Joel Kelly, then Patty Lovera, and then next, Cali Alexander.

So, Joel, would you please state your name and affiliation and start?

MR. KELLY: Hey, can you hear me okay?

MR. ELA: We can hear you. Please continue.

MR. KELLY: Great. My name is Joel Kelly and I'm from Live Local Organic in Portland, Oregon. We're a certified organic farm using aquaponics to grow food for local grocery stores and markets.

Live Local Organic is thankful to the NOSB for taking the time to listen to public comments, even in the midst of a global pandemic.
We also want to greet the five new members of the Board and express our gratitude for the responsibility that you've all undertaken.

Live Local Organic was founded from a desire to produce food locally, sustainably, and organically. We choose to use container production methods because there is now feasible option for growing out-of-season produce locally in a climate like ours in Portland, Oregon.

We choose aquaponics over other ponics systems because it aligns with organic practices by using a symbiotic ecosystem between fish, plants, beneficial bacteria, fungi, and other microorganisms.

The protection of the certification of container production systems is vital for assuring that consumers have access to both locally grown and organic produce during winter months in climates like ours in Portland.

Without an organic certification, our farm would lose our advantage against other container producers who use synthetics, GMOs, and other unsustainable practices. Consumers wanting to buy organic, out-of-season produce would then
be forced to buy non-local options from farms often thousands of miles away. This produce would typically be one to two weeks old, have a significant carbon footprint from transportation, and be from a farm with less accountability because of their distance from the marketplace.

These last four months have highlighted the need for food security. And we want to agree with previous commenters and express our appreciation for the local farmers who are keeping the shelves stocked during this time of crisis.

That being said, Live Local Organic supports the use of aquatic plant extracts in organic production. We would also support revisiting the question of container production for organic certification.

With recent litigation regarding this issue and perceived disagreement between the NOSB and NOP, clarity is more important now than ever. In this ever-changing industry the feature unknowns make is difficult to decide into which areas we should invest our time, innovation, money, and research and development efforts.

If and when this issue is revisited,
we hope that it will be accompanied by extensive, unbiased inquiry into the public opinion about this issue, as a core part of the argument for decertification seems to be that consumers don't know about, and wouldn't approve of, organic certification of container production systems. This has not been our experience over the years of working with thousands of customers. And we have seen strong public support for the certification of container production system.

I'm proud to be an organic farmer and to use container production methods with all the ecological benefits associated with such production. Any restriction of container production, in my opinion, would be short-sighted, as it is going to account for a significant portion of our food production over the next 50 years. However, a clear and final decision on this issue will help everybody plan for the future.

We would again like to thank the NOSB for the time and dedication in helping us resolve all of the important issues facing the organic community today, and I'm happy to take any questions if there are any.
MR. ELA: Thank you. It looks like Sue has a question. Sue, go ahead.

MS. BAIRD: Hi, thank you for your comments. In your mind, do you differentiate between containers growing that has, in pots, as opposed to strict water-based hydroponic, and/or do you differentiate in the aquaponics? Is there a difference in your mind between those?

MR. KELLY: There is a difference between aquaponics and hydroponics, as aquaponics uses fish in the system as a source of the nutrients. And so there is a maintaining of a biological ecosystem that happens.

And I do see a differentiation that was stated from the taskforce that looked at this issue and their differentiation between bioponic systems as opposed to ponics systems. And, yeah, that was part of the reason that we choose to do aquaponic systems.

However, I think there still is the issue of making sure that there is a local and organic option available, especially in northern climates who have harsh winters. I think making sure that container production system
certification is protected is still important.

So I guess, in summary, yes, I see the differentiation there, but I still think that the certification should be protected, as long as they are following all the standards that are put forth in maintaining an organic plan with their organic certifier.

MS. BAIRD: Thank you.

MR. ELA: It looks like Dave has a question, and then Dan. And we'll keep an eye on time, but go ahead, Dave.

MR. MORTENSEN: Okay. I would just say that, as one of the Board members of many who have worked on this over the years, we would need a stronger signal sent to NOP that this is something that we should be working to resolve.

It's been in something we've discussed on and off over the last two years, quite intensely at times. And I think to have it more squarely on the work docket and something that we really devote time to, that we do need a stronger signal in that way.

MR. KELLY: Yeah, I would agree. And if there's any way for us to help with that or assist
with that in any way, I would be happy to do that.

MR. ELA:  Dan, you have a question?

DR. SEITZ:  Thank you for your comments. And I just want to echo a little bit what Dave just said.

I appreciate that you're indicating support for standards for container production. And there are a number of us on the NOSB who feel that it's sufficiently different that we really do need to develop standards.

But my question is, you made a statement about consumer support for the type of production you do, container production. And I'm wondering, and this is not a matter for the NOSB, but would you support labeling of container production or hydroponic production so that consumers can make an informed choice about what type of production method fits their values?

MR. ELA:  Joel, we're not hearing you.

MS. ARSENAULT:  There we go, we just got him. You're unmuted, Joel, go ahead.

MR. KELLY:  Yeah, I was just going to say, absolutely, I would support that. I think that's a great solution, to just requiring that
growers put their production method on their labeling somehow so that consumers can make an educated decision about it.

MR. ELA: All right, thank you very much, Joel. We appreciate your comments.

MR. KELLY: Thank you all for your time. Appreciate it.

MR. ELA: We're going to move on to Patty Lovera. Cali Alexander will follow Patty, and then Marie Burcham.

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

MS. LOVERA: Hi, this is Patty Lovera. Can you hear me?

MR. ELA: We can. Please continue.

MS. LOVERA: Okay. Hi, my name is Patty Lovera. I'm the policy director for the Organic Farmers Association. I want to thank you for figuring out a way to have this -- have the public comments happen today, and say welcome to the new members of the Board.

The Organic Farmers Association is led by domestic certified organic farmers. And a top priority for our farmers is we're maintaining, in
whatever way we need to, the integrity of the organic label. We appreciate the role that NOSB plays in the process of keeping organic integrity high. And we think an important part of that is actually that the NOSB have more ability to set their own work agenda, which just came up from the last commenter. I think that's an important point.

Because this is a space where the whole organic community gathers, we actually have a couple of thoughts I wanted to share with the NOP for some key actions that we need to move forward as quickly as possible so that we're keeping the integrity really high.

One is we desperately need this rule on the origin of livestock to address the inconsistency we see on the ground in how the organic animals are being transitioned. We put some details about OFA's policy of the points that need to be covered in that rulemaking, but the key one is that you can transition one time per producer; and that once this regulation is done we need a very quick effective date, because this is going on for a long time and created a very
unlevel playing field for folks who are already living up to the intent of the standards on that.

In addition to an origin of livestock rule, we also need the program to continue to focus on compliance with the pasture rule and to keep emphasizing compliance for these high-risk operations.

The second main point is we desperately need to strengthen the organic enforcement rulemaking. We are catching up to have enough capacity to properly enforce a $50 billion industry with complicated, often global supply chains. And we understand that that rule appears to be stuck in the review process, but we're just really reminding the program who desperately we need it. And that when it gets unstuck we need to get it moving and finished as soon as possible.

And then one last point I wanted to raise, again, with the program, because the whole community is here, is that in this pandemic situation we've seen organic farms adapt very, very quickly, on their own, essentially on a dime, figuring out how to market, how to adapt, figure out new rules and regulations that change every
day from their local government or state government, figure out how to access the Small Business Administration.

Like, it's been a really impressive response, but we still need USDA's pandemic response to include organic producers. They can't be left behind just because many organic producers have scrambled quite effectively to turn on a dime; in a lot of ways, faster than our conventional counterparts who are on very consolidated supply chains.

So I just want to flag that and actually specifically ask for some help from the program in figuring out ways for organic farmers to access the USDA pandemic response, whether it's the commodity buys or the direct payments, because so far the details that are out so far aren't super clear that these programs are going to work for organic farmers and we need them to be included, as well. Thank you.

MR. ELA: Thank you very much for your comments. And I think, Jenny, do you want to make any comments on that?

DR. TUCKER: Yeah, we appreciate the
feedback on all of those different elements.

Strengthening organic enforcement is currently with the Office of Management and Budget. We responded to a number of questions that they had on the rule. And so it is with them at this stage of the game.

Origin of livestock is currently in, and coming out of very soon, legal review, which was done very quickly. So both of those are moving forward.

I appreciate the comment on the pasture dairy compliance project, which does continue in its third year, this year. And we will visit more farms this year than we have in the previous two years.

And then, finally, on the coronavirus response, I appreciate that feedback. We are monitoring closely what is happening within USDA and AMS and providing feedback from the organic community on those topics. There are a lot of different programs that are being developed.

There is a new fact sheet within the Organic Integrity Learning Center, under NOP Presentations Course 998. It is the NOP update
presentation that just launched last night. It includes a fact sheet on resources for organic farmers, as well our NOP update presentation that includes some of the information I just covered here.

MR. ELA: Thank you very much, Jenny, I appreciate that update. Dave, do you have a quick question?

MR. MORTENSEN: Yes, just a quick follow-up on that. I was wondering, it sounded like Jenny addressed everything but the origin of livestock, and I just was curious if we could hear an update on that, as well.

DR. TUCKER: Origin of livestock is almost clear of legal review. So, the final rule has been written, it has gotten the first round of legal review. It is waiting OGC clearance, and then it goes into a departmental clearance, and then to Office of Management and Budget for review.

MR. MORTENSEN: Is there a timeline that? Like, just is that years and years away or months away?

DR. TUCKER: So, you know, I am no longer committing to timelines, because I'm the
one who said strengthening organic enforcement would be out in the fall, and it is at OMB. So, all I can is tell you where it is in the process.

We had really hoped strengthening organic enforcement would be out of OMB by now. It is not.

The origin of livestock, the legal review has gone faster than we expected. The Department clearly knows how important origin of livestock is to the community. They consider it a high priority rulemaking. And then it goes to OMB. OMB does have 90 days, formally, to review rules.

MR. MORTENSEN: Okay, thank you.

MR. ELA: All right, thank you. And, as always, I'm just going to chime in -- and our stakeholders know this, but I think it always pays to reiterate it -- when those rules come up for public comment in the rulemaking process, it is imperative that we all give comments in favor of those rules, because we don't want to have something derailed by a couple of comments that maybe are not in favor of them and not have countervailing views. So we should all make sure in the rulemaking process to give comments, as well
as to the NOSB.

Thank you very much, Patty. We're going to move on to Cali Alexander, then Marie Burchman, and then Mary Capehart.

And, Michelle, I think you had said you were having a hard time finding Cali. Cali, are you out there?

MS. ARSENAULT: Yeah, we're not finding her on the participant list by name or phone number.

MR. ELA: Okay. Cali, if you are out there, could you let Michelle or somebody in the program know, please? And we will come back to you if you are.

Okay, we'll move on to Marie Burchman, followed by Mary Capehart, and then Harold Austin.

Marie, please go ahead.

MS. BURCHAM: Hi, can you hear me?

MR. ELA: Yes, we can. Continue.

MS. BURCHAM: Hi. My name is Marie Burchman and I'm an attorney and the director of domestic policy for the Cornucopia Institute. I just have a couple of general comments in addition to Cornucopia's written comments.
We stand by the fact that the organic label isn't just about substitution of inputs. The rules and regulations make that clear, but the industry has moved away from holistic practice.

We urge the NOSB to continue to work toward organic rules and regulations that support economic justice for family farmers, livestock animal welfare, and environmental stewardship.

To that end, it is essential that the NOP acts on NOSB recommendations. Of particular concern is the lack of action on the NOSB's 2018 former recommendation to eliminate the incentive to convert native ecosystems to organic production.

Sensitive ecosystems are still at risk. This is an issue that is essential to organic production and label integrity. We cannot say we are dedicated to environmental stewardship and then allow farms to destroy rare habitat in the name of organic production.

OFPA gives NOP broad authority to enact regulation to further the aims of the statute. The formal recommendation of the NOSB in this particular case does exactly that, since organic
production is explicitly required to support biodiversity and prevent environmental harm. Cornucopia urges the NOSB to continue to push these issues with NOP.

We agree with the other commenters that the rulemaking on the origin of livestock needs to be moved forward. The systemic problems of livestock origin and pasture compliance had not evaporated just because we are facing a global pandemic. In fact, now is the perfect time to get final regulation enacted to give some clarity and assurance to farmers who are facing an uncertain marketplace.

Cornucopia also wants to see fair competition under the organic seal. That means there must be uniform application of OFPA in the organic rules and regulations. We urge NOSB to act on these issues to the extent they can. Rulemaking and guidance are USDA's contribution to continuous improvement.

Cornucopia was happy to see the broad scope of the research priorities suggested by the NOSB. We suggest that it is paramount that research be done on regenerative agriculture and
its relation to climate change issues. Shifting global agriculture away from exploitative and input-heavy practices may be an important piece of solving the climate issues. And the organic label has an important role to play in that shift.

We'd also like to see research into how to bring racial and economic justice to the forefront of the organic label. Right now many families do not have access to land or the ability to farm. Still others do not have access to healthful organic food. The organic marketplace shouldn't just be a niche market reserved for some members of society. Labels' goals stand in contrast to the harms perpetuated by conventional food systems and should be the norm, not an outlier.

Our industry, like our society, needs to examine how we can do better. This is what it means to be dedicated to continuous improvement.

Thank you for your time and dedication to this public process, and welcome to the new NOSB members.

MR. ELA: Thank you very much, Marie. Are there questions from the Board?

Seeing none, we will keep moving on.
Mary Capehart is up next, followed by Harold Austin, and then followed by Harriet Behar. Hmm, I don't recognize that name at all, Harriet.

(Laughter.)

MR. ELA: We will go ahead, Mary Capehart, we'll look for you here.

MS. CAPEHART: Hello, can you hear me?

MR. ELA: We can. Please continue.

MS. CAPEHART: Oh, great. Hello, my name is Mary Capehart and I am the certification senior specialist focused on dairy at CROPP Cooperative.

My husband and I, we were herdsmen out at Hawthorne Valley Biodynamic Organic Farm for several years. We had our own dairy in the Midwest. Although we no longer are milking we still have several retired dairy cows, one which is 24 years old.

I will be commenting on biodegradable bio-based mulch and livestock sunset review. Biodegradable bio-based mulch, we appreciate the work the Subcommittee has done to advance the use of bio-based mulch (audio interference). Plastic mulch is widely used and near impossible to
recycle. Thus, as the Subcommittee is aware, there is a large volume of this plastic mulch going to the landfill.

CROPP encourages the committee to allow mulch film with less than 100 percent bio-based content, as there are currently no products that can meet this standard. Furthermore, it is unlikely that there will be product that can meet this standard soon. CROPP supports finding a solution to minimize or eliminate the use of plastic mulch.

Livestock sunset review. So, in response to the Subcommittee's questions, butorphanol; is butorphanol the considered the preferred choice for its use at this time or is there any other option? Xylazine is another option but it is not as effective. Butorphanol is not in use very often but is important to have when needed.

And are there any non-synthetic materials that would serve the same purpose as butorphanol? There are herbal remedies for pain control but are not as effective to prevent acute pain. This material should remain on the National List for animal welfare and safety considerations.
We support the continued listing of butorphanol on the National List.

Flunixin. Is it still deemed necessary for organic livestock production? Yes. Flunixin is a strong anti-inflammatory that counteracts endotoxin. No other drug performs as well. It is very useful in acute mastitis. Taking away pain medications is a major welfare issue.

Are there other non-synthetic materials that would serve the same purpose? Once again, there are other pain medications, but there are circumstances where this is the best option. Flunixin is accepted by most animal welfare programs, and, again, we support the continued listing of flunixin on the National List.

Poloxalene. Are organic approaches to dealing with bloat enough to address this healthcare issue or is poloxalene essential to full organic livestock production? Most often we use butter, although it should remain on the list since it's a common carry on veterinarian trucks. Not all vets know about using butter or oils in an emergency and it's good to have many options to
treat. It's not to be used as a feed additive or preventative, just a single dose for emergency use only.

MS. ARSENAULT: Mary, that was your time if you didn't hear the beep.

MS. CAPEHART: Oh, okay. Well, I would just like to thank you for the opportunity to provide the comments on the matter before the National Organic Standard Boards and we are grateful for the flexibility to keep moving forward during these challenging times. Again, thank you.

MR. ELA: Thank you, Mary. And for future speakers, we're still not getting a loud beep from the timer, so I'm just going to have Michelle say beep. And so if you hear her say that you'll know your time is up. So, Michelle, practice your beeps.

(Laughter.)

MR. ELA: And are there any questions for Mary from the Board? Looks like Sue has a question. Go ahead, Sue.

Sue, we're not hearing you.

MS. BAIRD: Of course, you're not, because I never remember to mute.
I was interested in your comment that you're using butter as a source instead of poloxalene. And I'm wondering, is that butter than considered to be a health product as opposed to food? Because, of course, we know you can't use an animal product back to feed it to that same animal? It's just an interesting thing to me.

MS. CAPEHART: I guess I never thought of it that way. Yeah, I guess we thought more of it as a food, not necessarily milk that came from that cow.

MS. BAIRD: But milk comes from a cow.

MS. CAPEHART: I know.

(Laughter.)

MS. CAPEHART: I guess I -- no, I guess I never thought of that.

MS. BAIRD: All right.

MS. CAPEHART: And I've never had that question. That's a very interesting question.

MS. BAIRD: Well, it was an interesting -- it was just interesting. Thank you.

MR. ELA: Are there any other questions for Mary?
Thank you very much, Mary, much appreciated. We're going to next move on to a couple former NOSB members. Harold Austin, then Harriet Behar, and then Vamshi Chintha.

Harold, please go ahead.

MR. AUSTIN: Good morning. Can you hear me okay?

MR. ELA: We can.

MR. AUSTIN: Okay. All right, thank you, Steve. Good morning. My name is Harold Austin. I'm a former member of the National Organic Standard Board, having served as a handler from 2012 to 2017. I am the current chair of the Northwest Horticultural Council Science Advisory Committee, as well as it's organic subcommittee.

I'd like to thank each of you for taking the time out of your busy schedules to participate in this process on behalf of the various organic stakeholders that rely on it. And especially to those five new members that have recently joined the NOSB. I'd like to provide you with the additional following comments.

Crops List 4 inerts. As Emily Brown Rosen and John Foster stated on Tuesday, this has
been a listing that has received a tremendous amount of scrutiny and hard work in past subcommittee undertakings, but we cannot de-list this listing without having something in its place. To do otherwise would have devastating consequences for the organic crop producers and handlers.

This listing is essential until an alternative process has been put in place and fully implemented. Please refer to my written comments on the impact that the loss of this would have on organic tree fruit if we were to lose the passive pheromone dispensers that the List 4 inerts are a part of. It is time -- actually, it's well past time -- to implement the 2015 NOSB recommendation that John Foster were a part in helping to draft.

Continuing in crops: aquatic plant extracts. These materials, primarily sourced from kelp, are a key source for organic crops for nutrients, amino acids, proteins, and other components that are derived from them. Soil and plant health begin and ends with the balance of nutrients, proteins, vitamins, and other key essential substances for both the crop and the soil
within which the crop is grown.

The materials derived from the aquatic plant extracts are used to help complement the other areas of practices, such as mulching, cover cropping, composting that all organic crop producers are doing on the farms to help and improve soil health and fertility. These materials are used on an as-needed basis when it's been determined that there is a need or a deficiency that truly does exist. Yes, this material listing is still a very important one for organic crop production in the United States.

The alkali extraction method is proven to be the best process to providing a material that is consistent in quality and of ease to use for both the manufacturer and the organic crop producer alike.

In handling, ozone is an important material used as a disinfectant sanitizer in our organic packing and storage facilities. While it's a very good disinfectant, at the same time it is proven to be a very benign compound within the environment. It is used to help reduce and control microorganisms in our organic handling
operations.

This is only one of several materials that we use. Resistance management and pathogen control are important, but even more so now as we move into the COVID-19 era, as is providing a safe work environment for our employees and freshly packed fruit that is safe to our families and our organic consumer. Thus, having ozone, along with the various other materials that we use, is more important now than ever before.

I would also like to make a comment, agree with Bill Wolf's comment earlier about sodium nitrate. It's time that that listing goes away.

Thank you for your time, everybody.

MS. ARSENAULT: Thank you, Harold.

MR. ELA: Thank you.

MS. ARSENAULT: You heard the beep.

MR. AUSTIN: I did.

MR. ELA: Thank you very much, Harold.

Are there questions for Harold?

Emily has a question.

MS. OAKLEY: Thank you, Harold, for your comment on sodium nitrate. What would you
suggest the current NOSB do to forward this issue within the NOP?

MR. AUSTIN: You know, I guess I would take and maybe ask for it to be either put back onto your work plan, or that various committees, subcommittees within the NOSB, draft language, a resolution requesting that action be taken by the National Organic Program and the USDA.

MS. OAKLEY: Thank you.

MR. AUSTIN: We've used the resolution process in the past, Emily, and it's worked, I think, quite well.

MS. OAKLEY: Yeah, I think that's a good point. Thank you.

MR. ELA: Harold, this is Steve. Would you agree that we should again ask for it to be prohibited completely rather than the 20 percent?

MR. AUSTIN: Absolutely. I think that message has been sent loud and clear by the past NOSB members, and I think by the organic community as a whole. It's time that we stop for the allowance for the use of it.

MR. ELA: Are there any other questions
from the Board for Harold?

Harold, we appreciate you continuing
to give advice. Thank you very much.

MR. AUSTIN: You're welcome.

MR. ELA: Next up we have Harriet
BeHar, and then Vamshi Chintha, and then we will
have a short break. And after break we will have
Patrick Kerrigan.

Harriet, welcome back and we'll be very
curious how it feels to be on the other side of
the fence. Please start.

Harriet, we're not hearing you. Still
not hearing you.

Michelle, can you check on that,
please?

MS. BEHAR: Can you hear me now?

MS. ARSENAULT: We got you.

MR. ELA: We can hear you loud and
clear.

MS. BEHAR: Okay, great. My name is
Harriet Behar and I'm a certified organic farmer
calling you today from my solar earth-bermed
greenhouse. I'm also an organic inspector, an
educator, and an advocate. And the former chair
of the NOSB.

I welcome the new members. Your time on the Board is what you make of it. The organic community has many issues and your stakeholders depend on the citizen boards to bring forward their concerns and improve the implementation of the organic law in this very young program within the USDA.

I am impressed how many consumers write public comments telling the Board how important it is that this organic label maintains their trust and that there are no problematic ingredients, as well as inputs or practices, that harm the environment under that label.

I understand that this label is overseen by the USDA and it is difficult to write regulations that incorporate the intricacies inherent in a healthy ecosystem. However, I encourage you to consider the long-term consequences of each material and management practice that you will be voting upon.

A change to the voting procedure during the sunset of materials has made it much harder to remove a material once it is on the National
List. Putting something on the list as a short-term solution is no longer an option, since, once it is allowed in commerce, the NOP may decide to keep it there forever.

This is what has happened to sodium nitrate. So I'm joining the chorus there. The NOP has removed it from the review of the NOSB, so you will not even be considering it as a sunset material. But it has remained on the National List for over eight years, without that five-year review.

I hope that both the Crops and Materials Subcommittees will continue to bring up this allowance without sunset review, since it is illegal under the Organic Food Production Act and is a bad precedent for any materials that the NOSB, with strong stakeholder agreement, has removed, but the NOP then puts this in its own special category of forever on the National List.

Fenbendazole. I urge the Livestock Subcommittee to table this petition until there is a clearer set of rules for outside access for poultry. At this time there are very few operations that would have the right management
practices in place to rest pastures to prevent reinfection, and the use of this parasiticide will become routine. The fact that there is residue in the eggs is a rejection of the trust of those organic consumers I spoke of earlier.

Biodegradable mulch film. I urge you not to change the annotation until further research has been shown that this material does not cause any environmental damage from microplastics, larger plastics, or an imbalance in soil biology caused by its breakdown.

Whey protein concentrate, it needs to come off the list. We have plenty of sources for this product, so it needs to come off 606.

And I refer you to my written comments. And thank you for all your work.

MR. ELA: Perfect. I'm --

(Simultaneous speaking.)

MR. ELA: Yes. Emily has a question.

MS. BEHAR: Hi, Emily.

MS. OAKLEY: Hi. Thank you, Harriet.

(Audio interference.)

MS. ARSENAULT: So we're getting some feedback. Harriet, I think it's coming from you.
MR. ELA: Yeah, we're getting a lot of feedback. Harriet, do you have two microphones?

MS. BEHAR: How about that, is that better?

MR. ELA: Much.

MS. ARSENAL: Way better. Thank you.

MR. ELA: Yes.

MS. BEHAR: Okay.

MR. ELA: Okay. Emily has a question. Go ahead, Emily.

MS. OAKLEY: Okay. Well, this was actually a question directed to the program, regarding sodium nitrate, since this has definitely been raised multiple times this morning. So I was wondering for your comments on the issues that have been raised by commenters.

MR. ELA: We will see if we can get Jenny --

DR. TUCKER: Hi, sorry.

MR. ELA: Oh, there we go.

DR. TUCKER: Can you all hear me?
Sorry about that, it took me a little bit to find the mute button.

So, sodium nitrate is not currently on the regulatory agenda. We do periodically get public comments on it. This is an area where we did send a memo to certifiers about how they should consider the sodium nitrate listing. That memo is in the NOP Handbook, for anyone interested in that. We have not gotten feedback that implementation of that memo has been problematic. And we do check it during audits.

We will, of course, take this feedback back. And as we report key items from the meeting, this is clearly a topic of interest, so we will bring it back up to leadership. It is not, however, currently on the Board agenda -- on the NOP's regulatory agenda.

MS. OAKLEY: Steve, could I just do a quick follow-up question?

MR. ELA: Sure.

MS. OAKLEY: So, given the current confusion over it, we've had some indication that there might be producers who are using this material above 20 percent limit. Is the program
aware of that at all?

DR. TUCKER: We have not heard that that is happening, so that, if there is evidence of that, we would be interested in hearing about it.

MS. OAKLEY: Thank you.

MR. ELA: Dan, you had a question?

DR. SEITZ: Hi, Harriet, thank you so much for your comments. Now, I want to just ask you about fenbendazole used for poultry. And we've heard almost polar opposite views on that from some people saying it's absolutely necessary, protects the consumers. We haven't heard from poultry producers who feel they need that.

And what I'm wondering -- and you mentioned pastured space and so forth. I was wondering if you think that there are cultural methods that would obviate the need for allowing this substance. And how does the practices of poultry producers come into play in regards to fenbendazole?

MS. BEHAR: Thank you, Dan. Well, just as it would for mammalian livestock, it would be a rotation of pasture, where you are aware of
what the lifecycle is of the parasite and do not bring the birds back into that area until there are no more viable larvae or eggs for those birds to consume. And that's the way to break it.

But, at this point, we have many poultry operations that have limited or, you know, they just don't have very much outdoor access for their birds, and so they don't have a place to rotate them. And so, really, until we have a better -- similar to the organic livestock and poultry practices rule where we did have a recommendation for at least 50 percent vegetative area for the birds, that would mean a very significantly larger amount. Because, as you know, when birds, poultry are out on pasture they do scratch and denude the landscape.

So, making sure that it's at least 50 percent vegetative means that they would need a very large area. And there could be more of a rotated pasture. I have seen operations with maybe 3- to 5,000 birds where they do rotate pastures. And those operations would meet the rule.
But my concern is that there's a significant portion of the egg production under the organic label right now which do not have enough space. And so what we would be doing is encouraging crowded conditions, kind of poor outdoor assets for birds, by allowing the parasiticide. And that it would become a routine use.

And then, of course, the fact there is residue in the eggs means that there will be constant residue of this parasiticide in the eggs, which I believe the consumers would find abhorrent.

MR. ELA: Thank you, Harriet. We have a couple more questions, with an eye at the time here. Rick.

MR. GREENWOOD: Okay, can you hear me?

MR. ELA: We can.

MR. GREENWOOD: Okay. Harriet, first of all, I miss my pies. So, beyond that, just wanted to make a comment about the fenbendazole. And I made the same comment at one of the live meetings, I think about a year ago.

Fenbendazole may end up as a residue in eggs, but the issue is it's destroyed at 179
degrees centigrade, which is average cooking temperature. So, I don't think the residue issue, since eggs are eaten cooked -- or they should be because of salmonella and other issues -- I don't think that's a particularly important issue. And I think that's part of the reason FDA has said that it's insignificant. But I just wanted to make that point again, because we're talking about a residue that doesn't really exist when the item is consumed.

MS. BEHAR: Well, yesterday we also did have someone talk about that some of those culled birds might end up at slaughter also, so that should be considered, as well.

MR. GREENWOOD: Yeah, but, again, if they end up at slaughter they're still going to get cooked. So I don't think people eat chicken tartar -- or they shouldn't, because it's pretty dangerous. Just wanted to reiterate that point.

MR. ELA: Yes. Okay, Wood, do you have a question?

MR. TURNER: I just have a quick comment. And I just wanted to acknowledge Harriet's service, and I'm sorry we're passing in
the night and she's leaving as I'm coming in and I'm sorry we won't have a chance to work together.

But I also want to just flag the value of comments like hers in helping make sure that incoming Board members, and the Board as a whole, really understand historical procedural changes that might affect our work on the Board. It's really important to have that perspective. And I just want to acknowledge that. It's very helpful for me to hear comments she offered.

MS. ARSENAULT: Hey, Wood, this is Michelle. You're fading in and out and somebody just muted you. I am trying to unmute you now.

MR. TURNER: Can you hear me now?

MS. ARSENAULT: Got you.

MR. TURNER: So you didn't hear anything I said?

MR. ELA: We did, yeah. You were in and out, but we could hear you.

MR. TURNER: Okay. Thanks.

MR. ELA: Thank you. And, Dave, one last quick comment.

MR. MORTENSEN: Yeah, I just wanted thank Harriet for reminding us that we're talking
about approving a synthetic pesticide, in fenbendazole. And the idea that we would allow residues of a synthetic pesticide in an organically certified egg that we can mitigate by cooking the egg to a certain temperature is really disturbing and worrying to me.

But, thank you, Harriet, for reminding us of what we're really talking about where a cultural method could help address this problem from a systems point of view. Thanks.

MS. BEHAR: You're welcome. And thank you all for your work.

MR. ELA: Thank you very much, Harriet. We miss you. We've got five Board members that are looking this year of what it looks like on the other side, so --

(Laughter.)

MR. ELA: Okay. We've got one more speaker and we're not sure they are on. Vamshi Chintha, are you out there?

Then we're going to take a quick break and then come back to Patrick Kerrigan, Jorge Gomez, and Emily Musgrave.

So, Michelle, did you find Vamshi?
MS. ARSENAULT: We haven't yet, by name or phone number. Vamshi, are you on the line with us?

MR. ELA: All right. Well, let's take a ten-minute break. It's 11:30 -- we'll, depending on your time zone, it's 37 minutes after the hour, so let's come back at 45. I know it doesn't quite add up to ten minutes, but a quarter 'til. So we'll see everybody back in about eight minutes. Thank you very much.

(Whereupon, the above-entitled matter went off the record at 1:37 p.m. and resumed at 1:46 p.m.)

MR. ELA: All right, everybody, we will come back from our break and get started again. I neglected earlier, Scott Rice and Rick Greenwood did join us soon after we got started. So just for the record to know they were on. I think you could tell by some of the questions that they were obviously here.

But we would like to start now with Patrick Kerrigan. And then we will move on to Jorge Gomez and then Emily Musgrave.

Patrick, please start. And please
state your name and affiliation.

MR. KERRIGAN: Hello, everyone, I am Patrick Kerrigan with the Organic Consumers Association. I'd like to preface my comments in replying to the issue Harriet just raised: would organic consumers find it abhorrent that a synthetic pesticide be included in their eggs?

Yes, I think they must definitely would. This would only further undermine organic consumers' confidence in the organic seal. Especially the confidence in the integrity of organic eggs, which has already been significantly undermined. And I think this would also be a issue that would be receiving widespread media attention and just give organic another black eye.

That being said, dear organic stakeholders, we are in the midst of an enormous global challenge in navigating our coronavirus crisis, including increasing instability and vulnerability of our industry food system. And we are also presented with an enormous opportunity to transition organic and regenerative production practices and in implementing organic farming's soil-health-building best practices to best
address our other global crisis, the climate crisis.

Indeed, we are well underway in building ecologically-based food systems that not only improve soil health but also encompasses fairness for workers and humane treatment of animals. But we need to rapidly pick up the pace.

We have great models in place, include Mad Agriculture's Perennial Fund, an innovative organic transition loan program, and Pennsylvania's exemplary organic transition program in their state farm bill.

But along with bringing new farmers and ranches into organic production, it's essential that we keep organic producers, current organic producers, on the land and organic companies and business throughout the coronavirus crisis.

NOSB members, please do all you can to urge Secretary Sonny Perdue and the USDA leadership to protect our organic farm workers, farmers, businesses, certifiers, inspectors, and consumers. The $9.5 billion CARES Act allocates funds to prepare for and respond to coronavirus by providing support for agricultural producers
impacted by the coronavirus, including producers of specialty crops; producers that supply local food systems, including farmer's markets, restaurants, and schools; and livestock producers.

The needs of organic producers must be lobbied for with a unified voice. The USDA can best support organic farmers and ranches as proposed by Beyond Pesticides, which include providing direct payments to farmers, including organic farmers, to keep them solvent through this critical production season in the face of disrupted marketing channels; providing financial systems for farms; setting up virtual platforms to facilitate the sale of their products, as well as on-farm stands, curbside pickups, and other direct-to-consumer, safe distribution channels.

Demand for organic food has never been higher. Farmer's markets, farm stands, CSAs, and other local marketing venues need to be classified as essential operations by the Department of Homeland Security, which the USDA should be lobbying for. It's also essential to support organic certifiers as they transition to online operations.
Organic dairy farmers were already in crisis --

MR. ELA: Patrick?

MR. KERRIGAN: Yes?

MR. ELA: Your time is up.

MR. KERRIGAN: Three minutes goes so quickly.

(Laughter.)

MR. ELA: Yes, it does.

MR. KERRIGAN: Thank you all for your service.

MR. ELA: Are there questions for Patrick?

Thank you very much, Patrick, I don't see any questions, but we do appreciate your comments.

MR. KERRIGAN: Thank you.

MR. ELA: We're going to move on to Jorge Gomez, then Emily Musgrave, and then Brian Baker.

And I will ask the Board, one thing is, when you address the speakers, if you would ask questions. We do have time later in the public meeting next week for Board deliberations and
comments. So if you must make a comment, go ahead, but especially let's try and direct our comments at least to a question for the speaker.

So, Jorge, please state your name and affiliation.

MS. ARSENAULT: Steve, we're not finding Jorge in the participant list by name or phone number.

MR. ELA: Okay. Jorge, if you're out there let Michelle know and we will circle back to you.

Next up is Emily Musgrave, then Brian Baker, and then Jane Kircher.

Emily, please state your name and affiliation and start.

MS. MUSGRAVE: Can you all hear me?

MR. ELA: We can. Go ahead.

MS. MUSGRAVE: Good morning. My name is Emily Musgrave. I am 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 NOSB.

I would also like to thank both the NOSB
and the NOP for their willingness and flexibility to hold a virtual meeting. I know this has not been an easy feat and I echo other public commenters' sentiment on this and appreciate your effort.

My comments focus on biodegradable bio-based mulch and the continued allowance of insecticidal soaps, aquatic plant extracts, and lignin sulfonate.

I'll begin with the topic of biodegradable bio-based mulch, or BBM. I'd like to echo one of the comments we heard on Tuesday from an organic grower in Vermont. He was spot-on when he said that the growing use of plastics in the agricultural sector is alarming, and organic growers are not exempt from this.

Plastic usage has become an integral part of organic farming from the field level all the way through to the plastic clamshells that consumers buy. Both growers and consumers are acutely aware, more than ever, of our plastic footprint in agricultural and want change.

Many Driscoll's organic growers have expressed a desire to use BBM as part of their
toolbox while at the same time cutting down on the immense amount of plastic waste. Driscoll's urges the NOSB to rewrite the language in the 2015 policy memo on BBM that includes requirements manufacturing companies can meet. There were good ideas from public commenters on how the Board could do this. It is clear organic growers want to reduce their dependence on plastic, and BBM is one avenue to do that.

For the crops subcommittee, Driscoll's supports the continued listing of insecticidal soaps for use in organic production on the National List. Driscoll's supports the continued listing of aquatic plant extracts for use in organic production, as they are widely used in the industry and are a necessary tool for organic growers. Driscoll's growers use aquatic plant extracts as foliar fertilizers to improve plant and soil health. The most common plant extracts used by our growers are seaweed and kelp.

Driscoll's supports the continued listing of lignin sulfonate for use in organic production as a plant or soil amendment, as well as a chelating agent and dust suppressant.
I thank the National Organic Standards Board for your service and for consideration of my comments.

MR. ELA: Thank you very much, Emily. Are there questions for Emily from the Board? Asa has a question. Go ahead, Asa.

MR. BRADMAN: I am just curious. Driscoll's, of course, produces a lot of strawberries, and, as you know, there is literally acres and acres of plastic used in strawberry production, in conventional and organic, including Driscoll growers and other progressive organic farmers.

Is there -- would the bio-based film replace that use? And I just kind of want to get a sense of what -- to what extent would that be adopted, or what would your expectation be in terms of the plastic culture now that's used to grow strawberries, both in the organic and conventional sectors.

MS. MUSGRAVE: That's a good question. Thank you, Asa. So, I know that a lot of our organic growers have really stressed that they want the use of biodegradable plastic mulch, and they
stress that if there is one that is certified and that works they would really like to use it.

And, on that note, you know, we also have conventional growers. And there is also -- many of our conventional growers adopt organic practices, which is great to see. And so even some of the conventional growers have also said that they would be willing to use, and want to use, biodegradable plastic mulch.

So I think if it works, and if it's certified, there's definitely a desire for our growers to move away from traditional plastic mulch.

MR. BRADMAN: Thank you.

MS. MUSGRAVE: You're welcome.

MR. ELA: Are there other questions from the Board?

I have one question myself, Emily. So, on that same note, do you have any concerns with the biodegradable plastic mulch, that it won't fully biodegrade or that we would have some plastic particles left over in the soil, maybe that we can't physically see, but that would contribute to the microplastic issue?
MS. MUSGRAVE: Yeah, that's a good question, Steve. I mean, there is that concern, and I do see that concern. And Harriet also brought that up in her comment. And I think it is, you know, something to think about.

However, I see that the plastic waste from traditional plastic mulch, we talked to 50 recyclers all over the U.S. and none of them would take this plastic. I mean, so you think of all the strawberry growers, and even raspberry, blackberry, just all your organic growers that are using traditional plastic mulch, that is simply going to waste, to the landfill.

I think -- although what you are mentioning is definitely a concern, but I think that something needs to be done, though, in the meantime, just simply because of how much plastic is going to waste. So it is a concern and I think the Board should continue looking at it. But I think that we need to do something. And growers and consumers want us taking this step to reduce plastic.

MR. ELA: Thank you. And I have a follow-up question. Emily, we'll get right to
Given that we are -- the Board is a little uncertain that this biodegradable plastic mulch would break down in all environments. What would you say that if we required -- and I'm just brainstorming here -- if we required it to be removed but then composed it in a commercial composting facility?

MS. MUSGRAVE: Oh, I think that would be a good alternative, one way to do it.

There's also -- I think it was maybe Lynn Coody who recommended yesterday, or Tuesday in the public comments, about the possibility of certifiers, you know, reviewing the ingredients in some of those biodegradables and some of the BBMs.

So I think there is different avenues to make it work, it's just really unfortunate now that, because of the current language, manufacturers can't meet the standards and growers, you know, can't use something that's written in the standards. But that's a good -- I think that would be viable, what you've mentioned.

MR. ELA: Emily, you had a question.
MS. OAKLEY: Just a quick one in terms of climates where these might not break down. Particularly hot, dry climates. Is that an environment where you see many of your growers might be using this material?

MS. MUSGRAVE: Yeah, that is, would be a concern. That's a good point, Emily, in the hot, dry climates. I mean, we don't typically grow -- well, there are some berries that we do grow in hot, hot, dry climates. So, I mean, that would be something that I think we would need to look into.

I think there's still quite a bit more research that needs to be done on this, like your point. But I also think that we really need to move it forward so that growers can start using biodegradable bio-based mulch. So, it's a good question and something that we should look into.

MR. ELA: Thank you very much, Emily. I don't see any other questions. We appreciate your comments.

MS. MUSGRAVE: Thank you.

MR. ELA: Next we're going to move on to Brian Baker, and then Jane Kircher, and then
Dennis Dean.

Brian, please go ahead.

MR. BAKER: Hello, can you hear me?

MR. ELA: We can.


NOP staff, NOSB members, new members, Mr. Chair, thank you for the opportunity to provide public comment to the National Organic Standards Board.

IFOAM North America is the self-organized regional body of IFOAM Organics International in the U.S., Canada, and the English-speaking Caribbean. Our members include organic farmers organizations, organic food-related businesses and trade associations, consumer groups, non-governmental organizations. IFOAM represents the global organic movement in over 120 countries.

IFOAM North America wants to speak to grower group policy, emergency remote inspections, and integrity in the food chain.

IFOAM has a longstanding interest in building a global organic guarantee system that protects integrity for everyone. We also want all farmers who meet the requirements worldwide to have
access to organic markets regardless of scale or location.

In principle, organic agriculture should contribute to food sovereignty and a reduction of poverty. Grower groups are collections of small scale producers whose farms are similar and all their products are marketed through a common certified organic entity. These are often farmers cooperatives or handlers that work closely with small growers.

The NOSB made recommendations about grower group certification in 2002 and 2008. In 2011 the NOP said it would draft guidance and request public comment before publishing vital guidance and possible regulatory change.

The draft guidance has not been published, and there has been no opportunity to public comment. IFOAM understands that the European Union is revising its regulations regarding certification and market access to grower groups.

We ask that the USDA and EU Commission as gatekeepers of the two largest organic markets worldwide to harmonize the requirements and not
create any unfair technical barriers to trade or entry for organic small holders who care for the land in the world's poorest regions.

We request the NOSB to reaffirm its previous recommendations and the NOP to move forward with draft guidance for public comment.

The COVID-19 health emergency has postponed organic inspections worldwide. We asked the NOSB and NOP to work with the International Organic Inspectors Association and Accredited Certifiers Association to find innovative ways to verify compliance without compromising integrity.

Tools developed for organic emergency remote inspections can potentially improve the certification process worldwide. Certification and inspection should be risk-based and focus on where the opportunities and motivates for fraudulent activity are the greatest. Inspection and certification requirements need to be adapted to local and regional conditions.

Requirements shouldn't discriminate against producers based on size, but risk-based approaches in the control system may want to
consider scale as a risk factor. Exclusion of non-certified brokers and other handlers from certification has been a source of fraud. We support international cooperation to provide oversight of such operations. Consider us a resource. We wish you a successful meeting and I welcome your questions.

MR. ELA: Thank you, Brian. Are there questions from the Board? Sue has a question. Go ahead, Sue.

MS. BAIRD: Hi, Brian.

MR. BAKER: Hi, Sue.

MS. BAIRD: It's good to hear from you. I got a question, and it's just been running through my mind because if -- and it's back to the fenbendazole issue.

MR. BAKER: Okay.

MS. BAIRD: And I know you had nothing to say with that, but since you were --

MR. BAKER: No, no --

MS. BAIRD: It was only forever.

MR. BAKER: And I can't really speak with my IFOAM North America hat on --

MS. BAIRD: No.
MR. BAKER: -- so I have to take that hat off, if I could.

MS. BAIRD: Take it off and think about ex-OMRI a long time --

MR. BUIE: Yes, okay.

MS. BAIRD: Yes. The rule says that we have to prevent contamination with the organic product.

MR. BAKER: Right.

MS. BAIRD: Right? Okay, so we're feeding a fenbendazole to the chicken --

MR. BAKER: Right.

MS. BAIRD: -- but that's not our final product. The final product is the egg or perhaps the slaughtered chicken. And we cook that chicken, and that is the product we eat.

Are we then preventing contamination to that final product if it disintegrates? Is it like a processing aid?

MR. BAKER: Well a couple of things. One is that looking at the petition, I also need to take off my other mask which is my armory role.

MS. BAIRD: Right.

MR. BAKER: I was the principle
investigator on that technical review --

MS. BAIRD: Okay, great.

MR. BAKER: -- so it's going to be an interesting situation here because I don't know if you had a chance to read the technical review yet.

MS. BAIRD: No. Has there been one, are you talking about the old one for the mammals or the --

MR. BAKER: No, the forthcoming one on the petition --

MS. BAIRD: No.

MR. BAKER: -- for use in laying hens.

MS. BAIRD: Oh no, I have not seen it. So it's great that we're hearing from you.

MR. BAKER: Okay. Well, thank you.

MR. ELA: And, Brian, make it through the CliffsNotes on this please.

MR. BAKER: Oh, okay. No, I can speak for hours on this. Yes, briefly, I thought that the petition was for eggs and not meat birds.

MS. BAIRD: It was.

MR. BAKER: Yes, for laying hens. So you're looking at different temperatures at which
eggs are prepared than what's baked in an oven or fried. That's one thing to bear in mind.

The other is that it's only been a few years where fenbendazole has been labeled for use in poultry. It's been labeled for use in ruminants for years, for decades, but prior to, I believe it was 2017 or 2018, any use of fenbendazole was off label, and there was a zero tolerance for it.

So FARAD recommended a 17 day extended withdrawal instead of a zero withdrawal, which is why it was granted with the new label. Does that answer your question?

MS. BAIRD: You cut out, I didn't hear that last sentence which I guess was the most critical.

MR. BAKER: Oh, okay. Yes, well FARAD, the Food Animal Residue Database that's run by different land grant veterinary schools recommended a 17-day withdrawal for layers treated with fenbendazole to meet a zero residue --

MS. BAIRD: Okay.

MR. BAKER: -- zero tolerance standard. When it was off label use.

MS. BAIRD: Okay. Well that
definitely answers the question then. Thank you.

MR. BAKER: Okay. Welcome.

MR. ELA: Any other questions? Thank you very much, Brian, we appreciate it. And we will look forward to reading that technical report that's still working its way through the system, but will soon be to the Subcommittee.

Next up we have Jane Kircher, then Dennis Dean, Ki Song Lee. And just after that Kate Mendenhall and Jennie Landry. We may have a couple of speakers that aren't on the call, so Kate and Jennie please be ready if we jump forward to you.

So Jane, please state --

MS. ARSENAULT: Hey, Steve?

MR. ELA: -- your name and affiliation and continue.

MS. ARSENAULT: Steve, I'm sorry, it seems like you may not have the most updated version of the schedule, and I apologize for that. I will make sure that you have it. But Jane is not on this schedule. I believe she cancelled.

MR. ELA: Ah.

MS. ARSENAULT: So Dennis Dean is next and then Ki Song Lee. And neither one of those
folks we can find in the participant list at the moment.

Dennis, if you are out there please let me know. We're not seeing his name or number. Nor are we seeing Ki Song Lee on the participant list.

MR. ELA: All right. Thank you. Dennis or Ki Song, are you out there? If you are, please let Michelle know.

And Michelle, yes, I printed this off from your list last night so I think there may have been a few updates that I didn't get put in this morning, so that's my bad.

MS. ARSENAULT: I'll make sure that you get the updated one. So Kate Mendenhall is next on my list.

MR. ELA: Yes, same for me. So Kate Mendenhall, then Jennie Landry and then George Seaver.

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, I am the director of the Organic Farmers Association and --
MS. ARSENAULT: Kate, I'm sorry. This is Michelle at NOP. Could I ask you to speak up a little bit? I'm having a hard time hearing you.

MS. MENDENHALL: Yes. Can you hear me now?

MS. ARSENAULT: Ah, better. Thank you.

MS. MENDENHALL: Okay. I'll start again.

MS. ARSENAULT: Okay.

MS. MENDENHALL: Thank you, members of the NOSB, for the opportunity to speak before you today. My name is Kate Mendenhall, I am 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 determine our policies.

Each year U.S. certified organic farmers are invited to participate in our grassroots policy process and identify their top policy priorities. Organic farmers have stated
that their top five policy priorities for 2020 are, number one, NOP enforcement to ensure organic integrity, number two, organic import fraud, number three, to prohibit hydroponics in organic production, number four, climate change, and number five, organic dairy standards and enforcement.

For the past three years organic integrity has been at the top of the list. Organic farmers built and established the organic label, and now they rely on the national organic program and the NOSB to preserve and enforce it.

Without strong regulations and standards enforced equitably across size, region and commodity, the organic label will wither. Prohibiting hydroponics has returned to third place on the OFA priority list for the second year in a row. Farmers nation-wide are committed to healthy soil and the crucial role that it plays in a healthy organic, agroecosystem.

And even conventional farmers and politicians are beginning to advocate for its important role in mitigating climate change. For organic to underplay the importance of organic soil
now would be misguided.

Since the NOP declared just a few years ago that hydroponics is allowed, we have seen a burst of hydroponic operations and enforcement issues that highlight real problems and concerns on this issue.

We cannot have a production system out of compliance with a definition of organic. We cannot have certifiers creating their own standards to regulate this booming sector. And we cannot undercut a label that farmers have built over the past 40 years.

With the 50th Anniversary of Earth Day celebrated yesterday, we should focus on making sure that certified organic, the gold production standard, is upholding its values, not undercutting them when Mother Earth needs us most.

The NOSB needs to revisit this issue.

Organic Farmers Association supports the NOSB process and agrees with the crop subcommittee's assessment in support for paper pots as an allowable synthetic and defined planting aid.

One lesson that is clear from COVID-19
is that we need more small to mid-size organic farmers throughout our communities able to meet our local food needs. Paper pots help small organic farmers and are similar to already approved inputs.

While organic farmers associations does not have a position on biodegradable mulch, I will comment that this policy issue was proposed in our grassroots process, yet it did not receive any farmer support to bring it forward.

With domestic and import fraud still gaining headline space nationwide, a lack of guidance from NOP on three year transition equity across growing practices, hydroponic production operating on a per certifier basis and undermining the very definition of organic, biodegradable mulch seems like a low priority topic for precious NOP volunteer time. Let’s get busy on the issues that are crucial for the organic community, not special interests.

I appreciate all of your dedication to working for the full organic community, for hearing public comment today, and for the farmers especially who have had to find others to cover
their farm work so that they can fully participate in this process over the two weeks of meetings.

Thank you.

MR. ELA: Thank you very much, Kate. Are there questions for Kate?

I'm not seeing any. Thank you very much, Kate, we appreciate your comments.

MS. MENDENHALL: Thank you for the opportunity.

MR. ELA: We're going to move on to Jennie Landry, George Seaver and then Dave Chapman. Jennie, please state your name and affiliation and continue.

MS. LANDRY: Thank you. My name is Jennie Landry. I represent DSM Nutritional Products, who manufacturers Omega-3 EPA and DHA based products from refined fish oil.

DSM strives to support a renewable and sustainable environment, and we welcome the opportunity to provide comments to the NOSB for official annotation change to address environmental concerns.

DSM would suggest source from fishing industry byproduct only and certified as
sustainable by a third-party certifier to be added to the existing annotation as an additional measure to ensure that fish oil is compatible with organic practices.

With this suggestion, it's important to allow flexibility in the use of third-party certifiers. There are several reputable organizations globally that safeguard vulnerable fish species and ensure that sustainable practices are in place for both the fishery and fish oil manufacturers.

We recommend third-party sustainability certification because it has a potential to directly impact and improve the sustainable sourcing of fish oil for human consumption. It is also clear and enforceable and is not overly burdensome because many fish oil manufacturers already have certifications in place.

DSM does have reservations with part of NOSB's proposed annotation that relies on classifications from both the NOAA and FAO. First of all, they actually do nothing to mitigate or control the overexploitation of fish when applied
to fish oil for human consumption since fish oil is only a byproduct of fish caught for other purposes.

Fish oil for human consumption will not drive or influence the outcome of NOAA or FAO classifications, which will remain unchanged with or without fish oil in the organic market. Therefore the requirements are irrelevant when applied to fish oil in organic products.

Aside from that, using both NOAA and FAO classifications could cause confusion, are potentially unfair, are unreliable, cause additional complexity and are difficult to enforce. The confusion and unfair playing field lies with using two independent organizations with potentially different expectations and standards of assessment.

DSM found one example of conflicting classifications for the same fish species in the same fishing area. And there could be others. The different organizations update their data and report at different frequencies. According to the proposed annotation, DSM would have to rely completely on FAO classifications that according
to the most recent report in 2011 are already almost 10 years old.

In addition to this requirement, it would introduce additional ramifications to the sourcing and supply management of fish oil globally. This is already quite complex. These additional measures could offset the benefits of supplying the U.S. organic market and therefore potentially reducing fish oil availability.

I'd like to thank the NOSB for your time and opportunity to provide comments in this webinar.

MR. ELA: Thank you very much. Are there questions from the Board? I am not seeing any questions, so thank you very much for your comments. We do appreciate it.

MS. LANDRY: Thank you.

MR. ELA: We are going to move on to George Seaver and Dave Chapman, and then Pam Krone. George, please go ahead.

MR. SEAVER: Hi. This is George Seaver. Can you hear me?

MR. ELA: Yes, we can. Please continue.
MR. SEAVER: Okay. I wanted to talk about rockweed harvesting on the coast of Maine. I'm Vice President of Ocean Organics Corporation. I've been making rockweed based fertilizers and biostimulants now for 42 years.

The slide on the screen provides a link to a short four minute video. I believe, yes, the link is there, that shows the harvesting, processing, and some of the uses of seaweed.

I support the re-listing of aquatic plant extracts for organic farmers for three reasons. One, the sustainable harvest of this resource is licensed and managed by the State Government.

Two, the resulting extracts are essential to organic farmers as a fertility tool. Three, the quantity used per acre is minuscule in comparison to almost all other organic farming inputs. It's a very small amount.

I previously provided documentation about the State of Maine's oversight on harvest in the written submissions earlier. To establish some perspective, the coast of Maine covers about 3,000 miles when you include all the islands and
coves. Only a fraction of that coastline offers practical places for commercial harvest of rockweed.

However, around 2004, following decades of commercial harvesting, the claim that rockweed harvesting was damaging the coastal ecosystem was asserted. Although that claim continues to be made over 15 years later, there are no, there are still no studies or supporting evidence of any such damage. There is no reason to think that the ecosystem will be impacted as we continue to responsibly harvest seaweed.

The total harvest is calculated to be about 2 percent of the standing biomass on the coast of Maine. And in contrast to the message often presented, the total harvest from Maine waters has grown quite slowly over the past 40 years.

Rockweed harvest data has been required by the Department of Marine Resources only since 2008. And in these last 12 years the average increase per year is about 13 percent. So it's just modest growth.

Considering all the serious threats to the coastal ecosystem, it is clear that rockweed
harvesting at current or projected levels is not one of them. Perhaps more importantly, as long as the Department of Marine Resources remains empowered to monitor and manage the future harvesting of rockweed, we can and should continue to allow rockweed to be harvested for use in organic food production without any additional requirements.

Regarding the questions you asked, yes, aquatic plant extracts should be re-listed. Are plant extracts needed in organic production? Yes. And natural seaweed meals are not a substitute for extracts. The extracts provide a unique mode of action. I welcome any questions.

MR. ELA: Thank you very much, George. Are there questions from the Board? I am not seeing any questions. So thank you very much for your comments, George. And we're going to move on.

MR. SEAVER: I encourage you to look at the video.

MR. ELA: Good.

MR. SEAVER: Thank you.

MR. ELA: Yes. Thank you. And thank
you for that link. We will move on to Dave Chapman, and Pam Krone, and then Anne Ross. Dave, please take the floor. Dave, we're not hearing you.

MR. CHAPMAN: Yes. Can you hear me now?

MR. ELA: Now we can. Please go ahead.

MR. CHAPMAN: Okay, good. Thank you.

So I'm Dave Chapman, owner of Long Wind Farm in Vermont. And we grow delicious organic greenhouse tomatoes in fertile soil.

I am also Director of the Real Organic Project. I'm speaking today to introduce some of the newer members to the challenges that we all face as an organic community.

Most of us speak glowingly about the importance of healthy soil and its critical role in human nutrition, and in reversing climate change. These are easy words to say.

But the reality of the National Organic Program is that it's going further and further from these words, certifying hydroponic and CAFOs, and allowing annual spraying of hydro greenhouses with prohibited pesticides.

This is not because of the personal
beliefs of the Deputy Administrator. It's because of the institutional realities of the USDA. Government is paid for by taxpayer dollars, but it's steered by corporate lobbyists. As a result, the NOP has failed to enact a single NOSB recommendation in 10 years.

You are certainly not a group of radicals, and yet your decisions have been too radical for the USDA. Undersecretary Ibach's publicly stated solution is to pick different members for the NOSB who will be more agreeable with the USDA's perspective. And if they have chosen any of you with that in mind, I hope that you will disappoint them.

At the moment there are three lawsuits against the USDA concerning issues of organic integrity. These lawsuits are focused on two major issues of animal welfare, and certification of hydroponics.

The lawsuits are trying to force the adoption of two recommendations of the NOSB that have been passed. Moderate though they are, if enforced they would lead to the decertification of three quarters of the organic eggs in America,
according to former NOP Director Miles McEvoy.

They would lead to the decertification of $1 billion of hydroponic produce, according to the Coalition for Sustainable Organics. And that is why they're not being acted on.

The impact of these outcomes makes it likely that these powerful corporations will simply have the law changed if they lose the lawsuits. They can do that, and have already done so in the past with the Harvey lawsuit.

As a community we are faced with a dilemma. If we accept that organic doesn't really stand for healthy soil, we participate in its destruction. If we insist that organic must be based on healthy soil, we are often accused of attacking organic. We can't claim that organic is an alternative to CAFOs and simultaneously permit CAFOs to be certified.

We can't claim that organic is based on healthy soil and simultaneously permit hydros to be certified. If we do this we allow organic to become a nice brand in the marketplace that actually means very little. The organic label will die a sad death in that mushy indifference.
And I am done. Thank you. Two seconds to spare.

MR. ELA: I was going to say, very well timed, Dave. Are there questions for Dave? Dan has a question. Go ahead, Dan. Dan, you have a question? Go ahead.

DR. SEITZ: Sorry. I was on mute. Dave, thank you very much for your remarks. An earlier person said that, who is involved with container production, said that if we were to remove the organic certification for container production, that people involved with that industry would be at an unfair advantage, vis-a-vis conventional hydroponic and organic production companies.

And I'm wondering if you could talk a little bit about the competitive disadvantage, if there is one, with soil based farmers in regard to hydro -- organically certified hydroponic and container production facilities.

MR. CHAPMAN: Sure, Dan. Were they suggesting that, were the people, the hydroponic producers who are being certified to drop their certification, and they would have unfair competition with the conventional hydroponic
producers?

DR. SEITZ: Yes. That was the -- at least that was my understanding of the essence of their comments. So I'm just --

MR. CHAPMAN: Yes, yes.

DR. SEITZ: -- curious about your read on --

MR. CHAPMAN: Sure. Well --

DR. SEITZ: -- competitive disadvantage.

MR. CHAPMAN: You know, you have to bear in mind that the major hydroponic organic producers are also major conventional hydroponic producers. So I don't think they'd be at an unfair disadvantage competing with themselves. You know, it's really all one and the same industry. It's just a matter of pretty much what they're putting in the nutrient tank.

In terms of soil producers trying to compete with the hydroponic producers, without a doubt hydroponic production is cheaper. It costs less to produce food hydroponically. And that's why they can afford to charge less for it.

So if that is the only metric by which
we decide whether or not it should be certified, by allowing hydroponic of course we are essentially mandating it. That will become, and has become the norm for tomatoes, blueberries. And it will soon become the norm for peppers, and lettuce, and things like that.

I don't think that it's possible to compete unless there's a distinction made in the marketplace between the different production systems.

MR. ELA: Another question from Sue. And, Sue, make it fairly quick.

MS. BAIRD: Yes. Hi, Dave.

MR. CHAPMAN: Hi, Sue.

MS. BAIRD: Rotation is a major part of the organic standard. And I'm not sure how we rotate hydroponically. People are focused on soil. And I see soil not so much as rotation in biodiversity.

MR. CHAPMAN: That is true in most of the world. They require some kind of rotation in Europe, in the EU. England does not. A few countries handle it differently. England allows no rotation of greenhouse crops. Holland and
Germany do require it, but it's a very narrow rotation. Typically they might rotate tomatoes with peppers.

MS. BAIRD: But we're talking about the NOP. And I appreciate all the international. But we're talking about the NOP requirement, which definitely --

MR. CHAPMAN: Yes.

MS. BAIRD: -- says it needs to be rotated.

MR. CHAPMAN: Yes. And --

MS. BAIRD: And --

MR. CHAPMAN: What are you asking me?

MS. BAIRD: -- can't maintain biodiversity. I'm just wondering if you feel like hydroponics or container growing would meet those standards for crop rotation and maintaining biodiversity?

MR. CHAPMAN: Well I would say that they inherently have less biodiversity. A pot of coco coir is, you know, dramatically -- got dramatically less biodiversity within it than a similar volume of fertile soil. That is why in my greenhouse I actually don't have to rotate.
And I can still grow --

MS. BAIRD: No, no.

MR. CHAPMAN: -- healthy crops.

MS. BAIRD: You do have to rotate. The rule says you have to rotate. I know that you don't.

MR. CHAPMAN: I understand, Sue.

MS. BAIRD: But you do have to.

MR. CHAPMAN: Yes. And I don't --

MR. ELA: I'm going to --

MR. CHAPMAN: Yes.

MR. ELA: I'm going to jump in. I think we have one more question, and then we'll need to move on. So Nate, go ahead. And let's make it quick.

MR. POWELL-PALM: Yes. Sorry. Thanks for your comments, Dave. I was just wondering if you had a position on moving forward with the hydroponic discussion with labeling?

And if they were allowed to keep the certification and use the seal, what do you feel about labeling hydroponics with a distinction between soil grown and hydroponically grown produce in the marketplace?
MR. CHAPMAN: Yes, Nate. I think that would be better than what we have now. I personally can't support it, because I can't support calling it organic. But I do think it would better than what we have now.

My dream would be that the hydroponic producers would create their own label, a bioponic label. And create a process verified program to certify it. I'm sure that they could find good market response for saying they used only organic inputs.

And in fact, they would have very little competition for years to come, because they pretty much wiped it out. So I think that would -- that would be my idealist solution, if the NOP chose to create an organic hydroponic label. I think it would be better than what we have now.

MR. POWELL-PALM: Thank you.

MR. CHAPMAN: Yes.

MR. ELA: Great. Thank you very much, Dave. Sorry to have to cut things off, but we do need to move on.

MR. CHAPMAN: All right.

MR. ELA: We appreciate --
MR. CHAPMAN: Thank you.

MR. ELA: -- your comments.

MR. CHAPMAN: Thank you.

MR. ELA: Yes. Take care. Next up we have Pam Krone, and then Anne Ross, and then Annie Kusterman. Pam, please go ahead. Pam, we're not hearing you. We've got your slides, but not your voice.

MS. KRONE: Hello.

MS. ARSENAULT: Hi, Pam. We can hear.

MR. ELA: There we are.

MS. KRONE: Okay. Okay. So --

MR. ELA: Go ahead, Pam.

MS. KRONE: Thank you. Thanks for this opportunity to present our interests and concerns. I work for the California Marine Sanctuary Foundation under contract to the Monterey Bay National Marine Sanctuary.

And I'm Ag Water Quality Coordinator. My main concern is trying to find ways to have agriculture help ocean health, and preserve the ecosystems of the ocean. Next slide.

So I don't think the news -- I don't think this is new news. Plastic is a big problem
for ocean health. But I think what is interesting and disturbing is that not only is plastic, microplastic, and plastic found in these big ocean gyres in the middle of the ocean, but it's also found right in Monterey Bay, right in the sanctuary.

And this is some work done by the Monterey Bay, by the research foundation that's part of the -- part of Monterey Bay here on microplastic at different depths in the ocean.

And microplastic is found throughout the ocean, throughout the water column, not just floating on the surface. And it's found in abundance at all levels.

And not only that, but the microplastic isn't just within the food web, starting from the very base with pelagic crabs and zooplankton, and working its way up the chain through the larger fishes and other ocean creatures. Next slide.

So ocean plastic is a big problem. And it's being added to the ocean at about eight metric tons of plastic a year. It's found in all kinds of species. Almost every species that has been tested has evidence that plastic is within it. Next slide.
I worked with a group of students at California State University in Monterey Bay to sample water in agriculturally dominated watersheds. We sampled water in seven creeks, and found that the density of plastic, micro plastic particles in the agricultural creeks was about equal to the plastic particles found in Monterey Bay. So indeed, agriculture is contributing to that plastic. Next slide please.

We also did bank surveys, and found that by far the most prevalent type of plastic was PE plastic mulch, composing more than 75 percent of the agricultural plastic found on stream banks. Next slide.

This is just an example of our findings. Next slide. This plastic can't be recycled. We had a recycling facility that found it wasn't economically feasible. Next slide.

Therefore, the only current way to get rid of plastic mulch is at the waste facility. And it's just filling up with mountains of plastic. Furthermore, about 10 percent gets left in the field, and doesn't even make it to the waste facility. Next slide.
And biodegradable plastic mulch we believe could be a sustainable alternative. It has the same benefits. Its cost, although initially it's higher, is the same or lower when you take into account labor and disposal. Next slide.

MR. ELA: And I'm going to have to jump in, Pam. I think your time is up. So --

MS. KRONE: And so that's the end of my presentation, other than ask you to please seriously consider some program for adopting current biodynamic plastics that are available, and making the standards progressively better through time.

MR. ELA: And we do have a couple of questions for you. So Asa, please go ahead.

MR. BRADMAN: Thank you for your comments. I'm interested in your findings partly because most, you know, virtually all the production in the Salinas Valley, at least the lower valley, is soil-based.

But there really are acres and acres of plastic used. I'm curious about recycling. I understand that the soil mulches are pretty much
exclusively landfilled. What about plastics used on hoop houses and high tunnels, which are also heavily used a little farther north in the berry growing locations?

MS. KRONE: Well currently in agriculture that's one of the things I'm doing is to investigate the different products that can be recycled. Drip irrigation tape is recycled by Encore Plastic. But I'm not sure who is recycling the hoop houses. That's something I'm going to be looking into in the future.

MR. BRADMAN: Thank you.

MS. ARSENAULT: And Steve, it looks like --

MR. ELA: Emily, go ahead. Yes. Sorry, I messed up the mute that time. I apologize. Emily, you have a question? Please go ahead.

MS. OAKLEY: Thank you. Yes, thank you for your comments. I think it is important to note that a large percentage of the agriculture in that area is also conventional. Just to throw that out there.

But I completely agree with your
findings about plastic. And I was wondering if you think the Board should consider not allowing plastic mulch at all, given what you presented to us.

MS. KRONE: Well I think that there are just so many benefits to the biodegradable plastic mulch that I'm not sure what the economics to the organic growers would be, compared with conventional if it weren't allowed in organic production.

I would just hate to see our organic strawberry production not be feasible if buyers would refuse to pay that higher price. I'm not really sure. I'm not sure of the economics. But that would be my concern.

MR. ELA: We have another question from Mindy. Mindy, go ahead.

MS. JEFFERY: Thank you. Pam, I believe you referenced a study in one of the Cal State schools. And I'm wondering if you could provide the, or us with some more in depth information from that study.

MS. KRONE: I'd be happy to provide it. You could send me an email, and I'll provide you
the information I have. We haven't written a formal report for the study. We've just finished all the data collection. So we're still a little bit early on.

MS. JEFFERY: Great. Thank you. I will reach out.

MS. KRONE: Thank you.

MR. ELA: Other questions from the Board? I have one quick question myself. Do you worry at all about if biodegradable plastics, which you seem to be a proponent of, if they do not break down all the way in the soil, wouldn't we be creating the same kind of problem with them that we're creating with the plastics that we currently have?

MS. KRONE: I'm not sure what their properties are once they get into the ocean. And that would be really interesting to find out is what -- how long it takes them to break down once, you know, if they get out into the environment, and into the rivers and streams, and into the ocean.

We know with conventional plastic that essentially, you know, the word is that they break apart, but don't break down. However, there is
some evidence that weathering does occur, and that even PE plastic eventually breaks down in the ocean. But I think the process would be a much slower process than with the biodynamic, biodegradable plastics.

MR. ELA: All right. Thank you very much. We do appreciate your comments.

MS. KRONE: Thank you.

MR. ELA: Okay. Next we're going to have Anne Ross, followed by Annie Kusterman, and then Javier Zamora. Anne, please go ahead. Anne, we're not hearing you.

MS. ARSENAULT: Hang on a second. We're making sure. All right.

MS. ROSS: Hello.

MS. ARSENAULT: Anne? There we go.

MS. ROSS: Hello. Thank you.

MR. ELA: We've got you now, Anne. Please go ahead.

MS. ROSS: Thanks so much. Good afternoon, everyone. My name is Anne Ross. I'm an attorney and policy analyst for the Cornucopia Institute. Challenging times such as the one we are living in now have a way of shifting priorities,
some by choice, and some out of necessity.

But there are certain efforts that cannot fall by the wayside without undermining core principles. This is true in the organic sector, and it's also true about its foundation, which depends on integrity.

That's why I encourage the Board and NOP to do everything in their power to ensure that the strengthening organic enforcement rule is published for comment. For years now, organic grain farmers have been forced to compete against some who are intent on violating the rules. At the same time authentic organic dairy producers have watched as fraudulent grain made its way to operations feeding herds numbering in the thousands upon thousands of cows, calling into question the authenticity of entire supply chains.

The enforcement rule needs to be released for comment immediately to make sure it does what it should do, which means that it actually works for and protects all organic producers, so that eaters get what they pay for every time they choose organic.

In addition to the publication of the
strengthening organic enforcement rule, we strongly support research to test for pesticide and fumigant residue. Not only can testing detect fraud, the threat of testing can deter it.

There can be no tolerance for bad actors in the organic market ever, and certainly not in times like these, where organic producers face uncertainty, and many will face market disruption. The empty shelves in some grocery stores indicate how easily disrupted our food system can become in times of crisis.

The conventional industrialized agriculture system, supported by decades of cheap unsustainable policy, is a failure. The extreme costs to human and environmental health cannot be overstated.

This shows how important local and regional food systems are, and how essential organic producers are in providing their communities with nutritious food.

In addition to working to finalize the strengthening organic enforcement rule, we need to make sure organic farmers are included in the USDA's aid payments.
Congress needs to hear from us. Organic farmers who need assistance must be included in emergency disaster payments and farm loans. Finally, our legislators, agencies, and public need to know the organic community will not tolerate the intrusion of genetic engineering into organic production. Organic production is premised on being free from genetic modification, without exception.

In sum, even in the most challenging times, our foundational priorities cannot change. Priorities like eliminating fraud, being there for our organic producers in crisis, and adhering to fundamental organic tenets. Thank you all for your time and service on this Board.

MR. ELA: Thank you very much, Anne. Are there questions for Anne from the Board? I'm not seeing any. So thank you for your comments.

MS. ROSS: Thank you.

MR. ELA: We are going to move on to Annie Kusterman, then Javier Zamora, and then Gwendolyn Ward. Annie, please go ahead.

MS. ARSENAULT: Annie, I saw you just a minute ago. And I know you're on the line with
us. Hold on one second. Let's make sure you're unmuted.

MR. ELA: We like to make Michelle earn her pay here.

MS. ARSENAULT: It's a long list.

MR. ELA: Along with --

MS. ARSENAULT: There we go. I found her. All right, you are unmuted. Annie, can you hear me? I think there are two of us trying to unmute you. And we just keep toggling back and forth here. Apologies.

We'll get you -- all right, Annie, I am going to unmute you. I'm saying that out loud. Oh, you are unmuted. Go ahead and talk. We're not hearing you. Annie, if you're, it looks like you might be only on your phone. Maybe not.

Try, if you're on your on phone, no, it doesn't look like you're on your phone. It looks like you're on your computer. If you are using a hand phone, a telephone, hit *6, and that should unmute you. No. I'm showing your line --

MR. ELA: What's the -- Annie, we know you're out there. So what I'm going to do is, we're going to jump onto Javier Zamora, and we're going
to come right back to you. So don't worry that we're going to lose track of you. But we'll figure out the technical difficulties here. So Michelle, can we go on to Javier Zamora?

MS. ARSENAULT: Yes. Javier, are you there? Looks like, I'm going to unmute you, Javier. Hold on one second. You should be unmuted.

MR. ZAMORA: Okay. Can you hear me now?

MS. ARSENAULT: We got you.

MR. ELA: We got you, Javier. Go ahead, Javier. And then, Annie, we will come back to you.

MR. ZAMORA: Hola. Hola, muchachos. Buenos Dias from our beautiful Watsonville. I thank you for the opportunity to allow me to give you my five cents. That might not be much, but it's actually very real.

I am Javier Zamora. I own JSM Organics in beautiful Aromas, California. One of the very few independently owned labels that has been blessed to still be around after nine years. And I really take a lot of pride in breaching that gap
between not only a small partner, but also an immigrant, and that comes from other country to do beautiful things.

So in my family and my community, and thousands of people that are fed now with our strawberries and our vegetables. What I wanted to say is that organic, it's a beautiful thing. And it comes in my blood since I was little.

And yes, lately there has been a lot of changes that perhaps might not be the best thing for our small organic community, and benefits lots of the larger guys. And we can talk about the hydroponic things, and all those things. But I really hope that you guys really keep in mind a small organic grower in our community.

That sometimes, or most times we really don't have the voice to talk about the issues. And we are for the most part left behind, whether it's the FSA, or USDA, on some of the changes that we have very little to say.

We have a big impact as the smaller guys. And we always talk about how beautiful it would be to have closer farms to big communities where food is needed. But when we get the power
to really make the change sometimes we look the other way, and obey the larger fish.

You are in a very unique part. And you have lots of power that you can keep in mind that organics is, it's supposed to be for everyone, not just to be pleased, or to be pleasing the people that have the most money.

I always say that we have to produce lots of food. And we don't have anything, all right, first we don't have anything against my big neighbor. Because we need the food that he produces, that they produce. However, we need a lot smaller farms and family farms that do have a big impact in our communities. Shelf, economic, and just even mental health, it helps a lot.

So I -- please keep in mind that some of your decisions might not be the best thing for a smaller guy sometimes. And I really, really hope that you guys have the opportunity once to visit me, and see what we do, and contribute to what we're all here for is to feed our families, and feed communities.

I always work with someone like Pam that
is doing beautiful things about, you know, the plastics, the ocean, for the oceans. There are a lot of things that I work with, with universities. And my farm is always open not only for my community, but for all the researchers that are willing to do something for the future generations. And --

MS. ARSENAULT: Javier --

MR. ELA: Javier --

MS. ARSENAULT: In case you didn't hear the beep. Sorry.

MR. ZAMORA: Okay.

MR. ELA: Javier, your time is up. But are there questions from the Board? I have a quick question, Javier. What would be the single -- like if you could think of one thing that this Board could do to help you, what would it be?

MR. ZAMORA: Perhaps, first of all really know what someone like me goes through, or Hannah Lyon, or Jose Flores, when he has three acres, and he can't really sell his things. He cannot compete with a larger label. That he doesn't have access to sell to school districts. But his strawberries are probably or vegetables
are even tastier than some of the larger guys, and a lot healthier.

Marketing is a big issue. Insurance is a big issue. A big thing is insurance for small organic diversified growers. We, I think I'm the only guy, and it took me years to really be able to get whole revenue insurance.

You go through so many different things. But if our corn or soy, or larger farms wants to get whole revenue insurance, they can get it right away. So for someone that is smaller and very diversified, it's very different. We are -- I feel like sometimes we're not treated the same.

MR. ELA: And Javier, I see we also have another question from Rick. Go ahead, Rick.

MR. GREENWOOD: Yes. Thank you. Just a quick question for you. You call yourself a small organic farmer. I was just curious, how many acres do you farm? Because everybody seems to have a different definition of what a small farmer is. So just to --

MR. ZAMORA: I'll tell you what. Correct. So I think that's a question that we all answer differently. The same as: what's
sustainable?

To me a small organic guy is someone that perhaps in our area has no more than 20 acres, and has three or four employees and their family. That's small. I started really, really small. And I'm up to a little over 100 acres now.

But that doesn't necessarily make me a $5-10 million revenue farm yet. It makes me a $2 million revenue farm. But I -- $800,000 out of $2 million goes to my employees.

So I think a small organic farm is when the family can actually, does not need to work for anybody else, and employs a couple of other people. I think that's still small. Once you start getting into the hundreds of employees, I don't think you're small anymore.

But I mean that's just the way I think. I'll leave it up to, you know the Berkeley and Stanford students to really determine what's a small farm.

MR. GREENWOOD: Okay. No, that's interesting. Because in California, I'm an avocado farmer. And over 50 percent of the avocado growers are less than six or seven acres. And so
they're small farmers too. But in a different kind of definition. But no, thanks very much.

MR. ELA: Thank you very much, Javier.

Muchas gracias.

MR. ZAMORA: Hasta luego.

MR. ELA: Hasta luego. We will move on to Gwendolyn Wyard, Eli Chandler, and Brad Johnson. And just as a note, Annie was having, Kusterman was having some technical issues. We will circle back to her at the end of the day here.

So Gwendolyn, please go ahead.

MS. WYARD: Yes. Can you hear me?

MR. ELA: We can.

MS. WYARD: Okay, great. Well, thank you so much. Good afternoon to everyone. And a huge welcome to the new Board members. My name is Gwendolyn Wyard, and I'm the Vice President of Regulatory and Technical Affairs for the Organic Trade Association.

It's nice to be coming to you from Oregon. I think this might be my 32nd NOSB meeting, but it's the first that I've attended in my comfy pants. So thanks so much for this virtual opportunity, and I hope that you too are all
enjoying your comfy pants.

I'm going to address a couple of the more technical handling topics on this agenda, L-malic acid and ion exchange filtration. You have our detailed comments, so I'll just briefly hit some high points, and answer any questions that you may have.

So starting with L-malic acid, synthetic. The answer to the classification question is synthetic. I really encourage Board members to take a step back on the two-step production process in question, and recognize that if the starting material or source is petroleum, and the intermediate source is synthetic, that it would really defy logic to end up with a non-synthetic substance.

We believe that the definition of synthetic, and the classification guidance folks support this conclusion. And if we can agree on that, the next question is how to go about the listing on the National List.

We've offered some food for thought in our comments, with the end goal of assuring clear allowance for the synthetic form, only when the
non-synthetic form is commercially unavailable.

If that approach is not favorable, then we ask that you please make sure that both forms are clearly allowed, and not just the synthetic form, which would be an unfortunate mistake.

On ion exchange, our comments with great purpose focus on technical background information, and the extensive history around the allowance of ion exchange filtration.

It's really important to understand that the allowance of ion exchange is based on NOP policy from 2002, and subsequent NOP guidance to certifiers in 2008 and 2010. It's really important to understand that certifiers are currently reviewing ion exchange process, and requiring what are known as the recharge materials to be on the National List.

At the heart of the matter are the ion exchange resins, their classification as food contact substances, and whether they need to be petitioned to the National List.

And finally, it's particularly important to understand that the allowance of ion exchange in organic processing is the result of
direct and open communication between NOP and certifiers over many years. But it's a topic that's never made it to the NOSB agenda until now.

From this perspective, and really above all, the Organic Trade Association supports transparency, consistency, and consensus, and a well-informed recommendation to the National Organic Program on whether the ion exchange resins need to be on the National List.

So thank you so much, and I welcome any questions that you might have. Thanks.

MR. ELA: Thank you, Gwendolyn. Scott has a question I think.

MR. RICE: Thanks, Steve. One of the questions that we, and thanks, Gwen, for your comments. One of the questions that we had in our discussion document addresses kind of the impacts of how we classify this on other substances that appear on 605A.

And classification of this says that synthetic, what impact that would have on some of those other substances that appear on 605A. And I wonder if you can just share some of your thoughts on that?
MS. WYARD: Sure. And thanks, Scott.

And I'm sorry I can't see you. I imagine that you're probably sporting a really nice COVID beard here for this meeting.

But as explained in our written comments, we analyzed citric acid, lactic acid, yeast, and xanthan gum. And I also took a close look at gibberellic acid.

And we found that as long as you view the two-step production for malic acid as one process, so one process with two steps, I really think that's an important way to look at it, and focus on the source or the starting material at the beginning of the first step, then there shouldn't be a problem. There shouldn't be a conflicting impact.

The two-step production process starting with petroleum is unique from all of the other materials that we looked at. And in no other non-synthetic example is the primary food source a petroleum product, or is it a synthetic substance. In this case the fumaric acid that's converted directly from a synthetic source.

So you know, that said, I think the
issue is around what constitutes the source material for substances produced via fermentation. And it, you know, gets long winded, and we need to get through the day. But I think that the real problem is that for fermentation and other naturally occurring biological processes, your starting material, the substrate, the medium, the culture broth, it's going to involve multiple inputs. And they're going to be synthetic and non-synthetic.

You'll have your microorganism and your glucose, which would be the primary food source. But then you're going to have nitrogen, oxygen, trace minerals.

Basically you're going to have other proteinaceous and complex nutrients that are required, and consumed by the organisms to successfully carry out that fermentation process, which in turn cranks out the citric acid, or whatever the substance is that is in question.

And so this really gets to the question of source, and how to distinguish one component of a substrate from another, and the question of what is allowed in that substrate.
And in light of the existing guidance on classification, I think this is what Sam was speaking to earlier in his comments, I really do think that there's additional work that needs to be done on that classification and materials guidance. It's not very clear in addressing fermentation products.

So for those of you that don't know my background, my academic background is in fermentation science. So my apologies if I just got a little excited there. But thanks for your question.

MR. ELA: Thank you, Gwendolyn. Much appreciated. Scott, did you have anything else?

MR. RICE: My beard's --

MR. ELA: All right.

MR. RICE: -- actually pretty short right now.

MR. ELA: Sounds good.

MR. RICE: But thanks for the question.

MR. ELA: We won't -- we'll give an allowance at the next meeting for, in person for everybody to show up in their comfy pants. And we can have a sit in protest.
We're going to move on to Eli Chandler, Ed Johnson, and then Angela Schriver. Eli, please go ahead.

MS. ARSENAULT: I think if Eli will --

MR. ELA: Or Eli, excuse me.

MS. ARSENAULT: No, that's all right. Devin is setting up your slides. There you go. You are now unmuted.

MR. CHANDLER: Okay. Am I coming through okay?

MS. ARSENAULT: Yes. And can you see --

MR. ELA: You are. And I apologize for the mispronunciation. Go ahead.

MR. CHANDLER: All right. That's fine. Good afternoon. My name is Eli Chandler with Thorvin. Thorvin provides certified organic kelp ingredients for animal feeds, fertilizers, and human uses.

I'd like to thank the Board for their time and efforts, as well as the opportunity to comment on the issues being discussed. I hope everyone is doing well and staying safe during these strange times.
Aquatic plant extracts are widely used by many organic producers. At this time there are no direct replacements for these products. These products are also very efficient in their use of natural resources. A one acre application only requires approximately four pounds of fresh harvested kelp.

Likewise, these harvests are -- likewise, the harvest of the parent materials of these products are regulated by government agencies. On your screen you'll see an example of the type of precautionary approach used to regulate these harvests.

This document is a 2018 update from the Icelandic Marine and Freshwater Research Institute, that states that no more than three percent of the total biomass should be harvested from the site. And that the current harvest rate is less than one and a half percent of the total biomass annually.

In short, we support aquatic plant extracts being relisted for use in organic systems. My next topic is the kelp listing in Section 205.606(k).
Kelp should not be relisted on Section 205.606(k). Organic kelp meals are available in sufficient quantities to meet the needs of both animal feed and human uses.

In response to your question, since kelp is a generic term, the regulatory definitions of such varied slightly between human uses and animal feed use regulations.

So, there are minor difference in the definition of kelp, whether it's for human use or animal feed. I'd be happy to answer any questions at this time. And thank you for your time.

MR. ELA: Thank you. Are there any questions from the Board? I don't see any. Thank you, Eli. We appreciate your thoughts.

We are going to move on to Brad Johnson, Angela Schriver, and Meagan Collins. And after Megan we will take another break. So, Brad, please go ahead. And state your name and affiliation.

MR. JOHNSON: Okay. Can you hear me okay?

MR. ELA: Yes, we have you. Go ahead.

MR. JOHNSON: Okay, great. I also had some slides. Oh, perfect, they're up. Okay.
MS. ARSENAULT: Okay. And can I tell you to hang on one second while -- Devin will switch slide decks there. Thank you.

MR. JOHNSON: Okay, perfect. Got it now. Sorry about the incorrect date there on the first slide. But good afternoon. My name's Brad Johnson. I'm the Senior Manager of Process Engineering at Ingredion, of our corporate engineering team.

And I wish today to show the Board that ion exchange purification is acceptable for use in organic processing. If you'll go ahead and go on to the next slide, please.

So, there are several salts, color bodies, and organic acids that are present in the agricultural products that we process in our plants.

To improve the safety, quality, and purity of the product, we employ a two-step purification technique using ion exchange resins. Both of the resins are already approved as both product contact surfaces, and secondary direct food additives.

And as you can see in the process flow
that I show, the cation resin captures any positively charged ions from the incoming impurities. And the anion resin captures any residual acids, leaving a completely de-mineralized product.

So, if you'd move on to the next slide, please. So, the resin can only operate for a limited time period, since it has a finite capacity to capture and hold these impurities.

So therefore, the resin must be periodically regenerated to restore it to its original condition. So, to regenerate the cation resin, the strongly held impurities must be removed using an acidic solution in the hydrochloric acid.

To regenerate the anion resin, the weakly bound impurities must be removed with a basic solution in the form of sodium hydroxide.

All of the removed impurities, and the regeneration fluids, are sent to waste for further biological treatment. And they're never in any contact with the product that we process. Next slide, please.

Okay. For the rinsing step, any remaining hydrochloric acid and sodium hydroxide
is fully rinsed from the resins using purified water.

The purity of the exiting rinse water is tested to ensure there's no residual acid or caustic remaining. And only then -- then and only then, the system is ready to return to processing our product. Please go to the next slide.

So, this is -- the key points I wish to express during this presentation are the following. The ion exchange purification does not chemically alter the syrup we're purifying. We are only removing unwanted material. There's no chemical alteration of the product.

Point number two, for the purification to work both cation and anion resins must be used. Sodium hydroxide cleans the anion resin, and is on the National List. Hydrochloric acid must be used to clean the cation resin, but it's currently not on the National List.

Point number three, none of the sodium hydroxide or hydrochloric acid used during regeneration passes into the purified product. Although we use these materials, they're only used to clean the resins of the captured impurities.
None of the acid or caustic is in contract with the product at any time during the processing. So, thank you for your time and consideration today.

MR. ELA: Thank you very much. It looks like Rick has a question.

MR. GREENWOOD: Yes. Just had a question on the materials that you send to waste processing. How is that processed? And where does it end up?

MR. JOHNSON: So, most -- the chemical and any impurities will go off as a liquid waste. And there's a typical biological treatment that a water reclaim system, any kind of municipal water treatment facility would have, to be able to treat the liquid waste to put it back into the waterways.

MR. GREENWOOD: Okay. Can you explain that a little further? I mean, do they neutralize it? Or how about the, I'm thinking of the BOD, if --

MR. JOHNSON: Sure.

MR. GREENWOOD: -- you're having organic waste, and how that's handled.

MR. JOHNSON: Correct. So, any
organic waste, just like at a municipal plant, would -- there would be obviously the neutralization of any of the alkalinity or acidity of the waste, to where biological activity would take place to be able to capture and remove the organic impurities.

   And that gets removed as a sludge, and dried. And that's typically land-applied in any kind of a municipal waste system. So, the biological oxygen demand, I think every municipality has a different regulation. But it's below a certain BOD that's allowed to be able to discharge into the waterways.

   MR. GREENWOOD: Okay. Thank you.

   MR. ELA: Are there any other questions? Thank you very much, Brad.

   MR. JOHNSON: Thank you.

   MR. ELA: We are going to move on to two people before the break, Angela Schriver, and then Meagan Collins. And after our break we will have Mark Hutton. So, Angela, please go ahead.

   MS. ARSENAULT: Angela, I know you're there. Hold on one second, make sure we're -- looks like -- Angela's listed. I don't
see whether you are on --

MS. SCHRIVER: Can you hear me?

MS. ARSENAULT: Ah, we got you.

MS. SCHRIVER: Can you hear me now?

MS. ARSENAULT: Yes, we got you.

MS. SCHRIVER: Excellent. All right.

MR. ELA: Please go ahead.

MS. SCHRIVER: Hello. My name is Angela Schriver, Schriver Organics located in Ohio. We primarily grow row crops, and have been certified organic since 2018.

We are members of OFA and the OFA Grain Growers Chapter. I want to thank the Board for their time, support, and dedication to organics. It is deeply appreciated.

Regarding domestic and import fraud, we entered the organic grain market when prices were depressed, primarily from the influx of imported, potentially, and most likely fraudulent organic grain.

We spent three years of our lives transitioning our grounds to organic. Three years is a long time to wonder if that decisions is what is going to save your farm. Three years is a long
time to wonder if you'll be able to support your young family unless you get to the other side.

And although we're confident in our decision to transition to organic, we know that it can be better. But we're still waiting. How much longer should we keep waiting?

I hope the NOSB and NOP can acknowledge how slow actions or inactions concerning strengthening organic enforcement is affecting farmers like us. This is hurting our bottom line. It's hurting our livelihood, and it's hurting our families.

Prior to the organic price slide, beans were at $30 dollars per bushel, and corn at $15. We are currently at $18.50 per bushel for beans, and $8 dollars for corn.

On 20 acres that's a difference of roughly $8,000 dollars for beans, and $14,000 dollars for corn. Those are prices that can sustain farms through crop rotation. Those prices can sustain families.

There are enough challenges out there as it is. Please don't make competing with fraudulent grain one of them. Don't make us keep
waiting for the proposed rule on strengthening organic enforcement.

Regarding the integrity of the organic label, we still have a split operation with organic and conventional ground. I believe having a foot on either side gives us a unique vantage point.

When considering requests and proposals, I believe the NOSB is being asked to consider one of these four things, the viability of the farming operation, the scalability of an operation, environmental stewardship, and human health and welfare.

I believe you do have a responsibility to consider impacts to the environment, and also to human health and welfare, including consumer expectations.

However, I do not believe you need to consider the viability or scalability of operations when making your decisions. That is something for the farmer to consider.

I hope the organic standard is not based on alleviating burdens, removing hurdles, and accommodations. It is not meant to function as a safety net for farming operations. That is what
conventional agriculture is for, where there is a poison for every poor management practice out there.

Specifically, concerning poultry welfare, I agree it would be unethical to withhold treatment in emergency situations. And after the animals are treated, they can be separated and marked as conventional, similar to other livestock standards.

Do not let the organic label become less than what it was intended to be, or less than what it is expected to be. The organic label is held to a higher standard, and should be.

Lastly, it was noted some certifying agencies had many requests for the use of fenbendazole, while others had none. I would like to make note that some agencies have a reputation for being stricter than others. And I would presume it is reflective of the farmers that choose them.

I would be happy to answer any questions you may have about our experience in choosing a certifying agency, or anything else I discussed. Thank you.
MR. ELA: Thank you, Angela. It looks like Emily has a question.

MS. OAKLEY: Okay. It's a comment. I just wanted to thank you very much for taking the time to provide us with your testimony.

MS. SCHRIVER: Thank you.

MR. ELA: Are there other questions? Angela, I had one, given the -- talking about how, like, other livestock is treated with a antibiotic or something and they're then sold on the conventional market, given that at least with fenbendazole, that really it's not treating one animal, it's treating a whole flock, do you still think that then that whole flock should be removed?

MS. SCHRIVER: I think if you're managing any operation, regardless if it's poultry, or your crops, or anything, that once you scale up to a certain size those are the issues you're facing. And if that's the risk you're willing to take, then that's your farmer's decision.

But yes, I think if you consistently need to find other ways to manage what you're currently doing, then maybe you need to actually look at how you're managing your operation.
MR. ELA: Sure.

MS. SCHRIVER: So yes. I think that's a risk that every farmer would have to take. Yes, I believe that.

MR. ELA: Any other questions from the Board? Thank you very much, Angela, for taking the time to -- oh, Sue has one question here. Go ahead, Sue.

MS. BAIRD: I'm so sorry. I apologize. I appreciate that take on it, and your opinion. And you're right, Steven, that they would have to either eliminate -- and probably the only choice would be to eliminate the whole flock.

Because once that farmer has his eggs contracted, he can't sell them on the conventional market. It's different than some products. But I do appreciate that. And it's something to take into consideration.

But it's not a scale up thing. Most of the farmers who have these problems are those who have done more than just organic. They are adhering to the OLPP, thinking it was going to be inhumane standards.

So they're giving more outdoor access
than is currently allowed. And that's caused some of the problems. But thank you. I appreciate that a lot.

MS. SCHRIVER: Thank you.

MR. ELA: Thank you very much, Angela.

We are going to do one more person before the break. Meagan Collins will be up. And then, after the break, just so people are aware, we have Mark Hutton, Sarah Alexander, and Ramzi Sulieman. Meagan, please go ahead.

MS. COLLINS: Hello. My name is Meagan Collins. And I am the coordinator for the Accredited Certifiers Association. Thank you for the opportunity to make comments to the NOSB.

The ACA is a nonprofit educational organization. And our mission is to ensure consistent implementation of USDA organic regulations through collaboration and education of accredited certification agencies.

Our membership includes 63 certification agencies that are accredited by the USDA or in the process of accreditation. This includes all of the USA-based certifiers.

First we would like to comment on the
proposal for paper based crop planting aids. Thank you for the work the NOSB has done on this.

The ACA requests clarification on the proposed definitions. Do certifiers and material review organizations need to verify both cellulose composition and ASTM 6866 bio-based content percentage?

If so, what does primarily cellulose-based mean? Also, does the term cellulose in this definition include modified forms of cellulose?

The ACA supports the allowance of paper based crop planting aids, including pots, collars, and seed tapes, provided that the NOSB gives clarification on certifier and material reorganization verification.

Finally, I want to just spend a moment highlighting the recent work of the ACA. In light of the COVID-19 pandemic, we have been working with the International Organic Inspectors Association on best practices for verifying compliance when onsite inspections are not possible.

This industry-wide contingency plan, which includes inspection policies to verify
compliance, maintain consistency, and ensure the integrity of the organic supply chain, while protecting our human capital, was shared with the NOP this week.

We had 60 certifiers, 16 contract inspectors, and four organizations participate and come to a consensus in record time, less than one month.

The ACA and IOIA have been working diligently over the last month to address the pre-competitive problems. We hope the NOP and the NOSB will support our work during these challenging times.

Thank you for ensuring the safety of the organic community by holding the NOSB meeting virtually. I would like to stress the importance of having in person NOSB meetings when we are safe to do so.

We find the ability to connect in person with other industry members extremely valuable. The ACA also uses the opportunity when our membership is together to hold our meeting in the evening, which is very productive, and essential for our organization.
We encourage the NOP to continue to hold in person NOSB meetings when possible. Thank you for your time and attention.

MR. ELA: Thank you, Meagan. Are there questions for Meagan? Meagan, I have one question. Of course on paper pots, since I’m the lead on that now.

So, your comment about that primarily cellulose-based is unclear. Would you -- how would you propose that we word that to make it -- I just about said less unclear -- to make it more clear?

MS. COLLINS: Yes. I think the working group that worked on this was saying they had, they all had kind of different perceptions on what exactly that meant.

Like, the biobase is like 85 percent. So, would cellulose be over 50 percent, especially when there's other biobased components in the product that aren't necessarily cellulose?

So, I think being very clear, if that's something you want to verify, what percentage are you verifying it at.

MR. ELA: Fair enough. And yes, I
appreciated that comment in the written comments as well. So, are there any other questions for Meagan from the Board? Thank you very much, Meagan. We do appreciate it.

We are going to take a ten-minute break now. So, we will reconvene at 30 minutes after the hour, for the final segment of our public comment webinar. Thank you, everybody. We'll see you in ten minutes.

(Whereupon, the above-entitled matter went off the record at 3:20 p.m. and resumed at 3:32 p.m.)

MR. ELA: Michelle, do you want to tell people about -- let's see, if they click on their ---

MS. ARSENAULT: How quickly they forget, I just asked you ten minutes ago.

MR. ELA: Right.

MS. ARSENAULT: Well, if you're in Zoom, if you click in the upper right of the Zoom box, you'll see a grid of dots, like the Brady Bunch dots, and it says gallery view or speaker view. If you go to speaker view, you'll see my webcam on. And it's pointed at the speaker timer, if I
can get Devon to pin it again, the speaker timer so folks can see it count down, since we're having trouble with the audio and people aren't hearing the beep very well.

Ah, thank you, Devon, he just pinned my camera so it's there permanently. All right, thanks, Steve.

MR. ELA: All right, thank you, Michelle. All right, in this final segment of our public comment webinars, we'll start off with Mark Hutton, then we're going to go to Sarah Alexander, and then Ramzi Sulieman. Mark, please go ahead.

MR. HUTTON: Thank you. Good afternoon, my name is Mark Hutton. I'm the University of Maine Extension vegetable specialist and also the Associate Dean for Research at the Ag Experiment Station.

I'd like to thank you for the opportunity to address the NOSB and update you about our work here in Maine developing a 100 percent bio-based agricultural paper mulch.

But I'd also like to express some concerns we have around the requirement of recycled paper content in organically approved paper.
products and specifically something like this paper mulch. The requirement of recycled paper content could be a barrier to commercialization, due to poor product performance or to excessive costs.

And here for your information and possible entertainment is a slide showing photos of our current product. Over the past ten years, in collaboration with several paper companies, we've been working to develop this agricultural paper mulch, as an alternative to degradable plastic mulch and plastic mulch films.

As you can imagine, there are many engineering obstacles in developing a sheet of paper with the properties of a sheet of plastic. Chief among them are thickness, weight, opacity, and durability.

Our current mulch in testing is about one half to one third the weight of currently available mulches. And it's about not quite twice as heavy as plastic mulch. We can put a standard four by 4,000-foot mulch roll that is manageable by two people.

This thin sheet also allows for some
infrared transmission resulting in a slow warming profile greater than what we normally achieve with paper mulch and nearly as favorable as plastic mulch. And a combination of bio-based coatings on the top and bottom surfaces of the sheet manage weed growth and also increase longevity of the mulch.

Materials used to make this mulch are 100 percent bio-based. They are cellulose fiber, nanocellulose lignin fiber, and sucrose esters. And furthermore, these raw materials that are being used are sourced from Forest Stewardship Council-certified suppliers.

Part of the NOP guidance 5034-1, which limits virgin pulp fiber, lead to questions about the allowability of this paper mulch in organic production. And our concerns, as I said, are typically around fiber quality and uniformity in recycled paper pulp is not adequate for this high quality paper. Also impurities and residues from inks in recycled pulp will also have a negative impact on this paper mulch.

I'd like to thank you for your attention, and I'm happy to answer any questions.
MR. ELA: Thank you very much, Mark. You timed that to a T, you had one second left. Are there questions? It looks like Asa has a question. Go ahead, Asa.

MR. BRADMAN: I have a couple of questions. One, in terms of water conservation, how does that compare to plastic?

And then, two, have you done any calculations on the impact on forests? You mentioned that it was from FSC-certified pulp sources, but I'm wondering, you know, could we calculate acreage that would be needed if, for example, all organic ag used a paper mulch.

And then, three, are there other fiber sources like hemp or other, you know, other non-forest sources that might allow production of the paper without cutting down trees?

MR. HUTTON: Okay. Let me try to take these questions one at a time. So your first question about moisture conservation underneath the paper mulch, we have measured that, and we do still conserve moisture underneath that paper.

Our soil to moisture measurements, while a little bit drier than under plastic mulch,
they're still -- our watering frequency isn't any different. And it's still superior to bare-ground production. So we have higher soil moisture compared to bare-ground production.

The next question on impact of forest production or logging operations, we did some -- one of the companies I worked with initially who have since dropped out or lost interest, the market isn't big enough.

Even if we replaced all plastic mulch with paper mulch, compared to their other paper outlets, this market wasn't big enough for them to be interested in it. They could make, in a three-day run, in the paper plant, enough paper to replace all the plastic mulch being used in a year in the country. So it just wasn't a big enough market for them. So I think our impact on forest production would be not super significant.

And then the third part of the question, you know, have we looked at other pulp sources, and the answer to that is we haven't yet. But that certainly could be a possibility.

Did I get them all, Asa?

MR. BRADMAN: Yes, thank you.
MR. ELA: You did very well, Mark. You have a much better memory that I do.

Emily, you have a question.

MS. OAKLEY: Thank you, Mark, this is really interesting information. I know you listed some of the ingredients, but could you again tell us what the bio-based coatings on the mulch are?

MR. HUTTON: It's nanocellulose and then sucrose esters.

MR. ELA: Looks like, Nate, you have a question.

MR. POWELL-PALM: Apologies if I missed this. I echo Emily, it's really interesting. Do you have an idea or any data on cost comparison for this versus a more traditional plastic mulch?

MR. HUTTON: So that's a really good question. And as we've been designing this and working on this, we've been trying to hit a price point. There's about a $350 margin in ag mulch if you look at disposal. Pickup and disposal costs run roughly around $350 an acre for plastic mulch. So we think we've got kind of that range of increased product price.
The product certainly will cost more than plastic. But how much more, I don't know. But we are trying to keep in that, not to exceed $350 an acre.

MR. POWELL-PALM: Thank you.

MR. ELA: Mindee, you have a question.

MS. JEFFERY: Thank you. If I reached out, would you be able to provide us a little bit more information on what nanocellulose is?

MR. HUTTON: Sure. But basically, you can think of it as really tightly bound pieces of carbon that the microbes can't get a hold of, or it's harder for them to get a hold of. So it slows biodegradation.

MR. ELA: Other questions? I have a question. How does this product hold up, like, if somebody steps on it or an animal steps on it?

MR. HUTTON: Not well.

MR. ELA: Not too surprising. And if we were -- I guess, what percentage of virgin paper do you need, versus recycled, or are really talking about pretty much all virgin paper?

MR. HUTTON: The preference would be all virgin paper. But I'm told -- you know, I'm
an ag guy, so I'm just an overeducated farmer. But the paper people tell me that we could have a percentage of recycled content in there, maybe as high as 25 percent. But sourcing high quality recycled pulp is, I'm told, challenging.

MR. ELA: Makes sense. Any other questions for Mark?

Thank you very much, Mark. That is very interesting. We appreciate you taking the time to ---

MR. HUTTON: Thank you for the opportunity.

MR. ELA: Next up we have Sarah Alexander, then Ramzi Sulieman, and then Dave Shively.

Sarah, please go ahead.

MS. ALEXANDER: Great, thank you. I'm Sarah Alexander, Executive Director of the Maine Organic Farmers and Gardeners Association, often referred to as MOFGA.

Our organization was formed in 1971, and we're the oldest and largest state organic organization in the country. Additionally, we're the sole member of MOFGA Certification Services,
LLC, which is a USDA-accredited certification agency certifying more than 550 operations in Maine.

MOFGA would like to thank the NOSB members for your work and your commitment to the organic community and thank the NOP for your work on increasing enforcement and oversight to help maintain the integrity of the USDA organic label. And thank you for the opportunity to provide comments today.

First, we would like to address organic integrity. I would like to reiterate concerns regarding consumer trust and questions that will only continue as the industry grows. Without consumer trust and belief in the integrity of organic standards, this will become another confusing and meaningless label in the marketplace.

In order to maintain consumer confidence, we urge the NOP to continue to prioritize two rulemaking efforts that are critical to the integrity of the organic label, the proposed rule on strengthening organic enforcement, and the final rule on the origin of
livestock.

Specifically, as the NOP finalizes the rule on origin of livestock, please don't leave any loopholes that will allow for continuous transition or multiple transitions by related entities, or allow any variation of interpretation by an accredited certification agency. Our dairy farmers are relying on this rule to create equal standards for all producers.

We also strongly urge the NOP to continue to focus on compliance with the pasture rule with an emphasis on higher risk operations including those on the margins of the 30 percent dry matter intake rule and dairies with 1,000 or more milking and dry cows.

Another action that breaches consumer trust and confidence and creates confusion in the marketplace is the NOP allowing organic hydroponics without clarity on how this type of production complies with the Organic Foods Production Act. We call for an immediate moratorium on any new hydroponic operations and to return this issue to the NOSB work agenda as a top priority.
Lastly, we know that the COVID-19 pandemic is shifting the way many of us work together. But we're concerned that a remote NOSB meeting will become the norm. Once it is safe to gather in groups, we encourage the NOP to continue holding in-person NOSB meetings.

These are important gathering points for our community, including many organizations that meet in advance of each NOSB meeting. And in-person meetings provide a level of transparency that is important. Thank you for your consideration.

MR. ELA: Thank you very much, Sarah. Are there any questions from the Board?

We appreciate you taking the time to give us your testimony and for what you do.

We are going to move on to Ramzi Sulieman, Dave Shively after that, and Michael Jones after that. Ramzi, please go ahead. And I may be mispronouncing your name. And for that, I apologize.

MR. SULIEMAN: No, you got it correct. Thank you. My name is Ramzi Sulieman. I am the Chief Operating Officer at True Organic Products.
I want to thank the NOP and each volunteer member of the National Organic Standards Board for hearing my comments about the importance of liquid fish as a fertilizer in organic crop production.

True Organic Products is a leading organic fertilizer manufacturer based in California. We produce liquid and pelleted fertilizers for many organic crops across the U.S. and internationally. Because of our growth and demand to support organic farmers, we are constantly challenging ourselves to assure supplies of sustainable and effective ingredients.

Fish solubles, a by-product of the fish oil and fish meal industry, are an essential ingredient. We rely upon it as a key component of our liquid fertilizer program. Fish solubles are a proven and important tool in organic fertility programs.

As indicated in the technical report, the wet reduction process for making fish meal and oil produces a by-product known as fish solubles. This by-product would be wasted or thrown away if not captured and returned to use.

Our supply consists exclusively of fish
solubles as well as fish waste. Both are by-products that are collected from fish processing plants that produce human food.

One of our fish ingredient suppliers harvests fish for fertilizer purposes. The products we purchase capture waste from other fish uses, such as food, oils, and feed.

We support the findings of the technical review, that there are no species of wild, native, harvested exclusively for liquid fish fertilizer products. We support the continued use of fish solubles on organic crop systems.

Thank you for this opportunity. I'll take any questions.

MR. ELA: Are there questions from the Board? Kim has a question, go ahead, Kim.

MS. HUSEMAN: Hey. I have a question about the properties in the by-product of the fish that you purchase versus the whole fish that are harvested for fertilizers. Can you speak to if there's different properties in that fertilizer that makes one more advantageous than another on our crop application?
MR. SULIEMAN: For the most part, they're very similar in terms of, you know, output as a fertilizer. Again, most of the fish that we source is scrap or waste. Of course, some fish that doesn't make it through any quality, you know, programs from the fisheries, what they'll do is they split that over to get sent over for fish oil or fish meal use. And it basically turns into waste.

But of course, most of the waste is specifically from scraps. And if you're asking in regards to different species of fish, we haven't really seen much variation. In fact, most of the fish that we source is a cocktail of different species.

MS. HUSEMAN: Thank you.

MR. SULIEMAN: You're welcome.

MR. ELA: Are there any other questions from the Board?

Thank you very much, Ramzi.

MR. SULIEMAN: You're welcome. Thank you, guys.

MR. ELA: We are going to move on to Dave Shively, Michael Jones, and then Kenneth
Rider. Dave, please go ahead.

Michelle, have you been able to find Dave?

MS. ARSENAULT: Yes, Dave's here. Oh, I just lost him. Hold on one second. Ah, there he is. I am unmuting your mic now, Dave. I only say that out loud, because there are three of us unmuting and muting people. And I didn't want someone to just keep muting and unmuting you. All right, you should be unmuted now.

MR. SHIVELY: So am I on?

MS. ARSENAULT: We hear you.

MR. ELA: You're on, Dave.

MR. SHIVELY: Okay, great. Good afternoon NOSB members. My name is Dave Shively. I would like to thank you for your time serving on the Board, NOSB Board, and the time to speak to you today.

I live and farm in the northwest Lake Erie watershed basin, in northwest Ohio, and raise organic corn, soybeans, wheat, and use cover crops for soil building. This is my 16th year of being 100 percent certified organic. I'm a member of the OEFFA grain growers chapter and a past
president of the group.

Growing organic crops without herbicides, pesticides, and fungicides has brought great satisfaction to me over the years. However, the last few years has brought a drastic decline in market prices, especially in corn. Corn prices have dropped over $3 since last year and some places have not even given bids.

There seems to be an excess amount of corn in the marketplace, and I believe a lot of this is due to the imported shiploads of layer corn.

The NOSB and NOP has set rules with high standards of meat. And I take pride in knowing my organic corn can be traced from my farm, what bin, what field, seed, and even how it was grown.

It is disheartening that the imports do not have the same traceability. Consumers see the USDA organic label and trust that those standards are traceable and have been met.

Imported, supposedly, organic grain should not even be unloaded without testing at the port of entry and proper document for the original origin of the grain, not shuffled around paperwork by unreliable and unethical certifiers, and false...
certificates. The NOSB must put more pressure on the USDA and the SOE to close the loopholes in these imports.

The new farm bill has allotted funds to increase inspections and trace fraudulent import documents of grains. I wrote comments to the NOSB Board earlier this year, and I spoke on this same subject last year.

I urge you to make this a priority. The longer you delay enforcement of this rule, the more it erodes the organic label and the future of the U.S. organic farmers.

Thank you for your time and dedication. The only other thing would be please consider changing the dates, if it be possible, for more convenience for the organic farmers to comment.

Dave Shively, USDA certified organic farmer.

MR. ELA: Thank you very much, Dave.

We have a question from Nate for you.

MR. SHIVELY: Okay.

MR. POWELL-PALM: I've struggled with this myself, Dave, but when is a good time, do you think, to have these meetings? I feel like in April, Montana is planting, and in May everyone
else in the Midwest is planting. So I've always thought it was just sort of the burden we bear.

MR. SHIVELY: I would say earlier in the year, February, March. I mean, for us it's, you know, if it wasn't not good weather, I'd probably be really chomping at the bit to get out there. The fall is a bad time for guys harvesting, the October, September -- October, it's just, I mean, we're right in the middle of harvest season.

So earlier in the year, in the spring, earlier in the summer maybe not as far as peak time. You may hear some more from other guys about this, too.

MR. POWELL-PALM: Great, thank you.

MR. ELA: Sue has a question for you.

MR. SHIVELY: Okay.

MS. BAIRD: Thanks for your comments and for struggling to continue doing organic with prices low, and I appreciate that.

What procedures would you suggest that we put in place that are not already there to help us to identify and eliminate the fraud in the grain organization?

MR. SHIVELY: I think there needs to
be, I guess what I see when I hear about grain loaded in the Black Sea, and then getting transported to Turkey, or somewhere else, and then grains changed, you know, instead of from being whole corn to cracked corn, which makes it different, and then it can somehow get magically certified coming into the ports, that's just disturbing to me. It just really disturbs me and all the organic grain guys out there.

I mean, we built the standard, and the more we let this infiltrate the organic label, the more it just degrades the standard that we set.

MS. BAIRD: Yes.

MR. SHIVELY: I don't --

MS. BAIRD: I think we all agree with that. I over-talked you, I apologize for that. I think we all agree with that. I think the NOP is really working hard to implement some procedures to stop that.

What do you think about our domestic fraud?

MR. SHIVELY: I dislike that just as much, more so on that.

MS. BAIRD: More so, right.
MR. SHIVELY: Because it shouldn't be here. But when you started getting more conventional guys transitioning over, they get ideas. And they don't understand that we set this and the standard that needs to be for the organic label. You know, they're just looking at it as a commodity. I'm looking at it as raising a special crop. Special grains need to be handled with integrity, traceability, all the above.

MS. BAIRD: Again, we agree with you and appreciate your commitment to continue on.

MR. ELA: Agreed.

MR. SHIVELY: Well, it's in my system, so I enjoy, I mean, it's just making it much harder to go on. I mean, I'm going to continue to do it, it just makes it not as fun.

MS. BAIRD: Yes, we understand. Thank you very much.

MR. ELA: Yes, thank you, Dave, for taking the time to talk to us. We do take it seriously, and we appreciate you reminding us of that.

MR. SHIVELY: Thank you.

MR. ELA: We're going to move on to
Michael Jones, Kenneth Rider, and then Edward Andrews. Michael, are you out there?

MR. JONES: Yes, can you hear me?

MR. ELA: We can. And could you please give your affiliation as well?

MR. JONES: Sure. My name is Michael Jones, and I'm a small organic grain farmer and on-farm handler. I'm from north central Ohio. I also wish to thank you and the other Board members today for the opportunity to comment today. I belong to the OEFFA grain growers group, just as Mr. Shively spoke about just a minute ago.

I was first certified in 1983 with OEFFA. And, you know, things have changed since then, and have not changed over the years. I know back then we all struggled to learn from each other, both within our mistakes and in our successes. We were all trying to succeed, both as farmers, as producers, as processors. Our goal was, at that time and it still is today, was to produce high quality, healthy food instead of high quantity, poor quality food.

Sure, there were people back then who tried to cheat and misrepresent themselves, and
how they grew and processed their crops. I remember back, the general consensus when the USDA became willing to support the self-policing of the USDA just to maintain and improve that label, that integrity of the certified organic label. Let's fast forward here, you know, to the last five years.

You know, we began to see prices drop when the demand was going up. And we saw increases of foreign imports from different areas of the world. And it became known to us of the fraud and the lack of enforcement against it.

I am thankful for the NOSB, who have heard our concerns and have passed many suggestions, both to the NOP and USDA, who are now trying to implement these. But we need to continue to encourage the USDA to finish its job, the strengthening of the organic enforcement rules, and then to give us the opportunity to comment on them and to add to them.

The future of my farm and other organic farms that are around me and across this country depend on this. You know, my farm in particular, it has lost between 30 and 35 percent of our crop.
prices, corn, soybeans, wheat, because of this import problem or situation, whether it's fraud or not.

It's my greatest concern of the viability, you know, to be able to pass this farm on, its way of life on, to the next generation which is my grandchildren. You know, this is something that I started over 35, 40 years ago. And I wish for it to continue on.

But I do want to thank you for your hard and, most often than not, thankless work that the NOSB does. With that, any questions?

MR. ELA: Are there any questions for Michael?

I don't see any, Michael, but as always, we always reiterate, thank you for taking the time to give the very personal perspective on this as a farmer. We know it's not easy to do, and we appreciate you doing that.

MR. JONES: Well, I appreciate your work that you're doing, and I encourage you to maintain the battle. And have a good day.

MR. ELA: You too, take care.

We next have Kenneth Rider and Edward
Andrews, and then DeEtta Bilek or Bilek. So Kenneth Rider, please go ahead.

MS. ARSENAULT: Ken, we're unmuting your line. It looks like -- there you go, you should be able to talk now.

MR. RIDER: Hi, I'm Ken Rider. Can you hear me?

MR. ELA: We can, Ken. Go ahead.

MR. RIDER: Okay, it's Kenneth Rider, and I've been certified for over 33 years, certified under OEFFA, a member of Ohio Organic Grain Growers, Organic Farmers Association, and Real Organic Project.

I'd like to reiterate what the two gentlemen before me have just said. Thinking about that, please follow me into the field, see the soil, and feel the sun. This is my organic grain farmer's cropping overview, all the while counting on you to provide evidence in defeating fraud in domestic and international imports.

This is a brief seasonal example of how we approach pure organic food, starting with commitment to organic land set aside or purchased, field buffering, crop selection, equipment
selection and purchase, with whom to certify, which crop planted where, seed selection, when to plant, fertilization, land preparation, plowing, ground work, planting, weather, crops sprouting, tining, rotary hoeing, cultivating, foliar spraying, hand weeding noxious weeds, making hay, harvesting small grains, bin storing, selecting and purchasing cover crop, sowing cover crop, cultipacking cover crop, equipment cleanup, grow crop harvest preparation, cleaning combines, trucks, wagons, arbors, harvesting grow crops, bin storage, fertilizing for the next crops, sewing winter grains, more cover crops if time available, caring for stored crops, conditioning stored crops using heat and fans, maintaining a safe operation, logging every above mentioned activity and date, marketing and sales, contracting, providing an audit control register, enjoying annual and unannounced organic inspections, off-season maintenance, et cetera, et cetera.

This intensity never stops for an organic farmer family, and this is nowhere near inclusive. We must have defined worldwide organic standardization, the United States to government
and foreign policing agencies to be adequately funded to be 100 percent effective.

We want to see printed, updated evidence of these efforts, and it must be in a timely and structured manner to determine progress in defeating both international and domestic fraud.

The penalty must be immediate, no off-loading of ships or trucks, and monetarily punitive where required. Standardization requires evaluation, but evaluation without enforcement is of no value. I ask you to verify.

Any questions?

MR. ELA: You timed that very well. I'm impressed. Are there any questions from the Board? Sue has a question. Go ahead, Sue.

MS. BAIRD: I appreciate -- I never do it, I never hit the unmute. No, not really a question, just thank you for walking us through that. We love you guys, you are the backbone of our organic industry. Sorry fruit and avocado guys, that's how I feel about it. Thanks for all your work. That's all I have to say.

MR. RIDER: And I would say that as
professionals, and we look around and we see professional doctors and so forth, and if you are considered a professional, you have a responsibility with that.

And to define it, a professional is someone or a group of people that police themselves. If you see someone in there that's doing something wrong, it is your obligation to make sure that that is taken care of and contended with.

MR. ELA: All right, thanks. That's a great point, and I totally agree. The best enforcers are ourselves. Thank you, Ken, for taking the time. And, I'm going to say, that exhaustive and exhausting list, it is pretty amazing what we all do. So thank your for giving us your testimony.

MR. RIDER: Yes, adios.

MR. ELA: We're going to move on to Edward Andrews, and then DeEtta Bilek, and then Michael Menes. Edward, please go ahead.

Michelle, have you found Edward?

MS. ARSENAULT: He is on the line. Oh, I just lost him. Sometimes it jumps. Edward, oh,
I'm unmusing now. Okay, go ahead and talk. You should be able to.

MR. ANDREWS: Hello, this is Ed Andrews.

MS. ARSENAULT: There you go. We got you.

MR. ANDREWS: Hi. I'm not near as well-spoken as the three people before me, Ken was really good. But I have a lot of the same ideas that they do.

I'm Edward Andrews from Andrews Farms Incorporated. And Andrews Farms and other organic farmers that I know of, like Ken Rider, and Dave Shively, take care to follow the rules. And other farmers, they don't follow the rules.

And some of the certifying agents don't follow the rules. And I'm here to talk about not only foreign grain coming in but also, you know, I think we need stricter enforcement for all of our organics coming into this country or grown here.

And I also wanted to, I think there are some real abuses of the rules in the livestock industry too. And these problems are, well, you
know, we'll have more organic meat, it'll be cheaper, and all of this. And it's the same with the grains.

Yes, I'm struggling right now too because of low prices. But it's the same with the meat, same with the grain, I don't care where it comes from. It needs to be stricter enforcement, because this will destroy our markets.

If the people that are buying get tired of all of our abuses of the rules, we're not going to have a market to sell to. And we're not going to take any more money than your other farmers. So I'm just asking for stricter enforcement, faster enforcement and, you know, I'm just asking the best you can do. And that's what I ask for today.

MR. ELA: Thank you very much, Edward. I think we take those things to heart. So are there any questions for Edward from the Board?

Thank you again for taking the time and giving us your perspective. It is truly greatly appreciated.

MR. ANDREWS: And thank you.

MR. ELA: Next, I guess DeEtta
cancelled and so we are going to move on to Michael Menes, then after him, Jeff Dean, and then Elijah Dean. So, Michael, please go ahead.

MS. ARSENAULT: Mike, hold on one second. I'm not sure you're unmuted here. Your slides are on the screen, let me make sure I unmute you. There you go, good.

MR. MENES: Want to make sure you guys can hear me.

MS. ARSENAULT: We can hear you now.

MR. ELA: We've got you.

MR. MENES: Great. Thank you. My name's Mike Menes, VP of Food Safety and Technology at True Organic Products. Thank you for this opportunity to address to you about a new petition regarding a novel material that needs your immediate attention.

Change the slide please. As an organic stakeholder, I'm deeply concerned about the use of ammonia extract, a novel fertilizing material that should be prohibited from use in organic crop production. This has been presented in a public forum, and the feedback was of genuine concern.

To help facilitate the process, I've
submitted a petition asking the NOSB to vote to prohibit ammonia extract from use in organic farming. The petition details why the NOSB must act. It also provides a definition and the various ways it can be extracted.

This ammonium extract petition needs prompt action to protect the organic integrity before the situation gets worse. Ammonia extract is not compatible with organic principles, and allowing it will harm the integrity of the Organic Program.

And here's why. Next slide please. Synthetic ammonia fertilizer is specifically prohibited in organic production because it is a chemical and does not foster a healthy soil system.

Think of all the principles that were the basis of OFPA, or the Organic Foods Production Act. New technologies are making it possible to create ammonia fertilizers that are non-synthetic but essentially identical to the prohibited chemical fertilizer.

Although ammonia is present in nature, it can now be extracted and concentrated for sale to organic farmers. Imagine, if you will,
yourself on the farm with a tank of organic ammonia directly next to a tank of synthetic ammonia, and you might just see just one potential for domestic and/or international fraud. Understand that MROs and certifiers are beginning to review and approve several such products.

Next slide please. I ask that you expedite this petition and vote to prohibit non-synthetic ammonia extract at the fall 2020 meeting. Otherwise, use of this material will reverse the progress on soil health, the environment, and human health.

This novel fertilizer is clearly not compatible with organic principles as spelled out in the Organic Foods Production Act. It threatens the movement and it threatens the seal. Thank you for your consideration. I welcome any questions.

MR. ELA: We have a question from Dan and then a question from Emily. Dan, go ahead. Dan, you're still on mute.

DR. SEITZ: I know, I don't how my hand got raised, because I didn't hit the computer. So I apologize, no questions.

MR. ELA: Must have been psychic,
Dan. We'll move on to Emily. Emily, go ahead.

MS. OAKLEY: Thank you. Thank you for this testimony. You said that some MROs and certifiers are approving use of some of these products. Could you elaborate on that, please?

MR. MENES: Yes. I think there's one, I know that there's one MRO, actually both MROs that have approved one, what I would consider a novel ammonia fertilizer or ammonia extract.

And I know that there are, as I understand it there has been a lot of other applications that have been submitted for review, and it could be expanding into all the other MROs.

So yes, I think there are, I know there are two that have already approved one and many in line.

MS. OAKLEY: Could you tell me the name of that product?

MR. MENES: Yes, it's Perfect Blends, BioStar Perfect Blend 600.

MR. ELA: Mindee, you have a question.

MS. JEFFERY: I just wanted to thank Mike for his comments here and for all of his contributions to the California Organic Products Advisory Committee.
MR. MENES: Thank you, Mindee, it was good serving with you on that.

MR. ELA: I have a question. So how is this being produced organically? And I'm sure when we get the petition before us -- I know it's being worked on right now, we'll see it shortly -- I'm sure that's explained, but just if you can give a very quick explanation for right now.

MR. MENES: Sure, absolutely. There is -- as you say, it's all in the petition. But there are biological ways of making this chemical fertilizer. And that's really the focus, I want to focus on what the end product is and not necessarily how it got there.

But a number of ways could be capturing from just normal fermentation or composting, any time that ammonia can come off of a particular pile or source and it's acted on biologically. There's a definition that we're proposing in the petition, so if you could refer to that, I think that would be -- answer a lot of your questions as well.

MR. ELA: Great, thank you. Any other questions from the Board?
Perfect, thank you, Michael. We'll look forward to reading through that petition.

MR. MENES: Excellent, thank you.

MR. ELA: Next up we have Jeff Dean, then Elijah Dean, and then Steven Turnow. Jeff, please go ahead.

Have you been able to find Jeff?

MS. ARSENAULT: Yes, Jeff's here. I'm going to unmute you now. There you go, I had to unmute myself first. Okay, thanks. Jeff, you should be able ---

MR. DEAN: All right, can you hear me now?

MS. ARSENAULT: We can hear you.

MR. ELA: We've got you.

MR. DEAN: All right.

MR. ELA: Please go ahead.

MR. DEAN: My name is Jefferson Dean. I'm co-owner of Timberlane Organic Farms with my son, Elijah. And our farm's been certified organic for over 25 years. And we grow corn, beans, wheat, sunflowers, multiple grain crops. We were a certified -- had a certified organic dairy, sold beef, sold some pork. So we've been
in a lot of things over the years.

This is like the fourth or fifth time that I've addressed the Board. And I appreciate the Board, and I thank you for your contribution and your sacrifice you've made. It's got to be a tough thing to do, and we appreciate it.

I went out to Colorado and spoke in the spring. I went to Pennsylvania last fall and spoke. One of the problems we have as organic farmers is the times of the meetings. And I know you can't satisfy everybody. But the spring and the fall are the worst for everybody. You couldn't pick a worse time for the majority of organic farmers, vegetable farmers, dairy farmers, grain farmers, they're all busy in the spring, they're all busy in the fall.

You've got January, February, March, maybe even December. You've also got, you know, the end of July, August, September, not nearly as busy. There's got to be a better way than having the times where the least amount of farmers can contribute.

The other thing I wanted to talk to you about is this organic fraud. It's just appalling
that we've been talking for years, it's been over five years now, and it doesn't seem like it's gotten any better.

We continually have organic fraud, fraudulent grain coming in from overseas. Mostly -- we know where it's coming from. We know it's not organic. People have identified the ships coming in, they've told, you know, authorities and nothing happens until a ship gets unloaded. And then it's like, oh well, we can't do anything now.

But you could. You could trace it down, find out where it went, and stop it and, you know, decertify them. That's what would happen if it came to my farm. You know, if I got caught doing some fraudulent organic, if I used treated seed or something, I would be decertified. So should they.

But it needs to be stopped before that. It's really disheartening, and it's going to just kill the organic label. The integrity is all that we have. We work so hard with this traceability, the work we do to do things correct, and then we get hammered with this fraudulent imported grain.
It's costing us. Our prices dropped another $2 a bushel. We're down over $4 a bushel for our corn. And I don't know how long we can sustain at a $4 a bushel loss. So I urge you, please, take urgent action now to take care of this problem. Thanks for your commitment. Any other questions?

MR. ELA: Thank you, Jeff. We do appreciate your comments on that. Nate has a question for you.

MR. POWELL-PALM: Apologies if I misunderstood this, Jeff. Are you saying that your organic corn is less than $4 a bushel?

MR. DEAN: Our organic corn has dropped $4 a bushel from when we first identified the fraudulent grain coming in. And now we have big buyers using the organic fraud against us. They're contracting at a very low price and then, in advance, without any grain to back it up, knowing that if they can't get farmers to come down in price where they can make a lot of money, they'll just import grain knowing it's fraudulent, and cover their contracts.

And when the big buyers, you know, we
talk to them and try to sell stuff to them. They say, well, we're already booked up. Even though that grain's not coming from, you know, U.S. farmers, it might not even be legitimate, but they don't care as long as it has the paperwork to back it up.

So no, our price is not $4 a bushel, it's $4 less than it was.

MR. POWELL-PALM: Thank you for that clarification. I appreciate it.

MR. ELA: Are there any other questions?

Thank you very much, Jeff. We appreciate you taking the time, as always, to give us your input. And we, just to clarify, we have taken very seriously your comments about timing and discussed it.

And one of the things we're up against is, because our country is large there are always farmers doing something at all times of the year. And we really haven't been able to identify another good time. But we appreciate the difficulties, and we do take that seriously. So thanks for continuing to bring that up.
It sounds like your son is up next, Elijah Dean. And then after that we have Steven Turnow and Michael Hanson. So, Elijah, would you like to go ahead?

MR. DEAN: Hello. Can you hear me?

MR. ELA: We can, please go ahead.

MR. DEAN: Hello. Yes, this is Elijah Dean. I am -- well, obviously you just heard from my dad. And you heard from a lot of the other OEFFA grain growers members.

I am the current president of the OEFFA grain growers group. It's kind of a mouthful. But we have a really great group of guys. We meet in the spring, sorry, not in the spring, in the early spring and in the winter to share information and to work together to become better farmers. And these meeting are purposely held in the very early spring and in the winter, because that's when all of our members are available.

I also would like to address the problem of meeting time. I spoke at the meeting in Pittsburgh, and there seemed to be some resistance but also some openness to potentially moving these meetings maybe a month, or maybe two months earlier
than they are now.

Because as my dad just said, and as other members of our group have said, this is a very, very bad time for this meeting. I'm sitting out in my field right now watching some clouds roll in. I was trying to plant oats. And I'm about half done with this field, and I would really like to finish up. If this meeting had been one month earlier, this wouldn't even be a problem.

Anyway, moving on to what I really wanted to talk about today, taking a step back, looking at the organic economy, it's really amazing. The organic industry, the organic economy is based on growers voluntarily complying with stricter regulations and consumers voluntarily paying more for what they see as a better product.

This is based on the trust and integrity that happens in the intermediate steps. This trust and integrity is the most important thing we have and what our entire industry is based on. And this integrity is being attacked in multiple ways, both from products and practices that are being proposed to weaken this integrity and to weaken what we go
through to provide a good product. Also, as you have heard many times already, from fraudulent activities and fraudulently imported grain.

I urge you to take strong action on both of these, maintain strong standards, and if people say that we need new products or new practices because organic is difficult, good, organic is supposed to be difficult. It's supposed to be hard. That's what the consumer wants. The consumer wants us to work hard and provide healthy products under strict practices.

Please help us do that, help us provide what the consumer wants us to. And with that, do you have any questions?

MR. ELA: We do. Thank you, Elijah. Emily has a question. Go ahead, Emily.

MS. OAKLEY: Thank you for your comments, really articulate, your second half. And I also just wanted to say that I have spoken, and several of us have spoken with the NOP about the possibility of trying to move the meetings back, either February or March.

I think some concern that was expressed was potential travel complications that can come
up at that time of year. But I do just want you to know that that conversation is taking place, and people understand the need to try to make it more accommodating to growers who are clearly not able to come at this time.

MR. DEAN: I appreciate that there's progress being made on that and, of course, the sooner the better. Because as you can see, we have many growers that are interested in taking part in this organization and in these meetings.

MR. ELA: Yes, I agree, Elijah. And I don't -- my previous comments, I don't mean to at all say that we're not taking that seriously. Our biggest problem is having to have meetings exactly six months apart with our work plan. And then having them earlier also means that we have to have the fall meeting earlier which can create some issues as well.

But please know that we continue to talk about it, and we're always open to, you know, you submitting ideas for how we can accomplish that with our current workload. And certainly, we appreciate you bringing it up as a real issue. We do take it quite seriously.
Are there other questions for Elijah?

Nate has a question.

MR. POWELL-PALM: Just a comment. I just really wanted to thank everyone in the OEFFA Grain Growers Chapter for taking the time out of their growing season. I am between plantings myself, so I totally understand. And it's really important to be hearing from you. So thanks for taking the time.

MR. DEAN: Thank you too.

MR. ELA: Agreed. I think the full Board always appreciates hearing from any farmer that takes the time to talk to us. And I get the issue, we're at full bloom out on our peach trees and other trees right now too. So thank you for giving us your thoughts.

We are going to move on to Steven Turnow, Michael Hanson, and then Bill Deneven. Steven, please go ahead.

MR. TURNOW: Okay. Can you hear me?

MR. ELA: We certainly can.

MR. TURNOW: Okay, very good. I just want to thank you for your service on the Board, every one of you. I think as you can tell now,
this is kind of a hot topic in the Midwest as far as corn and soybean farmers, you know, both fraud imports and domestic.

As you can tell, people get pretty passionate about it when they're doing the right things and they get undercut from things coming in from other countries that might not be legitimate.

You know, as I walk through the grocery stores, I look at the organic products, and I appreciate the NOP label and what it means. And I've got a couple of daughters, you know, and they're raising young kids. And that label means something to them. They expect a product that meets the standards, non-GMO, no herbicide residuals, and a product that's environmentally pure.

You know, as I look from the consumer standpoint, I ask myself do I want imported products that might not meet NOP standards or do I trust a product that has met the standards and is certified in the United States?

A global pandemic was never expected. However, you know, it's kind of forced us to
reflect and raises many questions on imports in the United States. You know, do we want to be reliant on foreign food the same as we're reliant on ventilators and face masks?

This country has the capacity and the willpower and the farmers to grow a good quality organic food, especially corn and soybeans. And, you know, why are we spending so much time, effort, and money trying to verify something grown halfway around the world when we could encourage and resource our own farmers to produce it?

We need to be proactive here. We must have a process, a plan to discourage imported grains and encourage domestic production. We must keep organics at a premium so it keeps conventional farmers transitioning into the organics. And we need to educate others on the environmental payoffs of organics, not only for us but for the next generation of farmers. Thank you.

MR. ELA: Thank you. Are there questions? Not seeing any, thank you so much for your comments. They're very much appreciated.

MR. TURNOW: Thank you.

MR. ELA: Next we will have Michael
Hanson and then Bill Denevan, and then John Hendrickson. Michael, you have the floor.

MR. HANSON: Hi. Can people hear me?

MR. ELA: We certainly can. Please continue.

MR. HANSON: All right, thank you very much. Thanks for the opportunity to speak and for your service on NOSB. My name is Michael Hanson. I'm a senior scientist with Consumer Reports, and I'd like to make comments on two items on the 2022 sunset review for the Handling Subcommittee, that's colors and inulin-oligofructose enriched.

Consumer Reports' national representative surveys have consistently shown that a large percentage of Americans expect organic food to be free of artificial or non-organic ingredients. Thus the use of colors derived from conventional crops, for which organic versions are readily available in organic products, may mislead consumers.

In addition, practices used to grow conventional crops for colors are not consistent with organic farming and handling and may have adverse human health and environmental impacts.
For example, the USDA Pesticide Data Program data, the most recent data, show residues of various pesticides on a significant fraction of carrots, blueberries, grapes, and cherries.

And in fact, more than ten percent, if you look at that, there are 15 different pesticides on blueberries that meet that, six on carrots, 13 on cherries, 16 on grapes.

If we look at 30 percent of the acreage, there are four pesticides that are on more than 30 percent of blueberries, eight that are on more than 30 percent of cherries, and five that are on more than 30 percent of grapes.

So many certified organic products contain certified organic colors. Thus, there should be enough organic carrots, blueberries, cherries, and organic versions of all the crops used for colors on 205.606 to meet market demand.

Removing these materials from the National List will create demand for all organic foods on the marketplace that contain organic colors. We urge NOSB to remove these 18 colors from the National List.

We also urge NOSB to remove
inulin-oligofructose enriched, IOE, from the National List, because it is not necessary for production and handling of organic products. IOE are highly processed isolates of sugar that are derived from foods such as chicory, sunchokes, and agave. And they're added to products to make certain marketing claims related to the perceived health benefits of highly isolated fibers and sugars.

Thus IOE is not necessary for production, only useful for marketing claims. The 2015 technical report clearly shows that IOE is highly processed, uses synthetic aids, and that enzymatic hydrolysis that helps create the product, quote, is a chemical change, and although the change occurs using an enzyme from a fungus, this is not a process that occurs in nature. Consequently, we urge NOSB to remove IOE from the National List.

Finally, although it's not on the agenda for this meeting, we urge the Crop Subcommittee to have its GMO Subcommittee continue their work on the table of excluded methods, expressly to discuss and review those methods on
the to be determined list and to put this topic on the agenda for the fall 2020 meeting. Thank you.

MR. ELA: Thank you. We do appreciate all those thoughts, certainly lots to think about.

Are there questions from the Board? Asa has a question, go ahead, Asa.

MR. BRADMAN: One of the issues that came up in the discussion from the IFAC representative was what -- of the colors, which specific colors do or do not have the option of organically sourced material?

And I hear that you're, you know, you're arguing that there is organically sourced material available for all of the colors. But are there some that are more, maybe I should say egregious versus others in light of the fact that there really is organically sourced material available?

MR. HANSON: Well, I guess what I'd say on that is just based on the Pesticide Data Program, I mean, they're not sampling all the 18 different colors, but just on there. Come on, I mean, there should be enough blueberries, carrots, cherries, and grapes so that those colors -- and then for
carrots there's actually three colors.

So I think for the ones where there's PDP data showing that, you know, a significant fraction are produced in this way that if there are enough of those crops, you know, they should easily be able to supply the colors.

And I think the other point is, is you're trying to create a market demand for those organic colors. So I would first start, if you're going to remove them, I would first start with the ones for which there is PDP data.

MR. ELA: Just a follow-up question from me, Steve. There certainly were some public comments saying that the problem is not the quantity of crops but that the crops, that you actually pick the crops at a different maturity to make colors.

So you're actually picking a fresh crop at a different stage of life to make a color versus just what you might, you know, sell fresh market. So there is the discrepancy between whether a grower wants to sell fresh market or for processing in the colors. Do you have any thoughts on that?

MR. HANSON: Well, but just again,
since the same would be true for then a conventional versus organic. Since you're getting them from a crop, the same thing is going to be true for the conventional production, right? They would have to be harvested at a different time than they would for food. But it's cheaper to do with conventional.

I mean, it can be done with organic, because there are certified organic colors. They might cost more, and I suspect what people are doing here is they're moving to the conventional, because they can get it cheaper. Because any of these issues about you have to harvest it earlier or maybe later, that's going to be true for the conventional as well.

So if they can supply it, the organic ones can supply it as well as long as they can get a reasonable price for it, right? So it would seem to me you would want to be helping to create that market for organic colors.

Because most consumers, again, when we surveyed them, they don't think that these materials are in organic or that they should be. They just assume when they see, you know, a color
from a blueberry, or from one of these other things, they think, oh, it must be organic when it's not.

MR. ELA: Fair enough. Thank you.

MR. BRADMAN: Right, but --

MR. ELA: Appreciate that.

MR. BRADMAN: I just want to add, I mean, theoretically, you know, I'm looking at the listing on the National List right now, and this is a problem with 606, you know, but it says only in accordance with restrictions specified in the section and only when the product is not commercially available in organic form.

So, I mean, theoretically there should be, inherent to the certification system, a push towards organically sourced colors. But I think what you're saying here is that, because of the market balance and the lack of use of organically produced crops to produce the colors, we're not getting the actual alternative to the final product which is the color.

MR. HANSON: Well, right, and it's probably an economic, right, because if they could, for all this time, I mean, there is enough -- I would say organic cherries, any of these basic
ones. Those are being produced in large volume.

But if you can get the color from the conventional, and it's cheaper, why would you even bother for the organic?

And folks that are doing the organic certified colors, and there are for all of these organic certified versions, they're clearly paying more. So, you know, there is stuff out there.

But to help create the market, if you say you could only use organic colors, then it would force people to say, you know, maybe there's, for turmeric or some of these other ones, maybe there's not enough for the color there.

And they could say, even if they're willing to pay more money, we can't find a product, then maybe those should be allowed. But here, this is about creating the market conditions for those organic versions of colors.

MR. BRADMAN: I understand. I can see how there's a concern here that 606 could be a barrier here. Because it allows the non-organic --

MR. HANSON: Exactly.

MR. BRADMAN: But I guess a further
question I would have, and perhaps you could send this in as comments later on, is we should all review the specific colors that have organic alternatives right now.

MR. HANSON: Yes.

MR. ELA: Yes. And I think that would be, yes, particularly helpful if we could suss out those that are currently available and those that maybe aren't.

We're going to have to move on because we do have several people that aren't on the list at the end here that we had to add at the end. So I think we're going to run just slightly over anyhow. But next we have Bill Denevan, and then we'll have John Hendrickson, and then Albert Straus. So Bill, please go ahead.

Michelle, were you able to find Bill Denevan?

MS. ARSENAULT: Yes. Bill's on the list. I'm having trouble unmuteing his line. Bill, if you're on your phone, if you could hit star 6 it might be on your end that we can't unmute you. Once in a while we have a little issue with this.
Oh, hold on one second. I think I just muted you again. Okay, go ahead, Bill. Bill, you're showing as unmuted, but we're not hearing you talk. No, we're not hearing you.

MR. ELA: Let's go on to John Hendrickson, and then we'll come back to Bill after John, and we'll figure this out. So could we go ahead with John Hendrickson.

MS. ARSENAULT: Yes, John's on the line with us. John, I'm going to unmute your line. Okay, you should be able to talk now.

MR. HENDRICKSON: Thank you. Thanks to all the members of the Committee. John Hendrickson, Small Farm Works, supplier of equipment and supplies for small scale farms.

I submitted the petition regarding the use of paper pots in 2018, and I'm here to express my support for the proposal to add 205.2 which will extend the use of paper-based crop production aids to include paper pots.

Use and popularity of paper pots has grown significantly since I submitted the petition. Vegetable growers across the country rely on paper chain pots, which is a clever,
efficient, profitable, and environmentally friendly method of transplanting.

There's a large contingent of growers who support this change to the NOP rule. Many tell me that, given the choice between continuing to use paper pots and maintaining their organic certification, they would drop certification. I would hate to see that happen.

My only concerns about the language and specifications in the motion are these. As written, the proposal would require ASTM D6866 testing of paper pots to determine the precise percentage of synthetic fiber in the paper.

According to a head scientist at a laboratory that does this testing, this test is not reliable for paper products made from wood pulp. The reason for this is a rather fascinating story which is rather long and complicated, but I'll offer a short summary.

As a result of atomic bomb testing in the middle part of the last century and the resulting radioactive carbon atoms floating around in our atmosphere, which trees indiscriminately absorb through the photosynthetic process, test
results of paper products made from long-lived trees cannot be trusted, and results can vary widely with no assurance of accuracy.

For paper products made from annual plants, tests are corrected to account for the amount of atmospheric radioactive carbon in the atmosphere during the year those plants were grown. However, for long-lived trees it is impossible to correct for this background radioactive carbon source.

Apparently, our atmosphere has only just now started settling back to pre-atomic bomb testing levels of naturally occurring atmospheric radioactive carbon. I'm not sure what the NOSB can do about this, but based on the information that I have gathered, the proposed tests will not be satisfactory for the intended purpose.

Second, I think the last part of the proposal which currently states that, quote, if these paper-based crop planting aids are commercially available with 100 percent bio-based fiber content, these must be used, unquote, could be changed to encourage the use of commercially available products with the least synthetic fiber
content.

As the proposal reads right now, an organic grower would only have to switch away from a paper pot with 15 percent synthetic material if there was one with zero percent. It makes more sense to encourage growers to use products with the least synthetic fiber content rather than jumping to a standard of zero which may not even be practical or achievable.

I believe this change fits nicely with a concept of continual improvement. The company that makes the paper products that I sell is well on its way to bringing to a product to the marketplace that will rely on hemp fiber for paper strength rather than synthetic fiber. We're really excited about that.

And I would like to sincerely thank the members of the Crops Subcommittee who have worked on this very complex and complicated issue involving paper and have developed this proposal. Thank you.

MR. ELA: Thank you, John. Are there questions? I am not seeing any questions.

MR. BUIE: Steve?
MR. ELA: Yes, go ahead.

MR. BUIE: This is Jesse, one quick question. What's the timeframe that you think hemp would be on the market?

MR. HENDRICKSON: The goal of the manufacturer that I work with is to have them in the marketplace for next growing season.

MR. BUIE: Okay.

MR. ELA: Any other questions? Thank you very much, John. We do appreciate it. And we appreciate your patience as we try and figure this out, since it is your petition.

Michelle, were we able to get Bill Denevan on?

MS. ARSENAULT: Sorry, now I'm muted and talking. Bill, I think you're unmuted. You want to try to say something? We're not hearing you. Your mic is unmuted. Bill, I'm going to send you the phone number so you can dial in on the phone.

MR. ELA: So maybe we will go ahead and go to Albert Straus. And Bill we'll keep trying to come back to you. So Albert Straus, and then David Epstein, and then we're going to do Annie Kustermann, if she's here, and then Alesia Bock
to finish things off.

So as I told everybody, we probably are going to run just about ten minutes over. So I apologize for that. But Albert, would you like to go ahead?

MR. STRAUS: Yes, hi. My name is Albert Straus, and I'm the founder and CEO of Straus Family Creamery. And I want to talk about kind of the organic certification, enforcement, clarity, and consistency in livestock production.

But first, I want to kind of talk about the crisis that we're in. There's a disconnect between farmers producing the products, the milk, the produce, and retailers, and people -- and consumers. So we're losing, we don't have the infrastructure, and all this restricting of buying is causing hunger, at the same time we're destroying food.

So I think there's a lot of clarity that needs to be done in this society around clear directions around shelter in place, people getting availability of food, and supporting farmers through this crisis and the economic crisis as well.
As far as the video that was put out by the NOP, I think it was an excellent attempt or direction to create, well, enforcement, better enforcement around improving documentation from farmers. I think that there's clarity that needs to be dealt with.

There's definitions around grazing seasons that still need refinement, and looking at the different age groups and nutritional needs of different animals and not having consistent grazing seasons, and then pasture productivity. Recognizing that pasture productivity after -- well, it changes over the season.

So I think that, well, shade and shelter, also climate considerations for shade and shelter of animals, and really trying to get consistency by educating certifiers, inspectors, and farmers, and using the same guidelines, and being on the same page.

So overall, I think that everything's, you know, we're doing well as an organic industry. We've gotten a lot more clarity, and we're on the right path.

And I look forward to really, actually,
I think through this crisis, we actually have an opportunity to really look at a food and farming system that is local, organic, and is more regionally-centric and brings nutrition and value to the public and our communities. Thank you.

MR. ELA: Thank you, Albert. Are there questions for Albert?

Albert, as always, we appreciate your thoughts and commitment to helping us think through things.

MR. STRAUS: Okay. Thank you.

MR. ELA: Next we're going to go to David Epstein, and then Annie Kustermann -- well actually, let me ask first. Did we get Bill Denevan yet? We'll figure him out. So let's go to David Epstein and then Annie Kustermann. David, please go ahead.

MR. EPSTEIN: Hey, Steve, can you hear me?

MR. ELA: We can.

MR. EPSTEIN: Good, thanks. I'm Dave Epstein. I work with the Northwest Horticultural Council which represents organic growers, packers, and shippers of tree fruit in
the Pacific Northwest on policy and regulatory issues.

The Pacific Northwest produces over 90 percent of fresh certified organic apples, 79 percent of organic pears, and 93 percent of organic sweet cherries produced in the United States. We also submitted written comments for your consideration.

Controlling foodborne pathogens is a challenge to tree fruit production. Microbial pathogens must be controlled in the orchard and in water and food contact surfaces at the packing house. Food contact surfaces have been identified as a primary contributor to pathogen outbreaks on fresh produce.

We need effective sanitizers and disinfectants to prevent pathogens from becoming established in packing houses and processing environments, and subsequent cross-contamination on produce.

We are also concerned with the evolution of resistance of these pathogens, such as listeria, to sanitizers. Recent studies have focused on reduced sensitivity of listeria
following repeated exposure to single sanitizers.

The Food Safety Modernization Act requires producers to adequately sanitize food contact surfaces. The ability to utilize multiple sanitizers as well as to use different sanitizers on different types of food contact surfaces is essential to achieving effective microbial concern.

In the 2018 Farm Bill, Congress directed that the NOSB, while following the material review requirements established in the Organic Food Production Act, to establish procedures for timely consideration and review of materials directly related to food safety compliance for inclusion on the National List, and to be transparent and adhere to the best science and technical assistance available, including from other science agencies, to provide certainty and predictability to the agricultural community and consumers.

The NHC requests that the NOSB formally consults with FDA subject matter experts regarding the sanitizer needs of producers before taking any further action on this issue.
Both public health and FSMA require you to consider the inclusion of efficacious sanitizers and disinfectants on the National List to prevent foodborne disease outbreaks. We want organic production to continue to thrive in the Pacific Northwest.

We ask that NOSB members carefully consider the importance of these materials for organic tree fruit production and in meeting the mandates of FSMA so that we can continue to provide organically produced tree fruit to consumers. Thank you.

MR. ELA: Thank you, Dave. Asa has a question for you.

MR. BRADMAN: Yes, I'm just wondering, are there specific sanitizers in the pipeline that you're referring to? I mean, there are, of course, there is an existing menu of options available.

And it sounds like you're expressing a concern that there's some limitations on that.

And I want to kind of understand the basis of it. I mean, one sanitizer we did look at last year, silver, I think, dihydrogen citrate, that did get voted down. I know there were
different reasons for that. I personally thought some uses could be allowed but that the petition was too broad.

But can you be specific and, you know, are there materials in the pipeline that you want and don't have? That would be helpful. Thanks.

MR. EPSTEIN: Well, it's a good question. And I made this statement to be fairly general. We want the NOSB to, if you're going to be reviewing materials, to consider the mandates that we have to meet on the production and the packing end before you -- you need multiple products. We can't just have one or two good products.

I mean, right now I know you're looking at things like ozone and some other materials. I did not single out anything particular in this case. This is more to ask the NOSB to keep their eye on the ball, remember the mandates that you're getting from Congress via the Farm Bill, in terms of consultation with agencies such as the FDA, and make sure that we have these products that would prevent these foodborne outbreaks.

MR. BRADMAN: Thank you.
MR. ELA: Thank you, Dave, as always, appreciated. And I think, yes, overall I've heard the Board talking about exactly that. And I guess we always appreciate any specifics you can give to us about if you're missing something or if something is redundant as well.

Because we certainly, I think the conversation is always we want to narrow the list, or keep the list as narrow as possible while also meeting exactly what you just said, making sure there are multiple venues open to maintain food safety.

MR. EPSTEIN: Right. And as those come under the scope of review we'll certainly continue to provide comment here and any, you know, we have a lot of folks looking at the different materials. If you want any feedback on thoughts on various materials for control of, say, listeria monocytogenes, I'm always working with folks at the university in order to stay on top of what's available and what we need. Thank you.

MR. ELA: Thank you, Dave. We do appreciate it. Looks like, at this point, I believe we have two more speakers. But then I do
want to go around and give anybody we skipped a chance. We're going to go to Bill Denevan finally. Bill, go ahead.

MR. DENEVAN: I think I'm back in business here. Can you hear me?

MR. ELA: We can, go ahead, Bill.

MR. DENEVAN: Oh, great. Sorry about that. Okay, so anyway, my talk is going to be about fire blight control and new materials. And I'm wanting to encourage the Board to allow the use of the ingredient kasugamycin in organics to control the fire blight on apples and pears.

This formulation is commercially called kasumin for conventional growers at the moment. This product uses a few disallowed inerts right now. The manufacturer is committed to creating an organic version as long as the basic ingredient, kasugamycin, is allowed to be used by the Board.

Fire blight is by far the most dangerous disease that affects both apples and pears. It could kill young trees in one year and severely damage older trees and reduce their crop load.

Let me give you a little background on
my blight situation. I grew 30 acres of organic Bartletts for 35 years where I had to rip out, burn, spray my trees. I work as a grower rep for Viva Tierra, and I've seen thousands of acres of blight from Canada all the way to Cuyama.

And I'm also a board member of the California Apple Commission, and I hear the grower concerns. And constantly we have seminars, and I hear in the field that this is their biggest problem.

Until the year 2014, the NOSB allowed antibiotics to be used in production. And after that, we've had to improvise with brand new products that amounted to dangerous experiments.

During the last six years, at least 20 new organic blight control materials have hit the market, and none of them have really turned out to be that good. They cause damage, they cause the trees to be -- either that or not work. There's 11 recent studies that have decided -- check these new broad things, new materials for efficacy. And results from all these studies have shown that they're not as effective as the old antibiotics or the conventional kasumin.
Let's see, times are really tough for growers right now. The quantity and quality of farm labor is lacking. Global warming is causing warmer winters, the rising temperature is causing erratic bloom, like right now, allowing blight material to increase with a longer period of disease susceptibility. Instead of normal bloom of two weeks, we have a bloom that goes on for a month.

Orchardists plant their trees as a long term investment. It costs 30,000 to plant a modern orchard. We don't really begin to recoup our costs for four or five years with apples and seven years with pears.

Growers need some stability these days. They need to have confidence their trees will be protected from damage and death by having access to an effective organically approved blight product. And kasumin would be a game changer in that regard.

So that's pretty much -- it looks like my time has run out. Are there any questions?

MR. ELA: Are there any questions from the Board? Thank you, Bill. We will -- has a
petition been submitted for that?

MR. DENEVAN: Yes, there was, yesterday, by Zea Sonnabend, a former member of your group, and the California Apple Commission.

MR. ELA: Yes. So we will obviously be reviewing that, so thank you for the input on that.

MR. DENEVAN: Okay.

MR. ELA: I'm going to -- take care, Bill. I'm going to do a --

MR. DENEVAN: All right.

MR. ELA: -- quick of the people we skipped. We have one more speaker. But I just want to check if Cali Alexander, Vamshi Chintha, Jorge Gomez, Emily -- nope, excuse me, Dennis Dean, Ki Song Lee, or Annie Kustermann are on the line anywhere?

If you are, let Michelle know. Otherwise, we're going to go to Alesia Bock, and she will be our final speaker today. Alesia, please go ahead.

MS. BOCK: I'm Alesia, can you hear me?

MR. ELA: We can.

MS. BOCK: Normally, the last speaker
was between you and the reception. But today, I'm between you and your kitchen. So thank you for letting me share today.

I'm Alesia Bock with Agrisystems International. And I am in an organic sustainable food consulting company in Columbus, Ohio.

I just wanted to thank the NOP and NOSB for your service, send a warm welcome to the new members. Your job is very important and, if nothing else, it's clear by now that these issues are not black and white. Your diligence and thoughtful review of all stakeholder comments is appreciated. I miss your smiling faces, and I look forward to seeing everyone in person again.

Second, I wanted to share comments regarding the EPA List 4 inerts. I agree with OTA's written comments, and I urge the NOP to implement the 2015 NOSB recommendation to resolve this long-standing discrepancy.

This is an organic stakeholder priority, and I think it would be very disruptive to organic production if EPA List 4 were delisted without a valid replacement system. We need a current and reliable framework, and the EPA SCIL
listings to be a great place to start. While we can't continue to reference an unsupported EPA list, organic producers need this critical tool to ensure they have pest control materials available.

Finally, in regard to sunset materials, I agree with comments received so far in favor of relisting. These materials have been vetted against OFPA criteria, are considered essential for the reasons listed by the commenters, and do not have a viable organic alternative at this time.

Keep in mind that sometimes no comment received for a sunset material does not indicate that it is no longer needed. Sodium bicarbonate is a great example where it is so clearly needed that no comments are necessary.

If sunset materials are removed prematurely, it does nothing but restrict the organic industry while conventional food production continues unabated.

It is important to remember that our organic toolbox has steadily gotten smaller. Only six synthetics have been added, but 77 have been removed between 2008 and 2018. While the National
List is small compared to conventional food inputs, it is critical to organic stakeholders.

As an example, this is not the time to reduce sanitation material options for organic processors. In light of COVID, it is even more critical to ensure that materials are available where they are needed, i.e. cleaning materials.

A robust supply, as the previous commenter mentioned, are not only necessary for healthcare workers but also for food producers, especially in regional hot spots. This is something to consider when evaluating commercial availability.

During this time of uncertainty, it has become clear how dependent we are on each other. But the organic industry is strong. We may have differences of opinion, but we agree on the overarching goal to ensure that consumers have access to healthy organic products. This helps all of us. Thank you again for the opportunity to provide comment.

MR. ELA: Are there any questions for Alesia?

I have one question, Alesia, just can't
end the public comments without a question here.

But if we were to transition from List 4 to the Safer Choice program, are there any materials -- what would you propose to, if there are some discrepancies between the two lists, how would you propose that we resolve those discrepancies as we move forward?

MS. BOCK: You know, kind of where we left it a few years ago was that this was going to be a combined effort between USDA, NOSB, EPA. I know that there might be some discrepancies on the new list versus the old one, but doing nothing is probably not an option either.

So I think we have to take them on a case by case basis. And I'm not sure within the framework of the regulations for OFPA how it would work, but it feels like it has to be a combined effort between the two agencies at a minimum.

MR. ELA: Right. Any other questions for Alesia?

All right, congratulations to everybody. I just want to appreciate all the commenters, and the Board, and especially the NOP staff in the background that nobody sees for
hosting us and for all the comments. These things truly do help us deliberate on these often very difficult questions, and sometimes confusing. So the comments from everybody are greatly appreciated in helping us gain a collective wisdom of our stakeholders.

We are going to be recessing until April 29th, at which point we will be having the formal public meeting of the NOSB with a discussion between the Board members. That meeting will be virtual, yet again. But it will be on a different platform. It will be on the GlobalMeet platform.

And if you have not received instructions of how to get on that, either check the NOP website or contact the NOP staff. Obviously the Board doesn't have lots of votes up for this meeting, but the discussions at this meeting certainly are going to inform the votes in the fall meeting. So this is an important meeting in terms of setting the stage for further votes.

I do want to say that these have been sort of strange times, and we hear loud and clear the importance of in-person meetings, and our
ability to talk to people and have other groups meet and things. We take that very seriously. And it's my personal hope that we continue to have in-person meetings.

But given the circumstances this virtual meeting, I think, is a great way to go. So with that, does anybody on the Board have any final comments that we need to address, or Michelle, or any of the NOP program?

DR. TUCKER: I wanted to say thank you, Steve, that was beautifully done. It's incredibly complex to run two days, five hours each of this many people coming on for three minutes, going off for three minutes. You are a classy, cool guy and we are so grateful. Thank you very much.

MR. ELA: And Michelle, can we make sure we get that captured in the minutes and on the transcript?

MS. ARSENAULT: We're recording.

(Laughter.)

MS. ARSENAULT: Allegra is on the line with us, writing down every word.

MR. ELA: I need to put that up on my wall. Thank you, Jenny. And again, the NOP staff
in the background is what really makes this work.

So with that we will recess until April 29th. Thank you all for your patience. Sorry to be ten minutes over, but appreciate all the comments. Everybody take care, and have a good night. Michelle, did you want to say one last thing?

MS. ARSENAULT: I did, yes. I just want to let folks know that we should have the links to get into the GlobalMeet meeting posted on the NOSB's meeting page by early next week, I hope.

And just for those of you still on the phone, just a heads up. There will be four separate links. The meeting is two hours in the morning and two in the afternoon for two days. So there will be a separate link for each one of those sessions, just so you keep an eye out for that. Thank you, Steve.

MR. ELA: And the meeting, yes, we're going to GlobalMeet. It's just to keep this organic community nimble and to keep practicing your powers of figuring things out on the fly. So thank you, everybody for doing that.

And we won't see you nor hear you next Tuesday, except for the Board. But we hope you
attend, and follow us, and give us feedback. All right, take care, everybody.

MS. ARSENAULT: Thanks, everyone.

(Whereupon, the above-entitled matter went off the record at 5:11 p.m.)
The Board met telephonically at 11:00 a.m. EDT, 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, NOSB Advisory Board Specialist, National Organic Program
DAVID GLASGOW, Associate Deputy Administrator, National Organic Program
DEVON PATTILLO, Materials Specialist, National Organic Program
DR. JENNIFER TUCKER, Ph.D., Deputy Administrator, National Organic Program; Designated Federal Official
BRUCE SUMMERS, Administrator, Agricultural Marketing Service
SHANNON NALLY YANESSA, Assistant Director, Standards Division, National Organic Program
CONTENTS

Call to Order ............................................................. 4
Agenda Overview .................................................... 5
Introductions ......................................................... 27

Secretary's Report .................................................. 41

USDA/AMS/NOP Update ........................................... 54

Compliance, Accreditation, and Certification
Subcommittee ......................................................... 95

Materials Subcommittee ........................... 101
Topics: Discussion document: Research
Priorities 2020

Crops Committee
Topics: Proposal: Paper (Plant pots and other
crop production aids) - petitioned .............. 116

Discussion Document: Wild, native fish
for liquid fish products ............................ 143

Discussion Document: Biodegradable
biobased mulch annotation change .......... 158

2022 Sunset substances review:
Soap-based algicide/demossers ................. 180
Ammonium carbonate ................................. 181
Soaps, insecticidal ...................................... 183
Vitamin D3 ..................................................... 184
Aquatic plant extracts ................................. 185
Lignin sulfonate .............................................. 195
Sodium silicate ................................................. 196
EPA List 4 - Inerts of minimal concern ...... 198
Arsenic ............................................................ 226
Strychnine ....................................................... 226

Adjourn ......................................................... 229
(11:01 a.m.)

MS. ARSENAULT: Hello, everybody. This is Michelle from NOP. I have one minute after the hour, actually, apologies for my tardiness. We're going to get started and I believe I'm going to turn the mic over to Jenny Tucker who will call the NOSB meeting to order.

DR. TUCKER: Hello, everyone, and thank you so much for joining us today. My name is Jennifer Tucker. I'm the Deputy Administrator of the National Organic Program which is part of USDA's Agricultural Marketing Service or AMS.

I am serving as USDA's Designated Federal Officer for this meeting. This session continues our spring 2020 National Organic Standards Board Meeting which started last week with two online public comment sessions.

Steve Ela, the board chair, will be introducing board members in a little bit.

Right now, I'd like to briefly introduce and thank key National Organic Program team members. First, Michelle Arsenault, our Advisory Board Specialist. Michelle does an
amazing job with these meetings and given the specific dynamics of this online format, we truly applaud her commitment and skill. Now I know you folks are only listening but this is how you can applaud in Zoom. You wave both hands and that's the way you show applause. So everybody at home let's go ahead and do an applause for Michelle because we would be doing that together in the room. So occasionally, I will signal applause and that's how we do it.

I also want to thank David Glasgow, Associate Deputy Administrator, who has done a tremendous amount of work to bring us together like this today.

Devon Pattillo, our Agriculture Marketing Specialist has been wearing several hats over the last few months, including supporting the Board's technical needs. Thank you so, so much, Devon, for all your work.

And finally, Shannon Nally Yanessa is our Standards Division Director and is leading that team beautifully.

Let's take a quick look at our agenda. Michelle, will you advance to that slide?
We're meeting from 11:00 to 4:00 Eastern today and tomorrow with an hour break in the middle of each day. The agenda generally adheres to our standard format, except we completed comments last week. Here's the order of events on the screen.

Now, I'd like to turn the floor to the AMS Administrator, Bruce Summers. In that role, he leads the myriad of programs across our Agency from commodity-focused programs to transportation and marketing to laboratories to organics.

Bruce is my boss and it is a true, true honor to work for him. He's an incredibly thoughtful, caring, smart, and committed leader and I am so grateful he is here.

Bruce, I turn the floor to you.

MR. SUMMERS: All right, thank you, Jenny. Good morning, everybody. And I want to say welcome to the board members and to the broader organic community who have joined us for this virtual meeting. It's great to be able to talk to you all this morning. I'd much rather be in the same room with all of you, but that just isn't possible right now, is it?
I hope in October, it will be possible for us to get together in person again, but that's not certain either. So I think we have to be resilient, find other ways to do business, and embrace the technology, and keep moving forward.

And I want to congratulate you all for agreeing to hold this National Organic Standards Board meeting virtually. It might have been easier to simply postpone the meeting, but I think it's really critical that we keep working, keep making progress, maintain our focus on carrying out our responsibilities to the best of our ability in this very unusual situation we are finding ourselves in. So I think it's great that you all are proceeding with this important meeting despite all the challenges, and I congratulate you, and I thank you for that.

You know, at AMS, we're working really hard not to miss a beat either. We just keep providing all the service to our stakeholders that they need and expect and we're continuing to make progress on high-priority issues that we were dealing with before the pandemic and we're trying not to drop the ball and keep all of those really
high priority issues moving forward.

A little bit about AMS's status during this situation. All of our employees that can are working remotely. That's presented some challenges, but thankfully we have all of this technology like Zoom and Microsoft Teams and Skype, so really, we've been able to do a great job. But I think it's important to note and what some people may not realize while all that can are working remotely, that's a very small percentage of the AMS staff.

The vast majority of our employees don't work in an office. They work in food processing facilities. They work on terminal markets. They work on farms all over the country. They're along the border at points of entry and the grain elevators, inspecting grain for export.

So for thousands of our AMS employees, they are not working remotely. They are out on the line, the grading lines, the processing lines, at the borders, doing the grading and auditing work that is so important including our market news reporters that are walking the terminal markets collecting that critical information.
I'd like to give a little bit of a shout-out to the market news folks. AMS and USDA market news is kind of a unique thing. Not even very many countries around the world have a similar service, but that data that is mostly given to us voluntarily from our industry stakeholders and has proven to be really invaluable in helping keep the Secretary and his team up to date on what's going on out in the marketplace as well as members of Congress, and sometimes the White House as well.

So I'm proud of the job that all of our folks are doing, whether they're teleworking or out there grading products or collecting market news data, AMS is really operating wide open as best they can given the challenges.

So it's not business as usual, but we are open and we are working really hard to maintain our level of service while at the same time balancing out the need to protect the health of our employees. So we're trying very carefully to follow all the CDC guidelines and keep our folks safe and healthy through this process.

For the National Organic Program, Jenny will provide, I think, a lot more detail in her
remarks, but I want to say how proud I am of the NOP staff that they've continued to move forward on important initiatives like strengthening organic enforcement, like origin of livestock, even new initiatives with electronic import certificates, just naming a few.

So I really want you all to know we are doing everything we can to keep moving forward, keep the business open. I think the fact that you all are having this meeting today and tomorrow is an example of that. And so I think we're all doing our best to keep the business, so to speak, moving forward.

A few other details you may be interested in, AMS is lending a hand on a wide array of issues with respect to USDA's response to the COVID-19 situation. Many of you know, AMS purchases food. I mean that's one of our signature programs at AMS. In normal years, we buy that food for school lunch and Emergency Food Assistance Programs which is food going to food banks.

We buy a lot of food, billions of dollars of food every year. In recent years, that's gone up quite a bit. The last two years,
we've spent a lot of money and a lot of time purchasing food, surplus commodities that were impacted by the trade tariff situation. That's to the tune of a little over a billion dollars in 2018 and now it's 2019 and 2020, we're talking about another billion and a half just for trade mitigation. In addition, we spend almost a billion dollars a year in moving surplus commodities into the Emergency Food Assistance Program.

Well, now, with the new situation and you've seen the pictures on the news and you've heard the stories and I'm sure some of your guys that are producers are feeling this pain directly, but with the closure of the food service industry around the country, and the disruption to the supply chain that that's caused, there's a lot of food out in the countryside and it's having trouble getting into the retail sector which is where everyone is buying their food now.

So you may have heard that AMS will start next month which is only a couple days away in May. We will be purchasing $300 million worth of food a month, $100 million for fresh fruits and
vegetables, $100 million for dairy, and $100 million for meat. And we're going to work with the food service sector that's been so devastated by the closure of restaurants and hotels and things like that, we're going to use the food services' logistics power, so to speak, and their staff who don't have as much work to do as they used to, to procure food, pack it into boxes, and then deliver it to nonprofit organizations that provide food to families in need. So it's a brand new initiative. We've never done anything quite like this before.

We've had great support from the producer community, from the recipient agencies, and the food service folks are excited about this, too. So we are rapidly working through that contracting process. We hope to have it wrapped up this week to award contracts to food service distributors next week, and begin shipping food in boxes to food banks and other nonprofits the week after that. So by the middle of May, we should have a tremendous amount of high-quality food, all grown in the United States, ready to be shipped to food banks. And so we're really excited about
being involved in that program. It's a major effort, but one we are confident that we can deliver.

The other thing that AMS is doing with respect to COVID-19, we are working with our colleagues across the Department to work on the CARES Act legislation which calls for direct payments to producers. It's going to be across the board. Producers of specialty crops, dairy, meat, row crops, a very complicated structure we're trying to put in place, but we're working diligently, believe it or not, day and night and weekends, to get that program designed. We hope to have that published very soon and begin implementation.

Secretary of Agriculture Sonny Perdue has asked the implementation of that program start by the end of May, so a very short time line involving and impacting tens of thousands, probably hundreds of thousands of producers, including small, local and regional including organic producers. Really, hopefully, no farmers will be left out of that program. And a lot of details still to be worked out on how producers
can apply and work the process through, but we are working through all those details now.

It's somewhat more complicated for specialty crops, for example, because specialty crops typically aren't involved in these kind of programs the way like corn and soybeans and some of those types of crops are. So they have a lot of work to do, but we are working as fast as we can to get that program stood up and ready to be implemented.

I don't want to use all the time here. I want to save some time for questions.

Jenny, let me just say thank you to the board, thank you to Chairman Steve Ela for continuing to represent the organic community through the NOSB.

I always want to say at the end because I never want you guys to think we forgot about this. This partnership that we have with the NOSB between USDA and AMS and NOSB is really unique and extremely important to us. We certainly value your recommendations which you prepare for USDA, and we're just really pleased to have this relationship and be able to work with you all. And I'm so
thrilled that you all are having this meeting today.

So thank you very much for your resilience and willing to try something brand new. And I know it's going to be successful. So thank you very much.

And Jenny, I'm happy to take some questions if anybody wants to delve into any of those issues further or anything else they might want to talk about.

DR. TUCKER: Chris, thank you so, so much. We are truly thankful to you for joining us today.

In a couple of minutes, I will turn it over to Steve Ela to facilitate some Q and A from the board for Bruce, but first, before I do that, let me thank the National Organic Standards Board myself. These 15 members are amazing people. They're bringing a diverse set of experiences and perspectives to the table today and we are incredibly grateful for their service and their good spirit and flexibility as we planned this meeting's approach.

So particularly, a big thank you to
Steve, the chair of the board and the chair of this meeting. So let's -- I don't know if you can activate my camera again, Michelle, but we're going to do another applause for Steve to thank him for his service.

And Steve, I'm going to turn it over to you for Q and A for Bruce and then for a formal roll call with the board. So applause to everyone attending. Thank you so much.

Steve, over to you.

MR. ELA: Thank you, Jenny, and thank you, Bruce. I know your schedule is very busy and we appreciate you taking time to come give us a few minutes and I also appreciated when we had our new member training back in February when we all could still move around, but you came in and introduced yourself personally to the new members. I think it's important to give some context for what we all do.

So I'll just go right to some questions here. Emily has her hand raised. So Emily, would you address Bruce?

MS. OAKLEY: Thank you so much, Bruce, for your reassurances that organic producers, and
direct to consumer growers, and diverse farm
growers will be able to access the USDA's COVID
funding, particularly the CARES Act. I'm
wondering also if there are steps for purchases
from the producers that might otherwise have a
difficult time accessing some of that direct
purchasing money. And what those steps might be
that you know of now know of now and can share with
us.

MR. SUMMERS: That's a great question, Emily. Thank you. I probably should have
addressed that directly. So thank you for raising
that.

So yes, the Box Program, the Farmers
to Families Box that we're calling it, we
definitely are working to set that up in a way that
small, local, regional sectors can supply food into
that program.

We also expect that many food hubs will
submit proposals to be on the food service
distribution side and so we're excited to have the
opportunity to work with not only small producers,
but also some of the food hubs that have been very
successful and have very sophisticated
distribution systems already set up. That's the logistics we want to take advantage of. And so we have absolutely set this box program up with them in mind as well as conventional. But absolutely, expect them to have a big role in that.

Thank you for that question. I should have said that directly, so I appreciate you letting me say that.

MS. OAKLEY: Thank you.

MR. ELA: And Bruce, I know during the public comment webinar there was some rumblings among the group of -- I know we were personally able to accept the PPP loans as a number of the other growers said that their banks -- or people said that that was not allowed. I know that's been kind of readdressed at this point with the new legislation. But I know that there was certainly some confusion in the community, especially among smaller banks. So your support on keeping that moving I think is greatly appreciated and is a real help for all of us.

It looks like Nate has a question.

MR. POWELL-PALM: Thanks again, so
much for joining us, Bruce. We really appreciate your time. And I also wanted to thank you for mentioning the origin of livestock. As you well know at this point, the entire organic dairy sector or the entire organic industry is really eager for this final rule to be made and to clarify and clean up the origin of livestock component pertaining to the dairy sector.

And so I just wanted to emphasize on behalf of the dairy sector that we're really hoping this rule goes to final rule and we're able to have -- experience a little bit of a clean-up of the oversupply of milk that we've seen due to a lack of clarity in the respective transition status of continued transition of dairy heifers from conventional to organic, so I really appreciate your time today.

MR. SUMMERS: Yes, thanks, Nate. So on that, it will go to a final. I mean we are moving this. It's really in the final stages of clearance within the Department.

So Jenny, this is a nice thing about being virtual, she can't kick me if I say too much, but I think she'll give you more details on the
exact status of that, but it's getting very close to being able to leave the Department. It's on track.

MR. ELA: Thanks, Bruce. The oral comments, that was a continuous feed from our stakeholders of the importance of that rule. So we appreciate you shepherding that through.

It looks like Scott has a question. Scott, we're not hearing you.

MR. RICE: Sorry about that. I had to unmute there for a second. Can you hear me now?

MR. ELA: Yes, we've got you.

MR. RICE: Great. Thanks again, Bruce. On a similar note to the origin of livestock, I had a question for you further on that strengthening organic enforcement rule that we're all eagerly awaiting. I understand that's in final, final clearance as well, but I just wanted to reiterate the importance of that rule, especially in light of kind of some adjusted day-to-day activities that the organic community is adapting to now. Certainly, certifiers looking at different ways of conducting our work, the NOP and Jenny and her team doing the same with
accreditation oversight and just became now more important than it already was in light of all those things. Hopefully, we can see that come out despite some of the challenges we're all seeing with the pandemic.

MR. SUMMERS: Yes, thanks for that, Scott. I don't really think that the COVID pandemic is going to slow that down. That's moving forward. The team has done a great job of kind of maintaining their focus on that. It's going to be a bit of a race, I think, to see which comes out right, origin of livestock or the strengthening organic enforcement. Maybe we can see both on the same day. Wouldn't that be a lot of reading all at one time? But they are getting very close. You probably maybe are getting tired of hearing that, but the strengthening organic enforcement is something that the Secretary has supported and he's excited about getting this out. And I think we're really close. So hang in there, but we're open. The Federal Register is open. OBPA and OMB are open, so these rules are moving forward.

MR. RICE: Thanks. I appreciate hearing that.
MR. ELA: Bruce, I have a question for myself and I think it came up during the National Organic Coalition meeting yesterday as well. I know there are a lot of different entities out there that have control, but certainly one of the main concerns has been farmers markets and their impact on specialty crop producers in making sure that markets are declared essential even though back in our state they are. The local health departments still have some jurisdiction and that has slowed some openings, but I think that anything the Department can do, AMS in general for making sure those markets are essential and of course, they're going to want to follow all of the proper protocols.

Our argument has been that if people don't shop at a market, they're likely going to go to a grocery store. So having a market closed -- the only thing it does is drive people back to a grocery store and it doesn't really benefit the specialty crop producers or our consumers. And so really trying to help the various states and local entities find a good way to keep markets safe, but also open because otherwise we're -- otherwise
I'd say we're back to the grocery store model and I think markets shouldn't have to go way above that, but we do want them safe. So anything you can do there that would be greatly appreciated.

MR. SUMMERS: Yeah, thanks for that, Steve. You know, I've heard some really innovative stories about what some markets are doing out in the countryside to stay open, but also maintain the social distancing and doing some things like that, additional hand-washing facilities and things, so it's kind of neat to see what's going on out there.

You know, we have a USDA farmers market every Friday outside of -- on the side of the Mall right next to the administration building called the Whitten Building of USDA, and AMS is responsible for pulling that together and kind of managing that market from May until October. And it's closed right now because really there's nobody going downtown. Everybody in D.C. is primarily working remotely, other than a handful that actually go into the building.

Of course, the museums are closed, so a lot of the tourists that are usually walking the
Mall this time of year aren't there. So it makes sense for the market to be closed right now.

But as we look to what's going to happen this summer and what kind of reopening we're all going to try to implement in our states and cities, we're looking at what we can do at the USDA farmers market to implement the types of practices that would keep people safe and allow them to keep shopping. So we kind of view that USDA farmers market as a bit of a laboratory. That's why it was put up a decade or so ago. And so we just view this as another challenge. What can we do with USDA farmers market to maybe show what other markets are doing to ensure health and safety and maybe some other innovative things we can do. So we are wrestling with that from both angles, Steve, what's going on out in the countryside, but what are we going to do in Washington, D.C. and we hope we can provide some leadership there and can find a way to keep that open.

So it's a really vibrant market. If you've ever been there on a Friday afternoon, it's a really neat thing to have right on the side of the Capitol Mall. It's something we're definitely
talking about and hoping we can get back in there at some point and get going on as we reopen and whatever reopen looks like, right? I know we're all grappling with that now.

MR. ELA: And I think as a national organization if you can guys can help highlight what is working and isn't working in the various states just so that people don't have to recreate the wheel on a state by state basis, but say well, California tried this. These are the protocols that are working and help kind of accumulate some of that data, it would be wonderful.

MR. SUMMERS: And so we're looking at some things we can do under our Transportation and Marketing Program where we have different grants and cooperative agreements. We work with a lot of universities. And we're looking right now, looking at possibilities of how we can help fund some research and identify best practices that are going on. We know that's only helpful if it's really quick feedback, so we're kind of looking at kind of some rapid response types of studies we can do and case studies we can pull together and then make them available to the primarily
local, regional organic sector of agriculture. So that's something we're kicking around. I hope we might have an announcement on that in a week or two.

But no, there seems to be our -- we are -- and AMS is kind of neat, right? We look at agriculture across the whole board and I want you to know we are looking at issues and ways that we can work with the farmers markets and the food hubs and that local regional sector and organic sector to hopefully provide some resources that will be helpful immediately, not a year from now.

MR. ELA: Thank you so much. Jenny, it looks like I don't see any other questions from the board and personally and as board chair, thank you, Bruce, for taking the time to come in. It's a great contact and a great context of the board.

MR. SUMMERS: Thank you very much, you all, and I hope you have a great virtual meeting. Jenny, anything else you need from me?

DR. TUCKER: Bruce, thank you so much for being here. It was great to have you be here with the board today. It makes it an even more special occasion so thank you for everything you
do for the agency.

MR. SUMMERS: I don't know about that, but I appreciate the invitation and I appreciate your questions, you all. Take care.

DR. TUCKER: Be well. Let's give Bruce a round of applause here. Wave your hands. So thank you very, very much.

And Steve, the show is yours for the official roll call of the board members and then the various reports for the board.

MR. ELA: Thank you very much, Jenny. And thank you to everybody in the virtual audience and on the board. I know some of you are very used to virtual meetings, some of us aren't so much. So I think it's been a good morning for us all and keeps our brains nimble.

At this point I'd like to do a roll call of the board and have each of you do a short introduction of yourselves as we go through. So if you could at least turn your video on for the board members, if you would so like for each of these to be -- we'll turn the video off after this so that we can give the stakeholders a chance to see who has their haircut, who has a big beard or
not and it gives the stakeholders context.

Sue, could we start with you?

MS. BAIRD: Yes, hi. I tried to start the video and could not. I'm Sue Baird and I'm from Missouri. I represent special interest groups. I am the Executive Director of Mid-America Food Hub. I'm also with Food Hub, Mid-America Organic Association, and I've had many years of experience in the organic world and thank you for having me.

MR. ELA: Thank you, Sue. Asa, continue.

MR. BRADMAN: Thank you. I'm Asa Bradman and I'm a professor at UC Berkeley in the Center for Environmental Research and Children's Health and have worked for many years on issues around environmental health and children, families, and farm workers, and other agricultural communities in California. I have a big of a corona hair here. I'm going to get my daughter to give me a haircut this weekend.

MR. ELA: I might have the board members say what year you're in. Asa is in his fourth year. Sue is in the fourth year as well.
Jesse.

MR. BUIE: Jesse Buie. I'm president of Ole Brook Organics in Brookhaven, Mississippi. I'm certified in mixed vegetables and melons and I also have my handling certification. I sit in the -- one of the organic producer slots. I think this is my last year. And my hair is much grayer.

MR. ELA: We'll have to do a study of board members, just like presidents, to see if our hair turns gray after being on the board.

Rick, you're next.

MR. GREENWOOD: Okay, thank you. I'm Rick Greenwood, professor at UCLA. I sit in one of the environmental seats. I'm a California organic avocado grower which I know the apple people hate, but have been a certified organic grower for about 20 years. And the only thing I can say is I have either the good fortune or the misfortune to be on the California Governor's COVID Testing Task Force which is taking way more time than I would like. But it's important work, as you know, because it certainly has touched everyone's lives. What we're trying to do is figure out ways to get things back to normal.
In terms of hair, I don't have any, so who cares?

MR. ELA: Excellent. And Rick, you're in your third year, is that right?

MR. GREENWOOD: I think it's my 12th year, actually.

(Laughter.)

MR. ELA: It may seem like it.

Jerry, I skipped over you, I apologize.

So Jerry, you're next.

MR. D'AMORE: Not a problem. Jerry D'Amore, class of 2025, so brand new. I spent the last 20 years specializing in berry crops. Prior to that, 15 years of owning and operating a hydroponic farm that did a lot of lettuces and herbs and then later on tomatoes, cucumbers, and peppers.

I'm currently spending an awful lot of time on the logistical portion of our business, that piece that gets the produce from the farms to the distribution centers which has taken a hit.

I'm not sure everybody recognizes the extent of that.

And I'm delighted to be on this board. It's an honor and a privilege. Thank you.
MR. ELA: Kim, you are next as a new member.

MS. HUSEMAN: Hi, good morning. My name is Kimberly Huseman. I, too, am part of the freshman class. This is my first board meeting as a board member. I sit on the handlers seat. Currently, I'm the Director of Specialty Ingredient Purchasing for Pilgrim's. My background is in commodity trading and logistics, both on the conventional and the organic side.

I'm really excited for this meeting and in the future ones. I think coming in especially in the freshman class of a virtual meeting, this is, although a new environment for everybody, it's our first one. So it's exciting to be a part of this -- this new world too.

MR. ELA: Mindee, you are next.

MS. JEFFERY: So hello, everyone. I am a retailer. I've been around organic food retailing for about 20 years and believe me, if you could see the big white streak in my hair, but I really need somebody to shave the sides.

I currently work for Eastside Food Co-op in northeast Minneapolis and I feel grateful
and if you could see the response of our local grocery community. We serve the local community.

I feel so humbled and grateful to be working with great teams across the country so we can provide food to this community and to seeing all the hard work and people being brave about showing up for work every day. So thanks for all the work you do all over the country, providing organic food to everyone.

MR. ELA: Thank you, Mindee. Dave.

MR. MORTENSEN: I'm Dave Mortensen and I am in my fourth year. I am serving the scientist seat of the board. I'm a faculty member and chair of the Agriculture, Nutrition, and Food Systems Department at the University of New Hampshire. I'm sitting up on the second floor of my house looking out. We had a hard frost here last night, so we're still kind of on the tail end of the winter into spring here.

My work over the 30-plus years at several universities has focused on predominantly on farm and farmer participatory research focused on organic systems and sustainable agricultural systems, ecosystems and service measurements and
that sort of thing. Delighted to be here.

MR. ELA: Thank you, Dave. Emily.

MS. OAKLEY: Thank you, Steve. I'm Emily Oakley. I serve as one of the farmer representatives. I'm a full-time farmer in Oklahoma. I grow diverse organic vegetables and I sell those directly to consumers primarily and of course that's definitely been challenging in the last couple of months, but we are all adjusting to that. I am in my fifth and final year and I definitely have more --

MR. ELA: I just lost my audio -- Michelle, can you hear still hear me? Okay.

MR. BUIE: Did we lose Emily?

MR. ELA: Well, she just cut out, so we'll find out. I thought it might be me, but we'll move on to Nate.

MR. POWELL-PALM: Hi, everybody. Nate Powell-Palm. I'm based out of Bozeman, Montana. I'm part of the freshman class as well, first year. We are in the thick of planting our spring grains. We're raising yellow peas and spelts and durum and flax for fiber this year. And I'm really eager to turn the cows out on to
pasture, but it's still a little bit short, so it's exciting when spring finally ramps up.

I've been certified organic since 2008 and run a first-generation grain and cattle operation.

MR. ELA: Thanks, Nate. Scott.

MR. RICE: Good morning, everybody. Scott Rice. I'm the external affairs coordinator with the Washington State Department of Ag organic programs and I sit in the certifier's seat. I've been with WSDA for about 13 years and have been involved in all aspects of certification from review to a little bit of infection to our accreditation work. And this is my fifth and final year on the board.

I am definitely sporting a little bit of COVID shag. I did update my headshot to be a little more reflective of what I am now, but this is what I came up with and Michelle thought that maybe that wasn't the best option, so.

MR. ELA: I think Michelle was right when I saw that picture.

A-dae, you're next.

MS. ROMERO-BRIONES: Good morning.
A-dae Romero-Briones and I work for First Nations Development Institute. I run the native agriculture and food systems initiative. So we work with indigenous producers and community food projects across the country, Alaska, and Hawaii.

I sit in the consumer seat and I am in my last year, second to last meeting. Thanks.

MR. ELA: Thank you, A-dae. Dan, you're next.

DR. SEITZ: Hi, everyone. My name is Dan Seitz. I'm also in my fifth and last year. I serve as a public member consumer representative on the board. I live in the beautiful Berkshires of western Massachusetts. My regular work is serving as the Executive Director of the Council on Naturopathic Medical Education which accredits doctoral programs in naturopathic medicine and I'm also on the board of a food co-op in our town here.

I've been involved with the alternative and natural health movement for about 30 years as an educator, accredditor, and regulator. And the great thing about natural health professions is that they understand the importance of real food.
for keeping people healthy and building strong immune systems.

And my formal professional background is in law and higher education. And just to say it's been an honor serving on the board and an honor serving with all of my colleagues. Thank you.

MR. ELA: Thank you, Dan. Wood. Wood, we're not hearing you.

MR. WOOD: Sorry, I failed there on my first move as a board member. This is Wood Turner. I'm a senior vice president for impact with Agriculture Capital and AC Foods which is the grocer, packer, and shipper of a variety of permanent crops on the West Coast including organic blueberries and organic table grapes. I'm trained as an environmental and landscape planner and I'm focused on sustainability and climate solutions.

I grew up in North Carolina, and after long stretches in Seattle and New Hampshire, I'm now based in California and am thrilled to be on the board. Thanks.

CHAIRMAN ELA: Thank you. Except for myself, have I missed anybody? I'm good at doing
that.

Now I'll introduce myself. I'm Steve Ela, obviously chair of the board. I'm in my fourth year, and am a fruit grower out in western Colorado, on the far western side of the state, where we grow peaches, pears, apples, plums, and some heirloom tomatoes, and no avocados.

With that, I think that gets us through the roll call, and next I'll turn it over. I just want to do a little bit of housekeeping.

For any votes we take today, I'm just going to go down the list and call on everybody so they can verbally vote.

I believe we only have one vote scheduled so it's not a big deal, but just so our stakeholders know how we're going to handle votes.

And then let me turn it over to Jesse for the Secretary's Report.

MR. BUIE: Okay. The minutes of the fall 2019 biannual public meeting have been distributed to the board members ahead of this meeting. Are there any corrections or comments?

Hearing none, the --
CHAIRMAN ELA: Hearing --

MR. BUIE: Okay.

CHAIRMAN ELA: Yeah, hearing none, we'll accept the minutes as they are. Thank you very much, Jesse. We do appreciate it.

Okay, and next we will go down to the Chair's Report from NOSB.

So I'd just like to again start off by thanking the board, and the program, and AMS for allowing us to have this meeting in these extraordinary times.

Today I think I'd like to focus on three things. I want to talk about the nominations coming up.

I kind of want to return to making sure we're all focused on the big picture of what we stand for in organics, and then talk a little bit about the consistency, and especially highlight again all the work on fraud and organic certification.

I know personally the great thing about an in-person meeting is that once I get there, I am focused strictly on NOSB things for the most part, except for in some of the off-hours when I'm
dealing with my own farm things.

I know it's a lot harder when you're working from home to not be distracted by other things, so I really appreciate all the board members and our stakeholders taking the time to carve out this meeting when I know that work things are right outside the door, kids are right there, and various other things.

So thank you for taking the focus even when we have many distractions, including the COVID crisis in our life.

I really wanted to look at the nominations coming up. We have five chairs open. As Michelle noted, we have two farmer seats, two public interest or consumer seats, one USDA accredited certification seat.

We're losing five great board members that have served in those seats, and I really hope our stakeholders and board members will encourage very capable and able people to apply.

I am especially concerned in the sense that we're losing people that really give us great diversity on the board. Jesse is from the south; Dave represents native populations.
And so I really hope that our stakeholders and both A-dae and Jesse will kind of beat the bushes down in those areas. I think it's really important that we have somebody from the south and somebody from native populations, and you know, and any of the under-served communities.

And it's a message to the NOP as well, and the program. And on up the chain, and I think that those are very important aspects to the board that should be filled as we look at nominations.

But I think it's especially critical at this juncture that we keep the diversity aspect on the board.

Yeah, we certainly heard from some of the other growers on the public comment about the timing of the meeting. You know, obviously virtual meetings are much easier to attend, and we've seen some comments about the economics of attending meetings, and plane fares, and the hotel rooms, and such, so the virtual side of that really benefits.

On the other hand, we all know how important it is, and the face-to-face
interactions, and the personal conversations, as well as to seeing body language, and all those things in a person-to-person meeting. So I'm hoping that this virtual meeting will not become permanent.

I think our stakeholders have said how important those person-to-person meetings are, and I look forward to going back to the person-to-person format, but I think it will pay -- you know, in some way maybe we can work on how to keep some of that meeting, even when we're in person-to-person, be able to live stream it or webcast it, or something so that people can attend if they don't have the means or the time to attend the person-to-person meeting.

The other thing, and it struck me on one of the public comments, is that the NOSB really works so much on materials and managing, and looking at the National List, but we also work on the big picture, and that we don't want to lose track of the big picture in organics as we look at all these materials.

And I think that's a very good underlying mantra that I certainly took to heart.
And you know, we can get bogged down in these materials. They're all very critical and important to the organic industry, but we do continue to need to look at the big picture.

This meeting obviously was upended by the COVID crisis. I am very thankful that we had our new member training for our five new members right before all this hit because I think that member training being in person is critical, and the new members can chime in on that.

But I also know that inspections and certifications are being upended by this. You know, when talking to the program, a lot of the certifier audits are done desktop, and looking at possible fraud that can be done desktop so it is continuing, but we do know in-person inspections are important.

I know our certifiers are being nimble in how they approach certifications when they can't actually visit farms right now. But I also know it has an impact on new people wanting certification that have never had one before.

That truly requires an in-person visit, so I'm keeping my fingers crossed, but the organic
community can continue to grow by welcoming in new people, people that have gone through the transition and maybe were very much looking forward to being fully certified.

I'm hoping that we'll find our ways to make that happen for those people, and also keep our current people that are certified whole and able to continue transactions.

I mean, it was brought up with Bruce Summers, the insecurity of farms at this point. And you know, the dairy farmers certainly have been feeling that for a number of years, and they've let us know that.

But I think some people are doing very well, some people are really struggling, depending on their market streams, some people don't know yet.

But, you know, organic farming has always been about resiliency and ability to adapt, and I see that happening all the time with farmers, but I just want to highlight that there's a tremendous amount of insecurity out there among all of us just of what will happen this year economically, and whether we will have access to
some of those federal programs, and how those will be distributed.

And so I'm going to, you know, ask the program and AMS to continue to help support us as organic farmers and what we do.

I truly believe we are more resilient than many other farms, but that doesn't mean we're bulletproof, and I recognize on our own farm, as well as many others, that that difficulty and uncertainty, we don't have an option to stop farming or close the business for a year, and I don't know anybody that does.

But, and so we all have to continue, and I'm going to recognize that.

You know, the organic community, we hear a lot of the divisions in our community at these meetings, and rightly so. You know, we have the NOSB to argue out the gray areas and such.

But I also really want to recognize and remember that the USDA puts tremendous resources into this, that we have the backing of a large staff and of inspectors, and that is all being paid for through much of our tax money.

And so despite the divisions in our
community and the arguments over what is and isn't organic, I think it's always important to remember that it would be really hard to self-fund this program, like that was often done before the NOP.

And so I appreciate that support and the background that many of us don't see, and I always kind of want to remind our stakeholders that we have that, and it's not often seen.

In terms of consistency, we obviously on this board tend to deal with the inconsistencies.

It comes into play when there are inconsistencies between certifiers, whether it's paper pots, or hydroponics, or fatty alcohols.

We deal with those inconsistencies, but we know that those are the rare things and that most of what certifiers do are very consistent.

And again, I want to remind us of that, of you know, what we really do, we do it so well, and that often this board is the conduit for those inconsistencies.

And that's as it should be, that's why we're here, to listen to stakeholders and to listen to those arguments.
I truly believe that organics -- and I explain this to a lot of people that question organics and whether it's a meaningful label -- but there is no black and white between organics and conventional.

There's a continuum of gray areas. And our charge, and the NOP's charge, is to draw a line in that gray area somewhere and say this is organic and this isn't.

And I know we can argue whether that line should be an inch one way or the other, and we do argue that, and those are important arguments, but we really do distinguish the broader pool of organic from conventional, and soil building, and these various practices that really do help protect the environment and protect human health.

We may not always hit the mark exactly, but I think we do a darn good job of that.

With that, I hope that with the strength in organic enforcement coming out, the Origin of Livestock, as those documents come out and are put into rulemaking, and are published for public comment, I can't stress enough to our stakeholders
how important it is for you all to, and for members of the NOSB ourselves, to individually comment on those in that rulemaking process.

It is our voice that got them this far through the NOSB, and now they are actually out of the NOSB's hands and into the rulemaking process, and those comments on the rulemaking process can really make a big difference.

So I'll remind people that when those come out, to make those comments and help push them over the finish line. We all know how important those documents are.

And finally, I just want to say that as we talk about fraud and the importance of how that affects our markets, and monitoring that, that we often are our best own inspectors and monitors.

I know so many of the fraud cases get brought up by other organic growers saying something seems strange, or something seems out of line, or this doesn't seem consistent.

And so especially in times of COVID when inspectors may not be able to be out as much, personally I hope that we, the board, and stakeholders will continue to self-police and
monitor ourselves, and let the program know when there might be problems.

This is a truly unique meeting in many ways. It's virtual. I believe we only have one vote, which is highly unusual for an NOSB meeting.

It does make it easier, but when you look at the fall meeting, I think we possibly will make up for that in numbers of votes.

The Handling Committee, I don't have an exact count. It has six or seven petitions before them. It's a lot. It's a lot of work for the committee. The Crops Committee has several coming up, and of course, Livestock has a couple as well.

So I'm looking forward to working with the new board members, and their experience and their energy. We hope to make use of expertise of the outgoing board members as much as we can before they leave. And I really hope for, again, that diversity of nominations and selections.

The board does important work, and it's kind of stunning sometimes to see what the collective wisdom of 15 people pops up with.

With that, I thank you all for being
nimble, for attending on short notice, for not always being able to know what the agenda was, or whether you should make reservations or not.

But it's good to be here. It's a pleasure to be chair of some really good people. And with that, that is my Chair's Report, and we'll move on.

Are there any questions from the board real quickly before we move on to the National Organic Program Report that Jenny will give?

Great. With that, Jenny, I'd like to turn it back to you.

I know you put a lovely report up on the Organic Integrity Learning Center, but I'm sure you'll add to that here. And I'd like you to take the floor.

DR. TUCKER: Okay, thank you. And Steve, thank you so much for that terrific report. What a lovely sort of encapsulation, so thank you.

So National Organic Program update. As Steve just mentioned, this is sort of part two of our National Organic Standards Board update.

There is a longer update that's the standard length that we would generally do for
these presentations. It's about 45 or 46 minutes.

It is housed in the Learning Center.

And so up on the screen right now is a look at what the different components of that presentation include.

That presentation's actually delivered by me and by a number of NOP staff members, so it's a good sort of state of the program.

If you don't already have a Learning Center account, the information on how to get one is up on your screen.

Once you go in, you will be able to click on a course called NOP Presentations.

We've posted presentations from earlier this year, as well as this update presentation.

So today I'm going to keep it fairly short, and so we can continue to move ahead with the agenda.

Michelle, next slide.

Okay. So yeah, Michelle, we seem to have lost a slide.

I did have a slide on USDA response with the website for coronavirus right before that. Yeah.
I just want folks to note this website. Bruce gave an overview of what is going on right now.

I would encourage you to keep an eye on the website for the department's coronavirus response. Things continue to evolve. Different agencies are finding different approaches and more flexibilities in different areas, which do impact organic farmers.

And so this is a good sort of centralized resource of what's going on in the department as USDA continues to monitor markets and supply chains. So I just wanted to highlight that website as a resource for you.

Okay, Michelle, let's go back to where we were before. One more. Great, okay.

And so a real take-home for the past few weeks -- and Steve discussed this -- is how robust and resilient this public-private partnership of organic certification really is, particularly in these times of uncertainty.

And so the NOP is fully operational and teleworking. We're continuing our enforcement work. We are conducting desk audits with
certifiers and advancing mission-critical projects. Hosting this NOSB meeting is part of that work.

We're also continuing to engage with the community virtually through telephones and Zoom meetings. We are periodically going into the office to get mail, but we do ask that any appeals, reinstatement requests, and complaints be submitted electronically.

And certifiers, if you're out there helping us get those otherwise paper documents to us would be helpful. Certifiers are also continuing their operation oversight.

The process to become certified has not changed, and each step is critical to ensuring compliance. We are encouraging critical thinking about ways to ensure compliance in the current environment, and the regulations drive that compliance, and certifiers must remain true to the regulations during this period.

So, you know, for example, we've been asked if the onsite inspection requirement could be modified for new applicants for organic certification. The initial onsite inspection at
205.403(a)(1) is a fundamental requirement.

A virtual inspection cannot replace an initial onsite inspection, and this may delay new organic certifications. I bring it up here because it is a question that we’ve gotten enough.

I want to make sure that we are consistent in how certifiers are applying that part of the regulations. Once certified, an operation remains certified until the operation surrenders or is suspended or revoked.

And so 205.406 does address different approaches to managing the continuation of certification. And this is where different risk-based oversight approaches may be appropriate to ensure ongoing compliance until an onsite inspection can be conducted.

So any certified operations that are listening, if you have questions, you can contact your certifier with specific questions about your own certification status and inspection approaches.

I also want to mention community support. We’ve seen certifiers and other
organizations working together, the local regional level to connect farmers with each other and with buyers.

We've heard some farmers actually have very fast growing CSAs and need produce to meet consumer needs, while other farms that mainly sell to restaurants have lost a market access point. And so we are seeing farmers find each other, and we see certifiers creating support networks to connect them.

The Organic Integrity Database can be a useful tool for finding both buyers and sellers of specific commodities and specific geography, so that community support is vital to the organic partnership, and organic farmers are also part of that local and regional network often.

And so all three of these organizations, constructs, National Organic Program certifiers and the community continue to support resiliency and robustness.

Next slide.

Going to reiterate where we are with a couple of rulemaking updates. Bruce mentioned both of these.
So more specifically of where we are in the process on both of these.

Strengthening Organic Enforcement. This is a proposed rule. The Office of Management and Budget came back to us with questions. Those came from other agencies as well, so that's called inter-agency review.

We have sent the rule back to them, so it is with Office of Management and Budget now. As soon as they decide that it's ready to go, we will publish the rule and open public comment.

So OMB is the final step to clearing the rule, and it will go to the Federal Register shortly after that. And again, we've talked about what that rule has in it in the past, but again I encourage you to submit your comments once it's published.

For Origin of Livestock, we have a draft final rule that is complete and is nearing the end of legal review. It then clears the department, and then goes to Office of Management and Budget. Now it will go through departmental review. That process has started.

We've done many briefings on Origin of
Livestock with both the Under Secretary and Secretary's Office, so this is a rule that is sort of well understood throughout the department, which is why Bruce sounded confident in the speed at which it will move through departmental clearance.

It then does go to OMB. OMB officially gets 90 days to review rules for Strengthening Organic Enforcement.

We got their comments at the very sort of end of that 90 days, so the 90 days is followed by whatever resolution period is needed to respond to their comments.

Next slide.

We sent out an insider on this, an Organic Insider on this last night, and so I did want to highlight it here.

It is a major milestone in fulfilling the requirements of the Farm Bill.

The electronic version of the NOP and the organic import certificate has been released, or in the process of being released in CBP's import shipment filing system.

It's optional for now. It was called
for in the Farm Bill.

It will be proposed in the SOE proposed rule, and well, based on comments, we hope will be a final requirement once the final rule is published.

This will, once data starts being entered into the system, allow us to access data from import certificates and build analytical tools.

And so U.S. importers that wish to request the NOP import certificate from exporters in other countries and want to include the import certificate in their import filings may start to do so.

And so we'll start this on a voluntary basis. We will have more outreach and pilot studies now that it is being deployed.

Interestingly, the way that the ACE system, that import certificate system, works is kind of like us in a public-private partnership, that once CBP deploys something, then there are a lot of software vendors and import filers that have to update their own software system.

So the fact that it's available through
CBP doesn't mean that every single software vendor has actually implemented that quite yet.

And so import filers who are interested in using the new certificate will need to contact their software vendors or their customs brokers to see what the status of that deployment is.

Again, we are developing technology and the rules sort of side by side here, so it happens that the technology's now just a little bit ahead of the proposed rule.

The proposed rule, once it comes out, will explain more how this import certificate process will work. It's just, we've deployed the technology before we were able to publish the proposed rule.

But once we get the proposed rule, it will articulate how this process will be required if it goes final.

Michelle, next slide.

I also wanted to reiterate the importance of nominations for the National Organic Standards Board.

It continues to be open. We're actually about halfway through the announcement
period now, about halfway through. The submission deadline is June 1, 2020.

We have gotten some applications in already.

There are five vacancies, and you heard from the board members what year they're in tells you who is sort of rolling off, and what positions we'll be filling.

So two individuals who own or operate a farming operation or employees of those operations, two individuals who represent public interest or consumer interest groups, and one individual who is a USDA accredited certifying agent.

So we have the website up here for the nominations process, though if you just type in USDA NOP NOSB call for nominations process, you'll get to it through Google, as well.

So we do encourage nominations. We are interested in diversity in all of its forms, so I want to echo Steve's comment on that.

The ability to represent different populations, different geographies, different domains, different areas of expertise, different
perspectives, we welcome and value a diverse pool of candidates.

So please share this information with anyone you think might be interested.

Next slide.

And this is actually also the last slide of this abbreviated presentation. We have continued to grow the program.

During public comments last week, there was sort of a question of where are resources going at the program?

We have gotten additional resources over the last few years here, and we are using them to continue to build out staff, build out program, and invest in more compliance enforcement and surveillance capability.

So as part of that, we have officially sort of reoriented the program. International Activities and Trade Systems are two new divisions in the program.

International Activities used to be joined with Accreditation, but that division was getting too big for the activities involved, and ultimately overseeing international trade
arrangements is a very different kind of activity than the accreditation of certifiers.

So we split those two out.

Cheri Courtney is leading International Activities, which has to do with the oversight of organic recognition and equivalency arrangements.

Trade Systems is led by John Veley. John came to us from Customs and Border Protection.

He has been the lead for this electronic import certificate system and will be responsible for all of that reporting and data analysis that will start being available through that system.

I introduced earlier Shannon Nally Yanessa in the Standards Division. She's leading that team beautifully.

Accreditation led by Robert Yang. We are staffing up significantly there as well, with new auditors and with new accreditation managers.

We also added a more junior level position of accreditation specialists.

All of those job announcements have been coming out. We've been posting them on USAJOBS.
Those that are open to the public we have been doing organic insiders on.

We will continue to do more job announcements in USAJOBS in the late spring and summer.

Unfortunately, some of those job announcements probably hit at the beginning of this crisis when folks weren't looking so much at USAJOBS.

But if you might be interested in working with the National Organic Program, we will continue to be announcing job announcements in the late spring into the summer.

Jobs are only open for about seven days, so only a week long, and they are capped, and so do apply early if you are interested.

We are onboarding right now. We actually have four new employees take their oath of office virtually on Monday.

We did a Zoom session to welcome them to the team.

They have laptops and they're up and running, so we've actually had seven team members join us in the last month, and we'll have about
that many or more join us before the end of June.

So that is where our resources are primarily going, is staffing up primarily in Accreditation and in compliance and enforcement.

We also continue to use external support, many hands to support compliance and enforcement in other AMS programs and in other resources.

So I wanted to end by showing the expanded organization. Our goal is to reach 59 people. Our target headcount is 59 people. We're going to be in the low 50s by mid-May.

So that is sort of an executive summary of the broader presentation.

Again, welcome you into the Organic Integrity Learning Center to see the larger, longer presentation presented by the full NOP staff for more details on some of our specific initiatives.

So, Steve, I will turn it back to you to facilitate questions and answers from the board.

CHAIRMAN ELA: Thank you very much, Jenny, and I appreciated you putting that up on the Organic Integrity Learning Center.

I thought it was great to be able to
actually see some of the other staff as well. It gives a much more personable approach to the program, and who is in charge of what, and I often hear these people's names, but it helps to see a face as well. So thank you for taking the time to record that and put it up.

I know it is nice to be able to have people look at that on their own time, and as well as but we also very much appreciate your personal presentation at the board meeting. That has meaning as well.

So let's open it up to questions from the board. Emily, go ahead.

MS. OAKLEY: Thank you, Steve, and thank you, Jenny, and I'll just start by saying forgive me, this is a slightly long question that I actually wrote it out, which I don't normally do.

So I will try to be as brief as I can, but we did hear in both oral and written testimony that confusion and differing interpretations remain about whether the three-year transition period is applied to greenhouses and other growing facilities.
I wanted to reference some of the written testimony we received.

One commenter referred back to the NOP's memo on this topic of June 3, 2019, and pointed out that the memo documented that the OFPA definition of a farm, Section 6502, as a farm or portion of a farm or a site where agricultural products or livestock are produced.

And this is tied to 205.202, that states that any field or farm parcel from which harvested crops are intended to be sold, labeled, or represented as organic must have had no prohibited substances applied to it for a period of three years immediately preceding the harvest of the crop.

So in my understanding of that, the farm is any site where agricultural products are produced, and any farm parcel must have had no prohibited substances applied to it for the three years preceding harvest.

Agricultural products, be they transplant seedlings, lettuce grown on greenhouse benches, or any other conceivable scenario are grown on farm sites, be they greenhouses, basements, or any other conceivable facility that
must go through the three-year transition period.

So I have two questions. One, is that an accurate understanding?

And two, I understand that this may not be how all certifiers have applied this rule in the past, but I ask can the NOP make clear the rules now, and state that going forward, all producers must adhere to them?

So thank you, Jenny.

DR. TUCKER: Thank you very much, Emily, for the question, and I share your love of 205.202, which does really lay out this concept of fields and farm parcels from which harvest crops are intended to be sold, labeled, or represented as organic must have had no prohibited substances, as listed in 205.105, applied to it for a period of three years immediately preceding harvest of the crop.

So those are the rules and certifiers need to apply the regulations.

As I said in my update, the rules drive compliance, and so 205.202 certainly applies to all operations, so certifiers use those regulations and the handbook to implement those
We continue to talk with certifiers and with different kinds of operations, and we believe that those regulations are being implemented.

And so we're continuing to listen to feedback from the community, but the regs and the handbook continue to hold.

MS. ARSENAULT: Steve, I think you're on mute.

CHAIRMAN ELA: You are so right, Michelle. Thank you.

MS. ARSENAULT: You're welcome.

CHAIRMAN ELA: I see that Nate, you're next, and then Dan, but Nate, if you'll allow me, I'm going to go to Dan and then come back to you. So Dan, please go ahead.

DR. SEITZ: Jenny, thank you for your incredibly hard work and the knowledge you bring to the NOP.

I want to ask a slightly broader question about the rules around greenhouse growing and container growing.

From what I can see in my five years, or coming on five years of service, there probably
has not been a more divisive issue than the question of whether hydroponics should be allowed to be certified organic.

And I don't think that this philosophic divide that we've seen there will ever be bridged.

But it still continues to be a sore point or a point of contention among many people, and I think that was seen by many of the comments during the NOC meeting on this past Tuesday.

I can really understand that the NOP wanted to hold off on developing production standards for container growing for hydroponic growing after the vote was taken by the NOSB on this issue.

I think there needed to be a lot of dust that settled during that time, and just a chance, as you pointed out, for certifiers to carry out their regulations.

But now that a certain amount of time has passed and there still seem to be some fundamental questions around how these operations should be regulated, I'm just wondering if it might be the time to return to the question of whether it would make sense at least to look at whether
production standards need to be developed for hydroponic operations.

And I'm thinking that if the NOSB and the NOP worked on this, this might also be able to at least address to some degree the philosophic divide.

Again, I don't think that that will ever be solved.

It's such a fundamental piece, and the understanding around the need to promote soil fertility is such an important value that people hold.

I'm just wondering whether there might come a time that it would be helpful to address this as a way of helping the community to heal that divide, at least to some degree?

DR. TUCKER: So thank you, Dan. That's a very sort of thoughtful summary.

This is a topic that is very contentious, has been very contentious, and has been explored extensively by the board, that there was a hydroponics and other production method task force that took time to really look at this issue and lay it out.
The board had a few meetings where they looked at this issue in some depth.

One of the slides in the recorded presentation online towards the end is we put together what's called an NOP civics slide.

It sort of shows how we move from the Organic Foods Production Act, to the regulations, to implementing the regulations, enforcing the regulations, and one of the parts of that diagram is the legal process.

And so lawsuits are a tool by which a policy is challenged and questioned. I think it's generally well known at this point that there is an active lawsuit now on the topic of hydroponics and rulemaking.

And so we are obviously interested to see how that plays out. I think it does reflect the energy around this issue in the community.

And I think sometimes, as with past lawsuits, outcomes of lawsuits can provide clarity. Let the courts sort of determine what the path will be on that.

So for right now, this topic is not on the NOSB work agenda. I continue to listen to
feedback.

Again, when we're working with certifiers, we are monitoring implementation of the current regulations, including our favorite, 205.202, and we'll continue to do so.

Thank you for the question.

CHAIRMAN ELA:  Nate, you have a question.

MR. POWELL-PALM:  Hi Jenny.

CHAIRMAN ELA:  Nate?

MR. POWELL-PALM:  Oh, can you hear me?

CHAIRMAN ELA:  There you go, yep.

MR. POWELL-PALM:  All right.

CHAIRMAN ELA:  We can now. Go ahead.

MR. POWELL-PALM:  Just a quick question.

I believe during the public comments webinar, the question was brought up about the Dairy Compliance Project, and I'm not an organic dairy farmer myself, but consider myself an honorary organic dairy farmer, and close to that community, and an avid consumer of organic dairy products.

So I pose this question sort of on
behalf of the organic dairy community, and that is in 2020, I think you mentioned this is the third year of the Organic Dairy Compliance Project, and that there are a lot of unannounced inspections planned for 2020.

In the face of COVID-19, I was just wondering if you could speak to how those unannounced inspections, as part of the project, if they will continue, how they will continue?

If there's any way you can speak to that, as I think it's a really exciting thing for the organic dairy sector to make sure that we have the support of the program to really keep everything shipshape and compliance as tight as possible.

DR. TUCKER: Thank you. Thanks for the question.

So the Dairy Compliance Project, we are in our third year, and it started actually before we all ended up coming home, so to speak.

The Dairy Compliance Project had started, in fact, a week before we ended up starting to work out of our homes.

We had a team in California doing
training with state folks, with county folks, with other AMS personnel, trained in livestock.

So and it was a fairly big group, so I think this feeds into the fact that we started the project early this season in the third year, maximizing sort of the learning from the first two seasons.

We've already started desk reviews of organic system plans, which is a first step before we tend to go out onsite so we can see what does the OSP say? What have certifiers approved?

We have many, many hands that are poised to support this project as we kind of restart.

We have NOP employees now that are located in parts of the country where travel will be -- once we're able to start traveling again in a safe way, we have folks that are near the ground that will be able to go out earlier than perhaps we might otherwise if we were all coming from D.C.

So I think having remote both NOP employees, but also broader AMS employees that have been trained to do the Dairy Compliance Project -- as Bruce mentioned, an awful lot of AMS employees are not based in D.C., they're based all
over the place.

So we would see being able to get out much earlier than we would if we were only running this project out of D.C.

So again, we have many hands, and more importantly, many hands that are geographically distributed, and so that will reduce our travel risk in doing those unannounced inspections once reopening is safe.

And in many areas, I know there are inspections going ahead right now in parts of the country where oversight staff are collocated with operations.

So I have a lot of confidence in us continuing that 2020 program in a way that protects the market and ensures fairness.

MR. POWELL-PALM: Thank you.

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

MR. MORTENSEN: Yes. Good morning, Jenny, and thanks for the update. That was really helpful.

I just wanted to return to Dan's question.
Not really to his question specifically, but to a dimension of that question that I think we need to take a look at as the board.

Well, just maybe to preface the point I'm going to raise, is you indicated in response to Dan that we had a task force, we discussed things a lot.

Much of that happened at least before I was on the board, but what has not happened since the hydroponic vote is there's been really I would say virtually no discussion, no coordinated discussion addressing the criteria that we would like to see farmers follow in soil and in liquid-based production systems.

And I think broadly that's what Dan is asking for.

And then to get specific, we've had a number of very thoughtful comments during the course of the public comment period about substances that we use in production systems that we would define as being highly soluble.

Certainly in hydroponic systems where we're delivering nutrient solutions in water, substances of high solubility is the way that those
nutrients will be provided to the plants.

There have been rules in the past that the NOP has made that actually restrict the use of a number of those, or put constraints on them.

I think for that reason alone, the board should be taking a critical look at how fertility inputs used in these production systems are managed, and how it is that we determine what is allowable and what is not.

So I guess I continue to believe that we have not had sufficient discussion and sufficient vetting of methods since we conducted the hydroponics vote.

And I would like to think that we could dive back into this and really sort out some very important sustainable production practices that are consistent with the organic label.

DR. TUCKER: So I think I'm off mute. Yeah, there I am. So thank you. I appreciate the follow-up.

These are important questions that continue to be raised in this specific setting.

When we are out there in sort of the world talking with organic groups and organic
producers, organic handlers, they tell us that their immediate top priority is in enforcing the rules that we have of deterring fraud.

There is a phrase that I tend to hear is that they are more concerned about oversight of grains than they are of greenhouses.

And so as a program we are focused on those issues.

Strengthening Organic Enforcement includes a number of provisions that came from the board.

I think there continues to be work that the board will be able to do in helping advance those oversight compliance and fraud related items.

So I think right now, that is where the emphasis is.

Again, the legal system is going to give us its perspective on this topic, which will perhaps also reveal next steps.

MR. MORTENSEN: I really am thankful for the work NOP is doing on behalf of the issue of fraud.

I certainly was one of the people
pressing, you know, or just asking for more work in that area, so I don't contest that point at all.

I guess what I am not comfortable with is since, of course, if we ask grain producers, they're going to say fraud's most important.

If we talked with folks growing vegetables, I think that you would hear many people say that I'm just concerned that we have standards that we have defined and that we follow that are consistent with the label for vegetable and fruit production.

And I know it's my view that the board could take this on and it wouldn't overwhelm the board to be doing this background work.

My sense is, at least in the Crops Group when we've discussed it, there is enthusiasm for taking it on.

And please, other board members, challenge that statement if that's not accurate.

DR. TUCKER: So --

CHAIRMAN ELA: It looks -- go ahead, Jenny.

DR. TUCKER: I just want to say I appreciate the feedback.
We do have a very robust set of organic regulations that have guided certifiers in doing consistent certification.

I appreciate the ongoing feedback on this topic from the board.

CHAIRMAN ELA: It looks like Rick has a question.

MR. GREENWOOD: Yeah. Thanks, Steve. Jenny, first of all, thanks again for all of your comments.

We had talked actually yesterday at our administrative meeting.

I had raised the issue of more residue testing.

So because enforcement is such a big issue now, is there any interest in the NOP increasing residue testing, and possibly even more random testing as a way to get better enforcement?

DR. TUCKER: Yeah, thanks Rick so much for the question.

The program does do residue testing. It is mainly to support our investigation, so our compliance and enforcement investigations, particularly when it will substantively support
enforcement action.

So our primary oversight at the program level is over the certifiers' control systems, ensuring that their control systems are operating properly to do their own sampling and testing, and to assess fraud.

And we do give noncompliances when certifiers are not implementing residue testing.

They in turn apply a risk-based focus in doing residue testing, as do we to support enforcement activities.

We also provide funding to a laboratory to support certifier testing. So for example, we required additional testing as part of the Black Sea enforcement efforts.

Those yielded positive outcomes, and so we assisted financially that additional sampling and testing process.

With the success of the Dairy Compliance Project, we are now talking about how do we then take that approach and increase risk-based surveillance of other commodity markets, such as grains?

And so how could we do even more
sampling and testing at the NOP level of domestic grains, for example, which we know are an enforcement challenge.

So our sampling and testing is really oriented towards achieving the risk-based positive outcomes that help us get bad actors out of the market.

That's happening both at the NOP level, and also at the certifier level.

And so we keep a close eye on how certifiers are implementing that residue testing program to make sure the system broadly is doing that type of surveillance and enforcement work.

MR. GREENWOOD: Okay, thank you.

I know that risk-based testing yields more positive results, but it just seems that the potential for random testing and letting everyone know that's organic certified that there is also a component of random testing might keep some people who are on the borderline of thinking about doing something that isn't correct from doing it.

That's the point of my comment.

DR. TUCKER: Yeah, I would say unannounced inspections are also a good forum for
that, that often when certifiers are out doing unannounced inspections, so that is sort of a mode of surveillance, that you know, complements risk-based, but when they're doing unannounced inspections, often they are collecting samples as part of that.

And so that may not be the outcome of an investigation, but would go more to what you're talking about in terms of, okay, we're coming for an unannounced inspection, I'm about to take all of these samples.

So I think sampling and testing plays a very, very important role in the control system.

A final plug for the Integrity Learning Center, we are going to be launching a sampling and testing course later this year.

That is an area we have found that certifiers could use some more learning support on, you know, how to plan out the sampling and testing so that is has maximum defensibility in court, if it should go to an enforcement action.

So that's something that came out of our peer review audit, was the need for more
training related to residue testing, and we'll be delivering that in the Learning Center later this year.

So I appreciate the question very much.

MR. GREENWOOD: Okay, thank you very much, Jenny.

CHAIRMAN ELA: We are essentially out of time with Jenny, according to our agenda, but Wood has had his hand up for a little bit, so Wood, let's go to you, and then we will move on and let Jenny off the hot seat.

So Wood, go ahead.

MR. TURNER: Thanks, Steve. It's less of a question and more of a comment, and thanks to Jenny for the great update.

I just wanted to acknowledge the previous comments by Dave and Emily in particular, and just wanted to suggest that, you know, I think it sheds some light on different transitions.

You know, they're more senior on the board.

Several of us are coming into this conversation sort of new to the conversation, at least in this context, on greenhouses and
hydroponics.

And I just wanted to acknowledge that I'm supportive of what Dave is suggesting, and hope that the program will be open to efforts that we make in the months and years ahead to focus on some of those standards a little bit more formally.

So I just wanted to make that point.

DR. TUCKER: Thanks so much for the comment, Wood. Thank you.

CHAIRMAN ELA: Thank you, Jenny. We appreciate your report as always.

It does give us insight into the program and where things are heading, and I think even though enforcement continues to be really one of the hot buttons because it really does protect the label, it's been great to see some of the enforcement actions you guys have taken, and I know are continuing to take.

And in many cases I know you can't talk about methods and things until they actually happen, but we do appreciate the work of the staff and the fact that Congress did appropriate more money for that.

I think it's really critical to helping
protect the integrity of the label.

So thank you, Jenny, for both being the officer for the meeting and for giving us your update.

DR. TUCKER: Thanks so much, Steve. I appreciate the time.

CHAIRMAN ELA: With that, we are going to move on to reports from committees.

We have several committees, like for example, Policy Committee, that does not have a report at this meeting because they did quite a bit of work prior to this meeting.

But we do have two committees that don't have huge updates.

And one thing I do want to note that I did not note at the start is that Michelle did ask for any conflicts of interest among the board for any of these committees and reports, and there are no conflicts of interest.

So we don't have to deal with that, so I just want to make sure we get that on the record that there are no conflicts of interest.

With that, we're going to move on to Compliance, Accreditation, and Certification
Subcommittee, often called CACS.

And if I didn't have that spelled out, I would often forget what the abbreviation is, but Scott, would you like to give a short update of what has happened on the CACS Committee over the past six months?

VICE CHAIR RICE: Sure, Steve. Thank you.

CACS, as Steve noted, does not have any proposals or discussions to bring forward to this meeting, but that's not an indication of some of the discussions that we have had.

Certainly have had a lot of the conversations around the COVID-19 pandemic.

I wanted to touch on that, and you know, some of this has been discussed by Jenny and Steve already, but I think it's worth reiterating.

You know, I wanted to touch on the certification community's response to the pandemic and what we're seeing.

And certainly certification oversight and upholding organic integrity are all essential roles for certifiers.

But when the shelter in place orders
started rolling out around the country, and restaurants and schools, corporate campuses closing, and farmers' markets shuttered, we saw markets disappear pretty much overnight, as I'm sure you all have seen.

It was clear that there was much more to be done than our usual certification activity.

And just reiterate that it's been amazing to see the immediate response of certifiers and many others in the organic community to work together, connecting the community with resources to help keep their business going and their communities fed.

As Jenny noted in her NOP update, farmers have been quick to network and share ideas, helping identify gaps in supply that those who lost markets might be able to fill.

And certainly that work continues now.

At the same time, the certification community saw that a business as usual approach to our oversight activities wasn't going to work.

And with social distancing in place and our ability on hold, rather, to stand side by side with a farmer or a processor and chat with them
as they explain their operations, creativity and ingenuity quickly kicked in.

The Accredited Certifiers Association and International Organic Inspectors Association have come together in what is the ACA's largest working group to date, brainstorming and forming plans and best practices to continue our activities and uphold organic integrity while keeping our staff and our organic community safe.

These interim practices are already being trialed with remote desk audits, physically distant site inspections, and other creative and practical measures.

All those efforts are rooted firmly in regulations, as Jenny noted.

Though there may be creativity and unique approaches, they are all based in our USDA organic regulations, ensuring that the organic produce and products meet the standards that consumers expect.

And I'll add to Steve's comments that with the regulatory requirements that new operations have an in-person inspection, we're hoping that we'll be able to welcome those
operations into organic production beyond site to help induce those soon.

That's one of the bigger challenges that we've seen, since we certainly don't want to close out those eager to enter the market.

Similarly, Dr. Tucker noted in her update how the NOP has adopted remote approaches to certifier oversight so that the import accreditation work at USDA can continue.

That's been great to see.

CACS will continue to stay informed on certification and accreditation activities during this challenging time, and we're of course ready to assist.

Finally, like many of us, CACS is eagerly awaiting the release of the Strengthening Organic Enforcement rule, as we heard from Bruce Summers this morning.

It's in its final stages, and I guess we've been eager for quite a while, because we've heard it's in the final stages for some time, but really hoping to see that soon.

And I expect and anticipate there'll be plenty for this subcommittee and the board to
dive into as we see the effects of that rule roll out across the industry.

With that, I'll yield the floor back to you, Steve.

CHAIRMAN ELA: Thanks, Scott. I appreciate that, and yeah, this is certainly a committee that ebbs and flows with strengthening the organic enforcement.

I remember a few years back, your workload was very significant, and so it's kind of interesting to see how that goes back and forth. I know once that rule comes out, we will be back on track. Well, we're not off track, but this committee will certainly have more to do.

And I'll just again remind everybody that this is Scott's last year on the board, and his work on this has been greatly appreciated, and we hope that there will be a number of certifiers that apply for this seat because that work is going to be incredibly important going forward.

Are there any questions for Scott before we move on to the Materials Subcommittee?

I'm not seeing any. We'll move on to the Materials Subcommittee. Dave Mortensen is the
chairperson, and, Dave, let me turn it over to you.

MR. MORTENSEN: Thank you, Steve. So we have wanted to just walk through some of the highlights of the updated research priorities, a little bit about our process, and some of the feedback we've received in the public comment.

And then Emily Oakley was going to give us a brief update on the status of the marine materials work that she's been spearheading and that the subcommittee's been working on.

The research priorities process, the process by which we reach these research priorities.

And just briefly, the idea is that these research priorities then are something that it's used by groups, private and public, to fund research and that help craft a research agenda through which or to which money would be directed.

The process we go through is a process where we discuss this amongst the board members and solicit input from stakeholders, and we get a fair amount of input from stakeholders, both through the public comment process, through the meetings that we have twice annually, and also as
we work on problem-solving as a board, we sometimes realize there are data gaps or processes that would be better informed if some research was conducted or could be conducted to help address things.

A good example of that is our interest in seeing more efficacy work, where different things are compared with respect to how well they perform.

That's just one example that's arisen over the last two years or so.

This past round, we got 27 public comments in the written record reflecting on our current set of research priorities.

And I would say that pretty much all of those public comments have been, you know, of the flavor that have thanked the board for doing due diligence and trying to incorporate the kinds of feedback that we've been getting over the last several years to shape the research agenda.

There are also some suggestions on ways that we could improve the document.

In this current go-round, we have added a number of new things.

The ecosystem service provisioning one
was one that I think really got momentum when we were working on the incentive to convert native ecosystems.

And I think it was really punctuated by one of the students at the University of Minnesota who came and presented to the board at our meeting in the Twin Cities several years ago, pleading for a sort of holistic farm-based ecosystem service assessment of how organic farms function.

Interestingly, that research priority, we got a lot of public feedback on identifying that one as a very important one for us to be investing in.

Some of the comments that we've gotten on ways to enhance the document or enhance the statement of the research priorities include some concern about the document having gotten longer with having added new things to it, and three or four thoughtful public comments about urging us to consider ways of perhaps prioritizing some of those objectives in the priorities.

So that was one.

There were several also encouraging us
to think not only about the nature of the research that needs to be done, but also how it should be done, and by that, several people encouraged us to frame some of the priorities in a more holistic framework, and be a bit more explicit about how the research would be done, urging us to add language about participatory farmer involvement in some of these research priorities.

There was some indication that folks would like to see us expand the soil health, where we have now added this new microbial inoculants, conditioners, and amendments to soil, that framing that in a broader soil health framework could be helpful, and then some comments about adding phthalates to the agenda on dairy.

So I think we have a great research priorities document.

I think that there's some suggestions about ways that it could be tweaked some to strengthen it further, and generally the reaction to it, you know, has been quite favorable.

And that is what I had planned to present on the research priorities.

The subcommittee has been working on
this together and we get input on each of these discipline-specific topics from the subcommittees that work in those areas.

Livestock, et cetera.

So now we want to move on, Steve, to just a brief update from Emily Oakley on the marine materials.

MS. OAKLEY: Thanks, Dave.

CHAIRMAN ELA: Emily, just I'll jump in before we go on to marine materials. Are there any --

(Simultaneous speaking.)

MS. OAKLEY: You wanted to discuss research priorities at all first?

CHAIRMAN ELA: Yeah. Are there any questions on research priorities from the board?

CHAIRMAN ELA: I'm not seeing any questions, but I do want to just clarify for sure to our stakeholders.

I think we all got it, but the fact that we're discussing research priorities at the spring meeting rather than just the fall meeting, I know there's been some confusion on this even among the board itself, and there might be in the
stakeholders.

We chose to put the research priorities out as a discussion document in the spring, and then we will actually pass them in the fall.

We realized last fall that you all gave us some great input on the research priorities and some changes, but because we can't make significant changes before we vote, that last fall, you gave us those great ideas, but we actually could not incorporate them into the research priorities that we voted on last fall because that would've been a significant change.

So we chose to change the research priority process a little bit, bring it up as a discussion document for the spring meeting, and we'll probably continue to do that so that stakeholders could provide comments, we could take it back to the committee and incorporate those comments, and then have a document that we will vote on formally in the fall, and then that will be the document that goes out to the various entities that are conducting research, such as NIFA and some of these others.

So I just want to make sure that
everybody knows that this document will come up again, and some of the public comments we received, the committee will take those under consideration as to whether to incorporate them or not, and then we'll have a formal vote next fall.

So Emily, go ahead.

MS. OAKLEY:  Thanks, Steve.  I just want to say that my rural internet is not so great right now, so you just cut out.

I hope I don't cut out, and if I do, I apologize for that.

So yes, we did receive public comments on marine materials, although we don't obviously have a document from the Materials Subcommittee on that this meeting, but we are reviewing aquatic plant extracts as part of the sunset process.

And we did receive comments from a number of folks requesting or suggesting that we look at all marine uses across all subcommittees more broadly within the Materials Subcommittee, and sort of try to look at the bigger picture of that, as you were discussing earlier, Steve.

And I think that ideally, that would be feasible.
I think practically there are probably some concerns about that simply because, for example, fish environments, and you know, research on that topic is maybe a bit different than seaweed.

And if we were to categorize all of those materials into one really large work agenda item, I think it might pose some challenges in terms of discrete recommendations and potential rules for that.

But we will discuss it on the Materials Subcommittee further, and there's a sort of subset of stakeholders that have been very active on this topic from the beginning, with whom I regularly discuss, and try to do some pretty, you know, frequent email discussions over the course of the year.

And we will circle back and discuss this further if there's anyone who is interested in joining us in those conversations.

CHAIRMAN ELA: Thanks Emily. As we saw from public comments --

(Simultaneous speaking.)

CHAIRMAN ELA: Say that again, Emily?

MS. OAKLEY: Oops, sorry. Can you
hear me?

CHAIRMAN ELA: Yes. Yeah, we got your whole comment, so you hung in there. And I just wanted to thank you.

I know from public comments there were obviously a number about marine materials and the need for comprehensive review across subcommittees, whether it's kelp, or the various fish oils, and you know, alginic acids, and such. And obviously, the Materials Committee is the place to do that.

When I first came on the board, you were working on that, and it really is a difficult topic to make it all encompassing. I look forward to what you're going to do this year, and that certainly you will leave your mark on the NOSB by tackling all this.

It is a hugely complex subject, and I hope you also reach out to the various subcommittees on their individual work so that we can continue to coordinate and be a unified voice in what we do.

So does anybody have questions for Emily?
I don't see any. We're all being easy.

Dave, do you have anything else for Materials Subcommittee?

MR. MORTENSEN: No, that's it for now.

Several of the new members are quite interested, and we've been discussing that we will be getting back to work on excluded methods, but nothing else to report at this time, Steve.

CHAIRMAN ELA: That sounds great. Well, the good news is we're about five minutes ahead of time.

So we will I think go ahead and break for lunch. We will reconvene in an hour at 2:00 Eastern Time. I'm sorry. These time zones.

See, the advantage of an in-person meeting is we don't have to adjust time zones, which we'll inevitably mess up the chair.

But, so we'll reconvene at the top of the hour in whatever time zone you are.

Enjoy your lunch, and we will see you in an hour and five minutes. Thank you very much.

MR. BUIE: Hey, Steve.

CHAIRMAN ELA: Actually, Jesse has a question before we move on. I'm sorry.
MR. BUIE: No, do we have to log out and log back in, or can we stay?

CHAIRMAN ELA: I believe you can stay on.

MR. BUIE: Okay.

CHAIRMAN ELA: The log in information is the same, so you can just leave it up, and then come back to it.

MR. BUIE: Okay, thank you.

CHAIRMAN ELA: Yep. We'll see everybody after lunch.

(Whereupon, the above-entitled matter went off the record at 12:58 p.m. and resumed at 2:00 p.m.)

MR. ELA: So why don't we reconvene? Michelle, do we need to do a roll call after lunch, so we know who's here? I guess that might be a good formality, since we possibly could have a vote on this next section.

So maybe let me go through the list of people -- assuming I can find it -- and we'll just have a verbal roll call. So, Sue, are you out there?

MS. BAIRD: Yes, sir, I'm here.
MR. ELA: Okay. Asa? Asa, are you out there?

MR. BRADMAN: Yes. Can you hear me?

MR. ELA: Okay, great. Yes, we got you, Asa, thanks. Jesse?

MR. BUIE: I'm here.

MR. ELA: Thanks, Jesse. Jerry?

MR. D'AMORE: Here as well, sir.

MR. ELA: Great. I am here. Rick?

MR. GREENWOOD: Yes, I'm here.

MR. ELA: Okay. Thanks, Rick. Kim?

MS. HUSEMAN: Yes, I'm here.

MR. ELA: Thanks, Kim. Mindee?

MS. JEFFERY: Here.

MR. ELA: All right. Thank you, Mindee.

Dave?

MR. MORTENSEN: Here.

MR. ELA: Thanks, Dave. Emily?

MS. OAKLEY: Here.

MR. ELA: Thank you, Emily. Nate?

MR. POWELL-PALM: Here.

MR. ELA: Thanks, Nate. Scott?

MR. RICE: I'm out here.

MR. ELA: All right. A-dae?
MS. ROMERO-BRIONES: Here.

MR. ELA: Thank you, A-dae. Dan?

DR. SEITZ: Hi, I'm here.

MR. ELA: And then, Wood?

MR. TURNER: I'm here, Steve.

MR. ELA: All right. I think that means that we have everybody. So we'll go ahead and get started on the Crops section here. I wore my special fruit shirt in honor of the Crops.

(Laughter.)

MR. ELA: Well, that's me, I'm Mr. Wardrobe, everybody knows me for that. I always worry that if people look back on the pictures of the NOSB each year, they'll see I've worn the same shirt every year.

But anyhow, let's move into the Crops Subcommittee. Jesse is chair, and Jesse, would you like to take over?

MR. BUIE: Okay. Good afternoon, everyone, and I think we're all in the afternoon time zone, maybe with the exception of A-dae.

But our documents that we're going to discuss this afternoon are priority, as evidenced by public comments and many hours of subcommittee
discussions.

So, Steve, you are first up with paper pots and I'll let you take it from here. I think you're on mute.

MR. ELA: Let me get myself unmuted here and trying to find the right screen at the same time. All right.

So we appreciate the paper pot discussion -- or, actually, proposal. We got lots of comments on that and we appreciate all the thoughts that went into it.

We spent a lot of time on the terminology -- Devon helped us a bunch as well -- but obviously, the broader stakeholder group, the meeting of the minds came up with some excellent comments. So I'm just going to kind of try and summarize the comments as best I can. They were extensive.

We had a number of people that said we should just pass the proposal as it stands, and then, a number of other people said that it does need some tweaking.

We did have one commenter -- I think Oregon Tilth, along with a couple others -- did
mention that our delay in getting this passed, that there are a number of farmers that would like to invest in the labor-saving technology, but due to the uncertainty about the future allowance of them, they are waiting for a final decision to make the investment. And we certainly take that comment seriously.

And I'll just lead off by saying my recommendation -- after I go to this -- is that we actually do send this back to subcommittee. There are enough minor tweaks -- I think we're really very close, but there are a number of minor tweaks that would amount to substantial changes that would prevent our voting on it today. But that will be up to the Board.

But I see no reason we should not be able to have a -- if we do send this back to subcommittee, that we should not have a vote next fall on it, which would give time for the -- well, NOP has to go through rulemaking, but it would at least indicate the intent of the NOSB that paper pots should be allowed.

So moving on through some of the other comments. There were comments that we've noted
about seed tapes and other products, and -- but that it was unclear that we were -- they wanted to make sure we weren't limiting only to the things we listed, so there were several suggestions that we should change that wording to, including but not limited to.

And certainly, we are not intending to limit it to the things listed, so I think that -- even though I think, to me, the intent was not to limit it strictly to that, I understand the comments about that, of saying but not limited to.

There were several comments that were worried that other products besides paper pots might not be able to meet the bio-based requirement. And that was especially seed tapes and cloches and collars and such that if those manufacturers were unwilling to test, then they might be taken off the market. So a lot of people said they supported listing, but were worried about that consequence.

Unfortunately, we did not hear from any of those alternative paper planting products and it would have been really helpful if we would hear from them. So I hope people can reach out to
them -- if we do send this back to subcommittee -- and make sure that those do meet the requirements.

It was our feeling that they would, because those products are applied dry to the soil, so they don't need to have as much integrity as pots that are used in the greenhouse and have to withstand water and such.

But that -- we take those comments to heart and I would love to hear from seed tape manufacturers and others, whether this annotation would fit that.

In terms of terminology, certainly we -- the subcommittee and Harriet Behar did a lot of work on this before I took it over.

It's subtle, because you think, oh, this will be a slam dunk, it'll be easy to list this, and then you realize on a number of levels that paper itself is a synthetic fiber, because it goes through a number of processes to be made into paper. And so it's not just easy to say, other synthetic fibers, because paper itself is synthetic.

It also gets complicated because
bio-based products -- such as some of those made out of corn -- can be bio-based but extremely not biodegradable.

And a couple folks pointed that out, that asking for a 100 percent bio-based future could actually lead to products that would not biodegrade, even though they are bio-based, and that non-bio-based products can be made to biodegrade. So it gets complicated in that respect.

It also -- a number of people commented in our terminology, when we said primarily of cellulose-based paper and no less than 85 percent bio-based content, and people were wondering if those were meant to be synonymous or if they were two different aspects. We actually did mean that it was supposed to be two separate things.

We've had comments that we could have up to 60 percent -- or maybe slightly more -- of cellulose content in the pot, so that would meet the primarily, but then the rest would be bio-based non-cellulose content.

But I think certifiers specifically asked about that, in terms of being able to make
sure that certifiers are consistent, and I think that was a good comment and we'll try and correct that.

And they also asked does this include modified forms of cellulose? And our intent was exactly that it was cellulose-based, but it could include any cellulose-based fiber, including some of the ones that kind of mimic synthetic fibers.

The other comment was that we noted 85 percent, but that -- or that 15 percent of the ingredients can be strengthening fibers and adhesives and then moving towards 100 percent bio-based.

A number of people asked if that just included the fibers or included the whole product. And we purposefully said fibers in that because we found it was going to be really difficult to cover all the adhesives and the exact percents of some of these other additives. So we did purposefully put fibers in that, but we can look at that a little bit more.

Another issue -- and NOC brought this up, along with others -- is that we should spell out which specific additives would be allowed,
especially in the adhesives.

They were worried that what makes it easy right now could lead to being overwhelmed further on down the road, just as we are with the inert ingredients and ancillary substances. So they wanted us to be very specific about the reinforcing fibers and adhesives.

And my editorial comment on that is it gets really difficult because different products are going to use different adhesives, and we found that almost a black hole that we weren't sure how to get out of.

They also noted that only nonsynthetic reinforcing fibers should be allowed. At this point, from my understanding talking to the various manufacturers, there is not a product on the market that would meet that, that some of the reinforcing fibers do have to be synthetic.

We're hoping that, down the road, we could move towards that goal and maybe -- and I think part of the point of that comment is that the goal would be 100 percent nonsynthetic reinforced fibers for the strengthening ingredients.
We also can't really go to 100 percent cellulose-based, because the question is, if you use hemp or cotton, those are not technically cellulose-based at that point.

Moving on, the next issue was testing. And referencing the ASTM D6866, ACA asked if that listing was current and worried about further upgrades to that listing. If we specifically point to one --- another standard that could be altered in the future, that certainly is a problem and we'll try and think about that.

The other was whether that would be the only requirement or there could be some equivalents, such as if people submitted the actual composition of the pot and it was 100 percent cellulose or 100 percent coconut coir or something else that is known to be bio-based, if that can substitute for the ASTM analysis and if the label claim of a third-party certification would be sufficient to confirm compliance.

And a number of certifiers were very worried about how they would assess whether compliance with this claim was.

My thought was that just as we allow
manufacturer attestations that they meet those standards, that this would be similar on this. But obviously, something that people are being very worried about.

We did have -- Cornucopia did note that they would like paper pots to be only derived from recycled papers, with non-synthetic --- without synthetic non-cellulose fibers when they are commercially available, and that petroleum-based fibers would be disallowed.

On the other hand, OPWC supports the provision of allowing use of virgin paper, recognizing that these are unique products that need the extra strength of virgin paper.

Finally, moving on down the list, we did have comments on the terminology of incorporated into -- excuse me, of degradation into the soil.

And it was suggested we should change the degradation word into incorporated into the soil, just because we are not referencing any biodegradation standard and how do we define that they actually do degrade into the soil?

And I find that this is probably a good
comment, that we're really trying to separate out from the comments last fall of aids that were intended to be removed versus aids that were intended to be incorporated into the soil. So that seemed like a reasonable comment.

ACA said, production aids -- or planting aids that were not removed prior to decomposition in the soil. So several people made that comment.

OPWC also noted that paper-based planting aids that prohibit colored or glossy inks is really kind of outdated, and even though that's the listing for newspaper, we could upgrade this listing.

And they suggest that prohibiting glossy papers and colored inks and being a little more specific on that. And that is certainly something to take under consideration.

Finally, moving through the commercial availability clause that we set, people noted that that may not be appropriate for this section and that the form of the product could easily be used to claim that commercial availability is not there, so if you want a specific type of pot or shape,
that form might not be available in the 100 percent bio-based content.

And it was also noted that 100 percent bio-based content may not lead to what we're looking for, that, again, because bio-based versus cellulose-based versus how things biodegrade, that wording probably wasn't appropriate and probably should be taken out.

I think our dilemma on that is, how do we -- if we make this annotation for paper pots and, just as the manufacturers noted, that within three to five years, they feel they will not need those synthetic strengthening fibers, that they can move to hemp or something else, how do we make this annotation react to that changing landscape and have -- down the road, not have to move back to a change in the annotation, which becomes a work agenda item, and to have this be more of a fluid listing that adapts to future possibilities.

Last thing is we had determined as a subcommittee that we did not need to say specifically that paper pots shouldn't include antimicrobials, fungicides, and fertilizers, that that was referenced elsewhere enough. But we did
have several people, including certifiers, say that we should include that language, even though it's referenced elsewhere.

And several people said we should make sure that, in saying that, that we should be allowing those that are already included on the National List. So they thought we should specifically say they cannot include antimicrobials, fungicides, or fertilizers, unless they are listed on the National List.

So there is the whirlwind synopsis of the many pages of public comments on paper pots. It is not an easy topic, as we have found out.

We -- obviously, the Crops Subcommittee is committed to working on this and making it work for current products, as well as be adaptable to the future, where we hope better, more natural, quote/unquote, products come out.

With that, I would open it up for questions, but ultimately, Jesse, I would suggest that at the end of the discussion, we make a motion to move this back to subcommittee for a few further tweaks.

MR. BUIE: Okay. I just had one
question. And you can see everybody, I can't see all the hands, so you will recognize the hands?

    MR. ELA: I will recognize the hands, but --

    MR. BUIE: Okay.

    MR. ELA: -- go ahead with your --

    MR. BUIE: Yes.

    MR. ELA: -- your comments.

    MR. BUIE: When we got started on this process, it appeared that -- well, it appeared to me that hemp was going to be the salvation for this whole process. What's -- I mean, what's the thinking on that now?

    MR. ELA: From our discussions with the manufacturers, yes, that is true. I think they thought that would be a fairly easy transition --

    MR. BUIE: Yes.

    MR. ELA: -- from where they are currently. And the current products are not there yet, using hemp. I think that we heard an oral comment, as well as written comments, they think in three to five years, they will be able to move that direction, but they are not there yet.

    So if we pass this -- if we worded this
annotation to specify a nonsynthetic strengthening fiber, such as hemp or cotton, at this point there would not be a product, in terms of paper pots, on the market that would meet those standards.

MR. BUIE: Okay.

MR. ELA: So that's the concern of trying to make it workable now and also tighten -- raise the bar in the future.

MR. BUIE: Okay.

MR. ELA: Are there other questions from committee members? Emily, it looks like you have one.

MS. OAKLEY: This was actually a comment for the new members. There is a 2017 supplemental TR on newspapers and other recycled material that you might find helpful.

If you haven't had a chance to look at that, that can provide a little bit of background and nuance that might help explain also some of the public comments, if you haven't seen that yet.

MR. ELA: Yes, very good comment. Wood, it looks like you have a question.

MR. TURNER: I do, Steve. I did find the comments on virgin paper to be compelling and
I wanted to hear you or someone speak to that, just help me understand.

I also understand that virgin paper is going to have fiber length and strength that you can't deliver with recycled paper, but I think, conceptually, I'm just concerned about not somehow supporting the need for recycled paper products in the market and, certainly, in organic use.

And I just wanted to hear -- I read the comments and tried to understand the perspective, there's very limited comments on this topic, but I just wanted to hear someone who's a little closer to it speak to that a little bit.

MR. ELA: Yes, good -- very good question, and really, was one of the differences between the newspaper listing and what we're working on here.

And I think you nailed it, that the quality of recycled paper -- you really have to use a very high quality recycled paper, if even that works, to achieve the -- as you said -- the fiber length or the structural components that you need in this.

The word we got from manufacturers was
that you really just couldn't make the pot that would hold up through the greenhouse conditions without that virgin paper.

I think we also heard, for example, from the University of Maine on the paper mulch that they were working on, during the oral comment section, and that --- I think they were pretty clear that that would require virgin paper, not -- or a certain percent of virgin paper, and that recycled paper just didn't have the quality to make that mulch work.

And I mean, that was an interesting presentation and certainly want to learn more about it, but that could actually be a biodegradable mulch that would fit the criteria, possibly.

MR. TURNER: Thanks.

MR. ELA: Does that --

MR. TURNER: I --

MR. ELA: -- answer --

MR. TURNER: Yes, I mean --

MR. ELA: --- the --

MR. TURNER: --- it does. I just want to make sure I -- I've obviously heard and read all those things as well, I just wanted to get a
little more color on it. So, yes.

MR. ELA: No colors allowed.

MR. TURNER: No colors allowed.

(Laughter.)

MR. TURNER: It's just -- yes. It's a --

MR. ELA: Yes.

MR. TURNER: -- lingering question for me. Thanks.

MR. ELA: I know the Ellepot people have mentioned that they -- that, like, the paper mill they use sources sustainably grown trees, you know, and to a sustainability standard.

And I think we heard a number of commenters say that the market share of these products, even if all mulch were -- plastic mulch were switched to paper mulch, we're looking at a very, very small part of the virgin paper market. But that doesn't mean that we ignore that. Rick?

MR. GREENWOOD: Steve, I think I'll -- I'm speaking for the entire Crop Committee, I'll never look at paper the same. For everyone that's out there, it's a very, very complicated process and just saying paper pots doesn't cover what we've been looking at.
So I want to thank all of my colleagues for digging into this, because it really is one of the more complicated topics I think we've looked at.

MR. ELA: This is obviously material that lends itself to puns in terms of digging in, we really are trying to dig these in.

But -- and I think, in following up on that, one of the reasons we did say primarily cellulose-based is that there are now papers on the market that are called paper, that are really not cellulose-based, that are plastic-based papers.

And so we were trying to not -- knowing that on the market or -- you know, this terminology gets clouded, to make sure that we really did try and limit it to cellulose-based papers and not, quote/unquote, paper in general. Emily?

MS. OAKLEY: Thanks, Steve. And thanks for your comment, Wood.

And I think that for a lot of growers who are currently using this product or who want to, they probably also, as Rick said, don't fully comprehend or know necessarily all of the
background that we've come to learn about the complications of paper and adhesives.

But I did just want to throw out there, we have discussed in the past as well that the first use of these products, especially the paper-chain pots, in particular, is as a transplanting tray in the greenhouse.

And then, the second use of that is once it gets put into the field. So it is conceivable that you could argue that it is a recycled paper product by the time it enters into the field, although I understand for some that might be stretching it a bit.

But it is definitely a complicated issue and one that at first looked very simple, but it's not.

MR. ELA: The things we get ourselves into. Mindee, you have a question?

MS. JEFFERY: Thank you. Being new and not in the history of this conversation and the Crops Subcommittee, I'm curious about the presence of ASTM D6866 as a requirement, in the National List, and wondering if testing as a part of organic systems in the regulatory framework is
precedent-setting?

One of the things I love about the organic system is it's process- and input-oriented, and not so testing-oriented. So I'm curious about the Board's perspective on whether that's a radical change for organic regulation.

MR. ELA: And I can reply to that, but I think if somebody else from the Board, if other members of the Crops Committee or the full Board want to chime in on any of these things. I mean, this is our chance for discussion and I certainly don't want to take up all the Crop Subcommittee time. But great question.

Biodegradable bio-based mulch was referenced to a standard. Of course, that has gotten us in some trouble, in terms of having no products that actually met it.

But I don't think that -- the referencing to the standard was not the issue there, it was referencing the percentages and types of things that went to the standard.

We obviously know any time we reference to an outside standard, most standards
change -- just like with List 4 inerts -- we take the chance of referencing to an old standard. And I guess I'd have to sit down with the Program and see if we can put wording in that is something like, that standard or equivalent, or, you know, if that standard's upgraded, be able to stay with that movement.

I guess I personally see -- even though it is a standard and it is a test -- it's a way of making sure that advancing some of the certifiers' questions of consistency by giving a very clear line of what we want.

And so that it takes away some of the interpretation that gets us in trouble down the line, of when one certifier says this and another certifier says that.

So while it is very procedure-oriented, I think at some point, we do have to be very clear and technical to make sure that everybody is on the same page, but also knowing that, you know, like whether it's meant to be incorporated into the soil and some of these other things are left a little more open. But it's a good question.

Are there other questions from the
Board? Maybe we should move on.

Jesse, I would make the motion that we move this -- send this back to subcommittee for further revision.

MR. BUIE: Okay. Is there a second?

MR. MORTENSEN: Second.

MR. BUIE: Can I ask the name?

MR. MORTENSEN: Dave Mortensen.

MR. BUIE: Dave, okay.

MR. ELA: Yes. Okay.

MR. BUIE: Okay. Are we ready to vote?

Any other questions?

MR. ELA: The way we can handle the vote is, I'm just going to read down the list of Board members and they can say aye or nay or abstain.

So --

MR. BUIE: Okay.

MR. ELA: -- if we're ready to vote, I'll go ahead and --

MR. BUIE: Okay.

MR. ELA: -- move down the list.

MR. BUIE: Okay. So we have a motion on the floor to return to -- motion and a second to return back to the subcommittee. Okay. We can
start the vote.

MR. ELA: Okay. Sue?

MS. BAIRD: Yes.

MR. ELA: Asa?

MR. BRADMAN: Yes.

MR. ELA: Jesse?

MR. BUIE: Yes.

MR. ELA: Jerry?

MR. D'AMORE: Yes.

MR. ELA: Rick?

MR. GREENWOOD: Yes.

MR. ELA: Kim?

MS. HUSEMAN: Yes.

MR. ELA: Mindee?

MS. JEFFERY: Yes.

MR. ELA: Dave?

MR. MORTENSEN: Yes.

MR. ELA: Emily?

MS. OAKLEY: Yes.

MR. ELA: Nate?

MR. POWELL-PALM: Yes.

MR. ELA: Scott?

MR. RICE: Yes.

MR. ELA: A-dae?
MS. ROMERO-BRIONES: Yes.

MR. ELA: Dan?

DR. SEITZ: Yes.

MR. ELA: Wood?

MR. TURNER: Yes.

MR. ELA: And the Chair, Steve, votes yes.

MR. BUIE: Okay.

MR. ELA: Scott, do you have a count?

MR. BUIE: It's 15 yes, zero noes, zero abstentions, zero recusals, no absence. So the motion passes.

MR. ELA: Thank you, Jesse, in your role as Secretary, I should have asked you and not Scott, I apologize. Okay. And with that, I think Jenny may have one comment to make before we move on.

DR. TUCKER: Thank you so much. I wanted to clarify for the organic community -- because I'm sure we will get questions, so if I can answer that question now.

Given this vote and the fact that this will go back to subcommittee, from the Program's perspective, we will continue to allow paper pots during this deliberation period.
And so we had sent out a note to all certifiers saying that these would continue to be allowed while the Board considered its work. That was based upon a resolution on the Board, the fact that this listing is very close to an existing listing, and certifiers make decisions in good faith on this particular material.

So I just wanted to clarify that the current status of temporary allowance will continue while the Board continues its work. Thank you.

MR. ELA: Go ahead, Jesse. Thank you, Jenny, for clarifying that.

MR. BUIE: Okay.

MR. ELA: Jesse, it's back to you.

MR. BUIE: Okay. At this time, we want to go to our next discussion, wild native fish for liquid fish production. Emily?

MS. OAKLEY: Thank you, Jesse. So this work agenda item came out of the sunset review of liquid fish products that took place in 2018 and questions that were posed to the stakeholder community regarding the existence of any fertilizers that use wild native fish harvested
exclusively for fertilizer.

And at the time, there was indication that there might be products that were using whole native wild fish harvested exclusively for fertilizers.

So we added this -- with the NOP's approval -- to our work agenda, received a TR, and the TR came back with additional information that provided more clarity on how these fish products are used.

So the TR is very extensive -- and I welcome anyone to refer to it if they'd like to -- but in essence, it helps explain that there are no fish per se that are harvested exclusively for the use of fertilizer, but there are fish that are harvested for a combination of meal, oil, and solubles, and that that might be perhaps some of the area in which there was an expectation that some were harvested exclusively for fertilizer.

But before I go into that, I will say that the TR did indicate that a majority of materials that are available or that are OMRI listed include fish waste -- which is waste left after market fish are processed for human
consumption -- or a combination of fish waste and bycatch and mortalities, or a combination of fish waste, meal, oil, and solubles.

But there is a subset -- about 32 percent -- of the products that are OMRI listed that are some combination of meal, oil, and/or solubles and that is from the wet reduction process.

So the wet reduction process, in a very simplified version, is that whole fish are cooked and pressed, the solids and liquids are separated. The solids become the meal. The liquids are then further separated into oil and solubles. And then, the solubles are evaporated and concentrated.

And a lot of the products contain solubles. And we did hear from stakeholders who produced fish fertilizer, using exclusively solubles.

We sent some questions out to the stakeholder community to try to get their feedback on thoughts for where the Crops Subcommittee should go from here.

We had initially expected that we would
look at an annotation possibility, if there were in fact materials that were using fish harvested exclusively for fertilizer. But given the TR's results, we wanted to hear from the community as to what our next steps should be.

We did get some feedback that the discrepancy between the TR and the Spring 2018 public comments needed to be resolved. And we did go back and ask the TR authors -- one of whom was OMRI -- to help clarify that.

And I think we feel like we understand what that resolution is. It's, as I've just explained, this breaking down of fish into meal, oil, and solubles, so that, for example, if a fertilizer is using solubles, meal and oil could have gone to other uses, primarily livestock feed uses. So not exclusively, again, for fertilizers.

We did get comments saying that we should just rely on the TR results and take no further action at this time.

We also got comments saying that some producers think that what they're using is the result of byproduct, presumably from human consumption only. And I can attest as a farmer
having used these products in the past that that was my initial expectation of them.

Then, we did hear that using the waste products -- the solubles derived after the oil and the meal -- does provide an economic incentive for this fish harvesting and that that's something we should consider.

We did hear from an inspector who has done an inspection of these facilities and he provided some detailed written comments about that.

And he believes that the TR is doing a disservice by attempting to separate fish stocks that are harvested for meal from those that are harvested for solubles, because, in his comments, those are basically both for agricultural purposes, either livestock feed or for fertilizer. And he said that this was low-hanging fruit and something that we could and should act on.

We did hear from several producers of fish fertilizers who use only exclusively post-consumption scraps, so fish waste from human use intentions.

And we did get some comments saying that
oversight is certainly adequate, in their view, in the U.S., where they are harvesting and sourcing their fish, but that there might be issues internationally, where government oversight may not be as strong.

And we did hear, finally, from some who felt that we might want to look at an annotation that restricted use to only from fish waste products derived from human consumption, but only if that requirement is enforceable and verifiable.

So that is sort of the overarching summary of the public comments. And I think the CS will come back and we will have another discussion about potential next steps and where that might lead. And I wanted to open it up if there are any questions from the Board.

MR. ELA: All right. Are there any questions? Asa has a question.

MR. BRADMAN: Thank you, Emily, for that clear description of the issues. I just kind of want to expand on one concept.

And I think there were some thoughtful comments in the public comments also that the use of waste to produce liquid fish products could add
kind of a marginal increment of profit that then could make harvesting wild fish for a given purpose profitable overall, and that without that secondary market, it might mean the original harvesting might not be as viable and there could be less of it.

So just, you've kind of addressed that, but it's a slightly different take on -- or an additional take on some of these issues about whether it's solely harvested for fertilizer and liquid fertilizer products.

MS. OAKLEY: Yes, I think that's a really good point and that was brought up by many public commenters.

And I think that was some of the initial issue that the CS had with this TR, concern that, you know, were we sort of splitting hairs, so to speak, about the fish meal versus oil versus solubles? And probably where some of the original confusion arose from -- or, I thought maybe confusion's not the right word.

And we did get comments saying we shouldn't be degrading one ecosystem -- the marine environment -- to promote the health of another,
of the agro ecosystem.

So I do agree with what you're saying and I think that's part of the nuance that we need to discuss on the subcommittee as we decide where to go from here. Thank you for bringing that up.

MR. ELA: A-dae, you had a question?

MS. ROMERO-BRIONES: Yes. So I'm not part of the Crops Subcommittee, but I'm really interested in this topic, because I think this has a lot of implications for indigenous communities who do subsistence hunting and fishing.

Of course, I think there's a lot of indigenous people who are dependent on a lot of these wild fish stocks. So it is semi-troubling to me that we have -- we would utilize wild fish stocks for commercial purposes, not necessarily for inputs into agriculture, because I think that is a long-flowing system.

When we think about the salmon that have basically created all the fertile grounds in California, like, I think that connection between ocean life and agriculture has always been there. And we should, as organic communities, should be not only supporting that system, but should be
figuring out ways to ensure that that connection remains.

But I do worry that by placing wild fish stocks into like a commodity-type of system, that there would be opportunities for exploitation.

And so I just wanted to ensure that, moving forward, I do appreciate the comments about oversight and I do think there has to be some oversight or some safeguards to ensure that there's not exploitation within that system.

I know that's so hard, but we should at least attempt to do that, in terms of not having wild fish that are important to indigenous communities solely being caught for fertilizers.

I know it's so complicated, I know it's a complicated situation, and --- but I appreciate the conversation that the Crops Subcommittee is having.

MS. OAKLEY: Thank you, A-dae. I think those are really good points and they were also brought up by some public commenters as well. And a lot of these fish that are harvested for the meal, oil, and soluble industry are the food for other larger fish that are key to fisheries for
communities and local communities around the oceans.

MR. ELA: And Asa, I wanted to circle back, did you finish the comments you wanted to make on that?

MR. BRADMAN: Yes, I actually -- I said something else on mute, but actually A-dae brought up some of those issues. Thank you.

MR. ELA: Okay, great. I just wanted to make sure I hadn't cut you off. So other questions from the Board?

I have just, I guess from the Chair, a similar question, Emily, and I think you've kind of covered it. But I've been -- the TR is like, okay, we don't have a smoking gun here anymore, we thought we did.

And I know in the public comments, it came back to OMRI's testifying several years ago that there were products made exclusively from wild fish harvested for fertilizer.

I did find, when we found the TR sufficient, the terminology in it -- and you just noted it -- about the fish meal and fish oil and solubles, that the solubles aren't -- people aren't
harvesting fish exclusively for those, but it seems that, yes, there might be fish harvested exclusively for fish meal, fish oil, and solubles.

And even though those are three things, they may be all destined for the agricultural market.

And so, I mean, do you see any way -- how do you think we should proceed with trying to sort this out and, I guess, the second part of that question is, do we do any harm by trying to put an annotation in or do we just cloud the waters further?

MS. OAKLEY: That's a good question. I've been grappling with this one myself and I was unsure if we were going to discuss it now or on the subcommittee call.

But I think my personal inclination would be that we should explore the feasibility of an annotation that is limited to use for -- of products that are fish waste, bycatch, or fish waste plus meal, oil, and solubles, but that we might try to explore the restriction of fish used from the meal, oil, and soluble industry exclusively.
Simply because -- as you pointed out, as Asa pointed out, as commenters pointed out -- even if not all of those products are in any given fertilizer material -- although some fertilizers could contain all three, meal, oil, and solubles -- it certainly is an important part of the economic aspect of harvesting those fish and does give a revenue stream for the solubles that would not necessarily otherwise be there. And certainly, the other uses are largely agricultural.

So I think it is a complicated issue, but I would like to see if we could have a discussion at the subcommittee level to see -- or here now -- to see what people think about the feasibility of exploring an annotation to restrict exclusive use from meal, oil, and solubles.

MR. ELA: And have we gotten any further clarification on that kind of discrepancy between OMRI's comments that there were and then, the TR that there weren't, or is that still kind of a question mark out there?

MS. OAKLEY: Yes, we have gotten some additional clarification and I think -- having
spoken with someone about that, I think their comment would be this is the benefit of the TR, because the TR is going to go into much greater depth than can be provided in a 30-day comment period covering a multitude of issues.

So the TR is the definitive word on this issue. And I think that the TR authors explored this further and determined and figured out that the meal, oil, and soluble industry is -- as we've learned -- slightly more complicated and not as basic as exclusively used for fertilizer, but it does have this livestock feed use for it as well.

So I think -- does that answer your question as to whether or not --

MR. ELA: Yes.

MS. OAKLEY: -- like what the discrepancy is -- okay.

MR. ELA: Yeah, no, that's fine, it -- there were some public comments on that as well and I had kind of forgotten where we ended up on that. So thank you for clarifying. It looks like Dave has a question.

MR. MORTENSEN: Yes. Rick earlier commented that paper was more complicated than he
understood and I completely agree with Rick about that. I also have come to learn that the fate of fish is more complicated than I understood, with respect to harvesting.

And I had a bit of -- I would have to say, I came to this particular issue with a bit of a bias that I was fairly certain we were harvesting fish solely for the purpose of their use in fertilizer. Certainly, historically, we have done that, but we didn't find a compelling argument to support that.

But I like what Emily is proposing here, which is to look carefully at the distinction of fish harvested for meal, oil, and other byproducts and solubles for fertilizer.

And I like -- I think from a ecological, sustainability point of view, it would be nice if we could understand better what species we're taking and what the impact of taking them is. I know historically we've overfished some species for fertilizer use. Menhaden is an example that we came across, that's historically, now, back in the 40's and earlier.

So anyway, I like what Emily is
proposing, at the end, when you were -- Steve -- asking where do we go from here?

MR. ELA: Looks like, Jesse, that is all the questions I see from the Board.

MR. BUIE: Okay. All right. Our final discussion document is biodegradable bio-based mulch and, Asa, that's your ball game.

MR. BRADMAN: Thank you. This is another complex topic. And as you know, we put out a discussion document that Harriet actually worked on very extensively. Harriet, I hope you're listening and I read through your comments.

I'll provide kind of a summary here of some of the comments we've had so far, and I'm hoping we can then discuss further about perhaps future plans and that can inform discussions in the subcommittee going forward.

So bio-based mulch, as we know, is generally a plastic material that is an alternative to polyethylene to function as a mulch, primarily for weed suppression, although there are some cases where it seems to prevent leafhoppers or other disease vectors. So it also involves pest control.
And the issue we've been struggling with is that the current annotation limits it to 100 percent bio-based materials. I know many of us are familiar with that, but I thought this summary might be helpful for some of the new members.

And the reality is, we've discovered that many of the current biodegradable mulches have -- do not have 100 percent bio-based materials. In fact, in some cases, they can be a majority source to petroleum or non-biological source material, but are still biodegradable or mostly biodegradable.

And I think to summarize some of the comment we've gotten on this discussion document would be to say that there's a lot of ambivalence in the community about these materials we've kind of taken together.

I think to summarize one comment from Beyond Pesticides is the sentiment that synthetic mulches should not replace organic mulches. And that we need to avoid harm from cradle to grave impacts. And that because of especially the petroleum content for these biodegradable mulches,
that raises concerns about these materials.

But kind of the flip side of this is that the petroleum products themselves are used heavily in organic production. We've heard a lot about plastic use, plasticulture, and the use of polyethylene films.

I certainly know decades-long organic farmers in California who still rely heavily on these materials, really, people I consider pioneers in organic. And plastic is used really everywhere. Well, maybe that's too general, but plastic films are used in many different settings, primarily wherever there's annual crops.

And I think that there is a tradeoff there -- when we're talking about this new product -- about the concern that we're actually still using lots of petroleum products in organic, we're just not allowing it to go into the soil, which I think is the real crux of the concern about this material.

Going a little back to some of the comments -- some of the comments about these materials, they're petroleum-based.

There's some concerns that the
Degradable plastics are produced by genetically modified organisms, and that's raising concerns. Although, there is a related comment -- which I tend to agree with actually -- that we should not be regulating the end product in this case.

There certainly are other cases where materials produced from genetically modified organisms are still allowed in organic and that the ban on organic is related to genetically modified organisms in production.

This is, again, another complicated area and I think raises some foundational concerns about the use of this material.

The crux of the challenges with this material are that we don't really know to the extent how they're fully degradable in actual use in natural environments. We've had extensive comments on this.

NOP has funded research on this, which has been very useful and informative, but there are still some outstanding concerns about whether the biodegradable mulches would fully degrade in different environments, such as a dry hot climate versus a moist damp one, and that -- in some
situations may result in residues persisting in soils, providing kind of a new kind of microplastic in the environment.

And then, also, can simply erode or be carried away by animals or blow into water, break apart before it can be removed or break apart as it's being plowed and end up in waterways, and could essentially be a new source of plastics in the environment.

In terms of the -- whoops, get back to my notes here. In terms of some of the suggestions, I thought there were a lot of very interesting and thoughtful comments about where we should go from here.

A number of commenters noted that we have kind of potentially a way forward with regard to the discussions around paper pots. There, we've come up with a suggestion that we should have 85 percent bio-based, at least.

And there was some suggestion that perhaps that could be a guideline for the use of bio-based films or basis for content for bio-based films, that maybe we should come up with some standard where we allow a portion of bio-based
material and a portion of petroleum or other synthetically-derived content for the biodegradable material, but not -- kind of step away from our current requirement that requires 100 percent biologically sourced material.

There is a lot of frustration that we -- that there's a material listed and as it's listed with the 100 percent bio-based requirement, there's no product that can fill that requirement.

And that, essentially, because of that, that situation really is untenable and really just contradicts the process of the National List.

One recommendation would be that if we don't allow some fraction of non-bio-based content, that really we should remove it from the National List.

This was kind of an approach that was I think designed to encourage the development of 100 percent bio-based material, but five years later or more, we still haven't succeeded, and therefore, it should not be present on the list.

There were some interesting developments with paper products -- which actually do meet the requirement of 100 percent
bio-based -- and I think it's interesting to see where that goes.

Again, that also can be informed by some of the discussions we've had with respect to paper pots, especially the use of virgin pulp material.

In terms -- getting back to going forward, I can say very strongly that many of the comments submitted really implore -- and I emphasize that word, implore -- the Board and the Program to allow use of these materials.

That there is such demand for use of films in organic production and that the environmental and potentially health implications of the heavy use of polyethylene materials is so great that even if we allow some synthetically-derived content in these biodegradable mulches, we essentially would be allowing kind of the lesser of two evils, in that the evils associated with polyethylene films is so great that this material is really advantageous. Let's see.

I really appreciated some of the comments from the OPWC, which really kind of recommended a phased approach to evaluating this
They do support allowing this material and changing the annotation to allow non-bio-based source material in the biodegradable films, but kind of posturing an incremental approach to get these materials out there, but then also move towards ultimately a fully bio-based content.

So this could result in an annotation that provides a minimum of bio-based content and then, also moves forward to how we can get to and support -- encourage the development of products that are 100 percent bio-based.

I kind of see this as analogous to listings on 606 and trying to move them off of 606 to require sourcing materials that are fully organic for many processing or other uses. Let's see.

Another of the questions we posed in the discussion document asked about uses related to incorporating nutrients and potentially pesticides -- of course, organically approved -- into these materials and whether that could be useful.

I think the answer to that was kind of
yes, in some cases, but really, I think that's not a relevant question right now.

I think the first question is how do we as a Board move forward on this issue? And do we want to keep the current annotation that limits it to 100 bio-based? Do we want to flex on that and allow use of these materials, perhaps with the goal of long-term encouraging movement towards bio-based materials? Or do we want to take it off the National List because there are not products that currently fill that requirement?

So I think that provides an overall summary of comment and input. It reflects discussions we've been having now for over a year. But I think more input from the Board will be valuable. And there, of course, will need to be more discussion in the Crops committee about whether we want to come up with a proposal to vote on for the fall.

So I think at this point, I want to open it up for comment and discussion from other Board members.

MR. ELA: Are there questions from the Board or comments? Okay. Mindee, go ahead.
MS. JEFFERY: Thank you, Asa. I was wondering if you could unpack what you said about GMOs and the relationship of synthetic fibers, and I think you said limited to in-production prohibition, and I wanted to understand what you were meaning a little better.

MR. ELA: Asa, you're on mute.

MR. BRADMAN: There are concerns in the annotation that limits the use of feedstocks that are derived from excluded methods.

And one comment, which I actually tend to agree with in this context, suggested a change that, rather than excluding, disallowing use of feedstocks derived from excluded methods, that the final project must not contain organisms derived from excluded methods.

So, I mean, this is a challenging issue within the organic community. The concern is, is that GMOs are being used to produce some of these materials from petroleum products that then become the biodegradable component of the films.

And this was a recommendation and I think that we need to consider about whether the key issue here is not the production method, but
the end product. I mean, there might be an analogy here where we allow vaccines that are produced by GMO organisms if there is no other alternative.

So I think that the analogy here would be that some of the biodegradable plastic materials that are components of the film may be derived using GMO organisms or from organisms that have been produced using excluded methods.

So I think this is something as a group we need to discuss. And I hope that provides some clarification.

MR. ELA: Other questions?

MS. JEFFERY: Just, I have a follow-up.

MR. ELA: Sure, go ahead, Mindee.

MS. JEFFERY: Do you mean that if there are, for instance, genetically modified corn stalks becoming part of a synthetic fiber, that that's less of a concern than the end product?

MR. BRADMAN: Yes.

MS. JEFFERY: Okay. So in that --

MR. BRADMAN: But that, I mean, that raises another issue here. I think there's two things.

One is not necessarily, like,
cornstarch from corn that was grown conventionally, I mean that raises its own set of issues, but from what I understand is that the petroleum products can be processed using genetically modified organisms to produce some of the polymers and other biodegradable materials for this material.

And correct me, someone out there, correct me if I'm wrong in terms of whether they're being used to process the petroleum source material or also the bio-based, like cornstarch or other source material as well.

MS. JEFFERY: Yes, I think we're thinking about the same thing, in the sense of there's sort of two trajectories there in that you can have genetically modified organisms producing fibers and you can have GMO corn stalks going into fiber production. And I just wanted to hear that we're looking at that from both perspectives in this context.

MR. BRADMAN: Right.

MS. JEFFERY: Thank you.

MR. BRADMAN: And just wanted to emphasize too that there's tremendous interest and
demand for access to this material. And again, I think there's a lot of ambivalence in the community about taking a petroleum-derived product and putting it in soil. And that just raises questions. Although, we already do it with other petroleum products.

MR. ELA: Dave, you had your hand up. Do you still want to ask a question?

MR. MORTENSEN: I don't really have much to add, I was going to -- I agree with what Mindee and Asa -- Asa was just asking someone to weigh in to confirm what he was saying. I agree with both what Mindee and Asa were saying.

My recollection of some of the presenters on this subject, a year or so ago, and reading about it, was that there are microbial, transformed microbial populations that work on the carbon substrate.

And that when we asked questions about the carbon substrate, the answer we got was that crop feedstocks would be used as the carbon substrate and because there isn't that much in the way of bio-based plastic being produced, they had little control over the source of the feedstock
and they admitted that probably most of it was genetically modified in origin, like maize stubble and things like that.

MR. ELA: Other questions from the Board? Asa, I have one myself. Besides the petroleum-based issues that we all wrestle with and, I mean, as you noted, we allow the non-recyclable, non-biodegradable mulch, so in some ways we don't have an issue with petroleum there, because we allow that.

But it still comes back to some of those issues, too, of whether we're getting full biodegradation in the soil. And in different climates, arid climates, whatever, if we're going to have plastic fragments and such.

Do you think that there -- we've had comments from certifiers and things saying, well, we should just, rather than getting too technical and trying to cover all soils and all climates, that we should just have certifiers verify that they're not seeing plastic fragments in the soil after -- I mean, a lot of people are saying after a year.

From what I've heard, I'd almost think
we'd have to say two years, since I don't think it breaks down that fast.

What do you think about that or do you have comments or thoughts on that -- besides the petroleum issue, we have this actual biodegradation issue. How should we move forward on that, do you think?

MR. BRADMAN: Yeah, I think there are some really good comments on those issues. And I think those can actually potentially form the basis for a way forward, from OPWC, from NOC, and from others as well.

In some ways, I think we have, potentially, a blueprint that could involve certifiers working with producers. I think there's going to be a learning curve with these things, and that was emphasized in the comments.

We could actually request removal, that was one suggestion that came up in public comments, removal of the material like we remove polyethylene film, but then, it could be composted in a, perhaps even in a certified facility or some other way.

Certainly, if it's used every year, then if we say it has to be done in two years, it's
going to be a little hard to tell, because there could be leftover from the previous year. So there's some challenges there.

But there were actually some excellent comments that we can look at as a Subcommittee that I think provide an outline of steps to take, in terms of monitoring use, providing guidance to certifiers, and having certifiers work with producers.

And there can be kind of a feedback in that relationship that can also potentially inform policies proposed by the Board down the road. So but, yes, I think there are approaches to using the material.

Also, removing it at the end of the year would mean that it's not eroding or getting blown into waterways or out into the atmosphere, although some of it might break up a little bit, but that would be hopefully minimal.

So I think, again, to repeat myself, I think there are approaches we can propose.

MR. ELA: Yeah, and I seem to have a -- I appreciate your thoughts on that. And I brought up, do we remove it?, and I seem to have a note
in my head from previous years that there was some concern that it would degrade enough that it wouldn't be very easy to remove.

But maybe we could ask that a certain percentage of it be removed, at least, so we reduce the load or the potential, I don't know. But it looks like Emily has a question.

MS. OAKLEY: Thanks, Asa. I thought you did a really great job encompassing the complexity of this issue.

And I just wanted to say to the point that we are allowing plastic right now in the form of plastic mulch, it's getting removed and there's something inherently challenging about the notion of allowing plastic that degrades into the soil.

I do agree with Steve, I think, although I don't know this product, my assumption is that people want to use it because they don't have to remove it, because it saves on labor and time and, therefore, expense of removal.

So I'm not sure if it would be possible to remove it, I think it might be friable enough by the time the season is over that it would not necessarily be feasible.
Although, in some environments, it might, because I do know from the panel that we had last year that in a desert environment, it could take a decade or more to degrade because of the lack of moisture necessary to help the decomposition process.

I've said this in the past, but I just want to reiterate it again, that I think many farmers who want to use this material may not understand what a low percentage of bio-based content it has. And some may know, but I think some would be surprised by the small amount of bio-based content that's in there.

MR. BRADMAN: Yeah, I think that's a good point. I mean, originally, when we first started discussing this, numbers like 15 or 20 percent were being raised.

My understanding that in some products, it's increased to more like 50 percent and that there is a movement towards more bio-based materials.

I agree with the statement about, or the point that when we use polyethylene films, they are removed from the soil. But they certainly are
not removed from the earth.

When I look at, for example, strawberry production in Monterey and Santa Cruz County, by both large growers and also very small, really down-to-earth organic farmers, it's still based on plasticulture. And the plastics are being removed from the farm, but they're being put back into the earth in another location, in a landfill.

And so we just have to keep that in mind and that it's not really removing it. Maybe from the patch of soil that's certified organic, but it's going into a bigger waste dump that will persist for years and decades.

MS. OAKLEY: Could I just quickly follow up, Steve?

MR. ELA: Go ahead.

MS. OAKLEY: Okay, I --

MR. ELA: Go ahead, Emily.

MS. OAKLEY: Okay.

MR. ELA: Sorry.

(Simultaneous speaking.)

MS. OAKLEY: I just wanted to say I wholeheartedly agree with that, Asa. I think that's a really great point. And these materials
are extremely complicated.

And I have used them for small-scale strawberry production. I don't anymore, but I used them for maybe three or four years and was really diligent about removing them, and yet, I still find pieces ten years on in the soil.

MR. ELA: All right. I'm not seeing further questions and we probably should move on. Thank you, Asa. I'll turn it back to Jesse.

MR. BUIE: Okay. Thank you, Steve, Emily, and Asa, for great work and robust discussion from the Subcommittee.

Let's now move into our 2022 Sunset Review. First is a soap-based algicide, 205.601 synthetic substances allowed for use in organic crop production. Rick, you're first up.

MR. GREENWOOD: Okay, thank you. My comments are based on the written comments and last week's webinars for the algicide/demossers. There were no comments related to delisting this product and there were a handful of support. So basically, nothing to say that it needs to be delisted, that I saw.

MR. ELA: Okay.
MR. GREENWOOD: Okay.

MR. ELA: Are there any questions from the Board? I don't see any, Jesse, so --

MR. BUIE: Okay.

MR. ELA: -- go ahead.

MR. BUIE: Okay. Ammonium carbonate, 205.601 synthetic substances allowed in use in organic crop production. Dave?

MR. MORTENSEN: Yes. So this is a material that's used in baits, either alone or in combination with yeasts, as an attractant for flies.

Like Rick's review of his last product, we had 16 written public comments. All of them either supported relisting or were, quote-unquote, not opposed to relisting.

About a third of those 16 written comments indicated that ammonium carbonate is not something that's used very much in their area. It's clearly something that's used more in systems where there is poultry and livestock production for fly management.

And so based on what was supportive comments about it and none that were raising flags,
this one also has a strong consensus for relisting.

MR. ELA: Are there questions from the Board? Dave, I have one, not seeing any others, and I'm going to get my fruit shirt right in here for this. But it's certainly one that is used for trapping in the fruit industry as well, for --

MR. MORTENSEN: Okay.

MR. ELA: -- for fruit flies. And there are a number of them, but it can be a component that helps. It's obviously fairly broad, but there are a few things that that really is the only choice, in terms of trying to trap, because there aren't specific pheromones or other things. So --

MR. MORTENSEN: Okay.

MR. ELA: -- I think, for that reason, I think it's fairly important to keep it on the List. And it's not --

MR. MORTENSEN: Yes.

MR. ELA: -- applied, it's kept in a trap, so it's not a broad --

MR. MORTENSEN: Yes.

MR. ELA: -- application.

MR. MORTENSEN: Thanks, Steve.

MR. ELA: Any other questions? Okay,
Jesse, go ahead.


MR. GREENWOOD: Okay, thank you. Again, comments based on the webinar and written comments, no one recommended delisting it. And the certifying agents mentioned that they have, of the ones that responded, over 100 users of this product. So there was support for its continued listing in the sunset process.

MR. ELA: Any questions from the Board on soaps? We're all into handwashing these days, it's always good to keep our insects clean as well. Jesse, your turn.

MR. BUIE: Okay.

MR. GREENWOOD: That's pretty, Steve, that's pretty bad.


MR. TURNER: It is, Jesse. This -- so vitamin D3 is listed as something to be used as
a rodenticide. We've had about a dozen written comments on this, pretty strongly weighted towards the relisting or no position.

Eleven comments all alluding to the fact that it really is essential for a lot of producers in organic, has historically not been the source of any bird toxicity.

There were several comments that pointed out that members have said, members of different organizations have said that the material is fairly ineffective, although we had over 100-plus actual growers saying they were still using it in the context of larger pest management strategies, with other mechanical tools as well.

So there was a strongly worded request for delisting from Beyond Pesticides that alluded to the painful death that it causes in rodents and did suggest that there was some toxicity to non-target animals.

So I think that research, some of the research came out of the New Zealand plant protection, out of that document. But in general, it's pretty strongly weighted toward relisting our position. That's what I have.
MR. ELA: Are there questions from the Board? I am not seeing any. Congratulations, Wood, you have now made your first presentation on the NOSB, so you're off and running.

MR. TURNER: An auspicious start.

MR. ELA: Yes. Back to you, Jesse.


MS. OAKLEY: Thank you, Jesse. So this material is what helped prompt in part the marine materials discussion that started five years ago, so it is a little bit more complicated.

But we did receive a large number of comments on this material, and also from producers using this material and certifiers, listing the number of producers that use it.

And it's very clear that it's a widely used material, across crops and across regions and across scales. So it is definitely one that farmers have been using for a long time.

We did receive comments that growers have experience with this material and that it's
been a part of fertility management since before the NOP, that it's pretty essential for people.

We heard from some producers who appreciate that we're exploring the environmental impact, or potential environmental impacts, of harvesting and want to continue using this while we explore that. We heard that it's small amounts that are used, but by a large number of growers.

And in response to some of our questions, we were informed by several manufacturers of aquatic plant extract materials that the nonsynthetic forms require more biomass to achieve the same benefits.

And we have been -- or we did hear from another commenter that natural extracts are available and that alternatives exist, so we should perhaps not allow these materials.

And I think it's timely and helpful that this is up for sunset review while we're very much in the thick of exploring possible annotation for this, which is obviously separate from the sunset review process, but it does help us see how essential these materials are for growers and how widely used they are, but also support for
continuing to explore environmental impacts. Are there any questions?

MR. ELA: Are there any questions from the Board? Emily, I will ask one. And it doesn't -- I mean, the Board, in the last few years, just looking through the notes, I think it was 2015, actually split pretty much five to six on whether to delist it.

They -- I mean, as you noted, these extracts are widely used, people love them, they've been used well before the NOP came into effect. I mean, there's a number of claims of all these beneficial micronutrients and such, which are hard to get in a cohesive whole otherwise, but yet, the Board really, obviously, was in a quandary of whether to continue these, even though I'm sure the comments of use were very similar then.

We obviously had a lot of comments on this go-round of the comprehensive review of marine materials. And that -- you personally have put out a number of discussion documents on this and I know it's so hard to wrap our hands around and I know you, probably, and the Board has kind of spun out on, how do we address this?
Do you have any guesses, comments, thoughts on how we move forward on this, to make some progress without just chasing our tails, but also knowing that it's an incredibly diverse topic?

MS. OAKLEY: Yeah, thanks. I would like to be able to move forward in the fall with a proposal for an annotation, in my ideal world, given that it's my last meeting and the amount of time that has been spent on this up until now.

I do take into sincere consideration the comments made by some stakeholders to aggregate all marine origin materials into one broad work agenda item. But as you discussed, I think that might be a challenge and it would be harder to make discrete recommendations for each of those.

So in terms of the 2015 sunset review and the divided vote, it's my understanding that that's what led to the 2016 TR, which was cross-subcommittee in its scope, so it looked at Handling, Livestock and Crop uses.

And just to the point, I'm trying to address this on a broader level, Jean Richardson was the lead on that subject and did work on her -- worked very, very hard through the last
couple of months of her term and came up with two proposals that came out, one in Handling, one in Crops, to try to look at nomenclature.

And ideally, I think it was also hopefully intended to address environmental impact on some level as well. But that was very challenging. And trying to do cross-subcommittee work is certainly feasible, but it comes with a lot of restrictions.

So what's taken place since the fall expert panel on marine materials is that I have crafted a draft annotation, basically considering the scientists' recommendations from that panel that address harvest areas, method, species, bycatch, and regrowth.

And then, address verification in two possible ways, either in material evaluation programs, similar to the one used for highly soluble liquid fertilizers, or organic certification. But we need to explore economic impact of that.

And I had been attempting to send this out to a number of marine scientists who specialize in seaweeds to just get their feedback on the
wording of this annotation and make adjustments as needed.

But whether that comes out as a proposal or a discussion document will depend on the Materials Subcommittee's review of it.

But it is work that is happening behind the scenes that you don't see right now, but I am trying to build as much scientific agreement on the annotation wording as I possibly can before bringing it forward.

MR. ELA: Thanks, Emily. This is going to be -- we know it's a bear and we know it's one that also, like so many things in the organic community, that some of the bigger concept discussions, it's so hard to find consensus, and yet, they potentially really do affect the Earth and the world we live in.

So I guess I just want to say thank you for taking this on, from when you first came on the Board. And as a heads-up to the rest of the Board and new members and members down the road that this is one that Emily's going to pass on.

But I think it's an important topic, and sometimes, I just want to throw up my hands
and say, let's forget about it and move on to other things, and then, I come back to that bigger picture idea of, we can't ignore some of these big picture things just because they're not easy.

So thank you, Emily, for your work on that. Are there other questions for Emily on this?

MS. OAKLEY: Steve --

MR. ELA: And, Emily, I guess, one last question. In the --

MS. OAKLEY: Okay.

MR. ELA: -- absence of that bigger picture idea, I'm guessing that you're -- we're not up for a vote with this, but that you're comfortable with moving it forward for relisting?

MS. OAKLEY: Yeah. I mean, I think that, I'm hoping, as I said, to come forward with a proposal, if it all works out, that would be an annotation to the listing, which obviously is separate from the sunset, because that's what we've been working on, me and others, Jean and others as well, for a number of years.

So, yes, my goal would be to have a proposal that would address some of the potential environmental impacts and at the same time,
separate from that would be a sunset review and relisting.

And I did just want to say in response to your great comments about the overall impact that we have on the environment and also just the comments that people would like to see a broader holistic approach to this, one of our commenters on the oral testimony said, don't let the perfect be the enemy of the good, and I think that that's actually a really appropriate analogy for this situation as well.

Of course, we need to get it right, but we have to do that in a manageable way and something that is enforceable and actionable.

MR. ELA: Thanks, Emily. It looks like one more question from Dave, and then, we'll move on. Go ahead, Dave.

MR. MORTENSEN: Yeah, Steve, this is really more a comment and a thank you to Emily for, if we were at a meeting face-to-face, I am sure that Emily would have convened already a breakfast, during which time ten or 15 people would have sat around a table sharing their views on this subject, some supporting the work and others with a,
perhaps, less supportive view about some of this.

But for the last several years, she's worked tirelessly to move this along and I thank her on behalf of the Subcommittee and Committee for all the work she's done on this.

MS. OAKLEY: Oh my gosh, you guys have to stop thanking me, because I don't really do that much compared to many other people. But thank you, it's nice.

MR. ELA: Yes, and I just saw somebody noted that, saying that you should be noting Jean because it's her birthday today. So happy birthday, Jean. We appreciate your work on this.

MS. OAKLEY: And you, yes, you got this thing going. Thank you so much.

MR. ELA: Jesse, back to you on --

MR. BUIE: Okay.

MR. ELA: -- the next item.

MR. BUIE: Okay. Lignin sulfonate, 205.601 synthetic substances allowed for use in organic crop production. Again, we're back to you, Rick.

MR. GREENWOOD: Okay. Thank you, Jesse. Yes, this is a chelating agent and dust
suppressant. No comments, again, either public or from the webinar on delisting. And the certifiers, taken as a whole, mentioned they have over 200 users of the product. So, again, I'd say that's pretty strong support for continuing to list lignin sulfonate during the sunset. Any questions?

MR. ELA: Are there questions from the Board? And I'd just like to point out that this was one that was modified through rulemaking, it used to be listed as well for the use in flotation of pears, similar to sodium silicate, and that was one that did get altered in the past. But (telephonic interference). So I don't see any other questions, so, Jesse, back to you.

MR. BUIE: Okay. Sodium silicate, 205.601 synthetic substance used in organic crop production. And that's you, Steve.

MR. ELA: Yes, thank you very much. And one of the reasons that sodium silicate was a controversial one in the last review of it, it is used to float pears out of the dump tanks, because pears are heavier than water, so you need to change the density of the water to get them to float.
We did receive a couple comments in favor of it, both from the Northwest Horticultural Council and then Harold Austin, who's also a fruit grower up there, in support of it.

Basically, while there are mechanical ways to get pears out of dump tanks, there was concern that many of the smaller pear processors, those mechanical ways are very expensive to retrofit the packing lines and that it is acceptable for use in organic production, especially for those smaller packing lines, and it would cause some harm to take it away.

Lignin sulfonate was taken off for that, in the last delisting, so it really left just the one material, sodium silicate.

So we did have two comments in favor of it. We did have one comment from Beyond Pesticides saying it should be delisted and that we should take it off the List.

We didn't receive any comments in terms of its use in fiber processing, which it's also listed for. So they noted, without support for that fiber processing use, it should be delisted.

So, but basically, people in favor of
it and one against. So any questions on that? Not seeing any questions, so, Jesse, back to you.

MR. BUIE: Okay. EPA List 4 inerts of minimal concern, 205.601 synthetic substances allowed for use in organic crop production. And that's a big one. Asa?

MR. BRADMAN: Okay. I got the two easy topics today. So my hope today is that I can kind of present an overview of comments and that all of us should be thinking about where we want to go and vote on in the fall related to this sunset. And then, in particular, discussions within Crops and I guess Livestock, as well.

I want to start out by saying, and I'm sorry, Jesse, if I take too long, let me know, but there's a lot of comments and views on this.

MR. BUIE: Use the time, we're in good shape for time, I think, yes.

MR. BRADMAN: Thank you.

MR. ELA: And I'll jump in on that, Asa. We've got until the top of the hour and we only have two more materials after this, that should be pretty straightforward. So you can -- I'm kind of balancing 15 or 20 minutes for this discussion.
So --

MR. BRADMAN: Okay.

MR. ELA: -- FYI. Counting questions.

MR. BRADMAN: I want to just lay out, too, one of my biases, I think all ingredients for every pesticide formulation should be publicly available, that we shouldn't have confidential business information or other ingredients that aren't listed, that really we should know what's being put on our food.

And I think that should be universal in pesticide formulations, both conventional and organic, but especially in organic.

I want to -- there's dozens of comments on this issue, very high level of interest and concern. I would say there's pretty much universal dissatisfaction with the current situation.

Words like embarrassment, we used the work broken in our sunset review about the current situation, we have a reference in the National List to a list, generally List 4 in EPA for, quote-unquote, inert that are not of toxicological concern, that we have a broken system
where we reference a list that's not maintained by EPA.

I'm sorry for the new members, I think you've heard that we have this situation where, quote-unquote, inert ingredients -- and I really hate the term inert. Really, we should be using adjuvant, because these are active material.

Certainly, when we reviewed iron phosphate, for example, for slug control, the active ingredient really wasn't active without an additional material. And that's often the case for many formulations.

So I think the current situation, again, where we have this reference to a list that's not maintained, is problematic. And especially because that list includes substances that I think by any standard do not comply with OFPA criteria.

NPEs are really the kind of poster substance for that. And I know, personally, I would have a hard time voting for a list that includes NPEs, even if it's just in principle.

And I think the question we need to ask ourselves when I'm done talking is do we want to hold our nose and relist List 4? Or maybe we should
not and use that as a mechanism to kind of move the process forward?

Words that come up, I meant, broken, unconscionable delay from the National Organic Program in implementing existing NOSB recommendations on this issue.

We've had recommendations from the Board in 2010, 2012, and 2015, and we kind of have a foundation for how to move forward on this. And I'm hoping that the level of concern, especially raised at this meeting and with the sunset, can encourage the NOP to establish an agenda item and reformulate the plan. Let's see.

Overall, I think, again, like some of the comments on bio-based mulch, the organic community has provided an excellent blueprint to transparently implement NOSB recommendations.

NOC, Beyond Pesticides, Organic Producer Wholesale, and many other organizations, I think have provided excellent comments that really provide a detailed roadmap for how we can move ahead on resolving this.

One of the main proposals from 2015 is for the NOP to work with EPA and the Safer Choice
program, which derived from the Design for the Environment Program at EPA, to basically develop a list of materials that are acceptable for pesticide formulations, but also meet OFPA criteria.

And I think there's going to have to be a give and take and kind of circular discussion between the NOP, the NOSB, and EPA to establish that. But that specific recommendation, I think is really something that we can move forward on.

This does put requirements on EPA. One recommendation to create a new section of the Safer Chemical Ingredients List, that I think there was a title provided for it in comments, which I really like, Ingredients Other Than Active Ingredients in Pesticides Used in Organic Production.

But that would essentially provide a mechanism for us to both review inerts and then, provide a reference for adding or, I must say, removing materials on that list.

One of the big, I think, challenges here is the sentiment that the NOSB is not positioned to provide reviews of individual compounds that are potentially available as inerts.
And I agree with that at some level, but there has been some really thoughtful proposals and discussions in the past that I think would allow grouping of some inerts, limiting the effort for groups that are less toxic and ensuring that there's a more thorough evaluation of individual chemicals that do potentially pose risks.

There is -- one of our questions and one of the issues raised is our current situation, where we refer to kind of an un-maintained EPA list for inerts, one of our questions was, is that stifling innovation?

And the answer is, yes. One certifier, or perhaps it was OMRI, excuse me, mentioned that there are products out there that aren't being developed, because there's not a reliable alternative to List 4 and formulations that may include, well, let's call them adjuvants or inerts, that aren't on the list are not being developed, yet those materials may in fact meet most of our concerns under OFPA.

So I think the question is, yes, there is evidence out there that the current use of -- the current broken system is stifling product
innovation. And I think that should really be kept in mind.

There were a number of concerns, though, that if we were to actually recommend delisting the List 4, that that would create turmoil in the current pesticide market for organic use, and that would ultimately lead to a reduction of available materials, increasing costs, and limit the access to useful materials that many consider essential for organic production.

Because of that concern, a number of groups are recommending that we relist List 4, that we vote for it.

Essentially, the argument essentially is we should hold our nose and not break the current system, which is already broken, but really use this as an opportunity to move the debate forward, well, really, not the debate, the discussion, and more importantly, move the programmatic steps forward that need to be taken to actually solve this issue.

There are comments from some growers. And I almost -- I think we need some discussion here, but I think this is overstated. I'll give
Inert ingredients are in every pest control substance we use. If you take away inert ingredients, kiss off more than half your food.

That's really a kind of extreme view of what could happen or what's going on here, with respect to List 4.

If we take our 2015 or other proposals to work with EPA and develop essentially a new list of inerts without toxicological concern, it's very likely that many of the materials on List 4 would be on a new list that could be managed, for example, under the Safer Choice Program.

So I think, in most cases, in many cases, existing pesticides, their formulations would not change. And then, if there are any materials on List 4 that don't make it to a new jointly created list, then they shouldn't be in products approved for organic production.

One of the examples there is NPEs, it's my understanding with OMRI that they're not approving products with NPEs, but the point is that that's potentially out there and available for use in a number of pesticide products.
And there, of course, may be, potentially are other current materials on List 4 that we don't want in organic.

And I think, really, the key here is that, given the scale of our industry and the importance of materials to control pests in, of course, hopefully, a much less toxic and environmentally friendly way, we need a system that works.

Some of the comments from the BPIA and related stakeholders was that a proposal to change the process with List 4 inerts could be extremely disruptive. It was sometimes compared to the Food Quality Protection Act of 1996, that kind of changed the way we regulate conventional pesticides.

I just want to say, I think that the 1996 change for conventional pesticides was a needed disruption. And I think we have a situation where we need a disruption to our current system here.

And that the concerns about, one of the concerns raised about making changes to this here is that will require a lot of regulatory work,
re-registering materials, both at the federal level and the state level, like California, and that that is at least a ten-year process and extremely expensive.

But again, I want to raise the point here, and I hope in our discussions today and as the Subcommittee prepares for a vote in the fall, that, again, if many of the inerts on List 4 ultimately transfer to some new system, that there won't be changes in formulations and there won't be a need for the kind of regulatory challenges that are being raised.

Of course, that's going to vary, depending on whether a given inert is exempt or not from a food tolerance, and perhaps might also depend a little bit on label requirements for current organic pesticides that do have a food tolerance.

I believe pyrethrin and a few other compounds do have an EPA food tolerance and if there were some registration changes there or formulations, that would require some challenges, and I think -- though we can try to quantify what that effect is.
So one of the recommendations -- let's see -- one kind of simplified recommendation from the BPIA was to keep List 4, but then, limit inerts -- keep List 4 and then, also allow other inerts that have an EPA tolerance exemption.

And I encourage everyone on this issue to make sure we kind of read each other's comments.

I also want to mention that some folks submitted additional comments by email and other ways after the webinars last week. And it's my understanding that those comments are now on the public docket.

So I think it's really important that this discussion be transparent and that those of us engaged in it make sure we have a clear understanding of what different groups are proposing, and from that, hopefully we can distill an effective approach or recommendation.

And again, as a Board, I think we're going to have to decide whether we want to relist List 4, a little redundant there, but approve relisting of List 4 and the current situation, but tie that to a strong recommendation to move forward programmatically, or whether the current situation...
is really just not acceptable, and if we vote to delist it, there won't be an immediate change, but I think that could also set in motion the programmatic steps to move forward.

MR. ELA: Asa, can I open it up to questions now? Just --

MR. BRADMAN: Yes.

MR. ELA: -- keeping an eye on time. And I also, before I open it up to questions from the Board, I want to see if Jenny Tucker has any comments on this, because it really does kind of involve, as you said, not just whether we vote to delist, but how do we move forward and how that might affect how the Board feels. So, Jenny, do you have any thoughts?

DR. TUCKER: Just a quick comment. We are certainly aware at the program level of the problematic nature of this now very outdated reference.

I think a lot of thought was put in a few years ago, and this was, yeah, a few years ago now, as to the next best step. At the time, it was -- we did talk about doing rulemaking on this item.
And at that time, it would have been not only a significant rulemaking, but an economically significant rulemaking, which is a very big deal. At that time, we decided, based on that, that there were other priorities that needed to be advanced at that time instead.

I think the landscape out there has shifted a bit at this time and so I think that it may be now more ripe for rulemaking. Certainly intently aware of this issue at this time.

So I appreciate the Board's work on it, and the Board's sort of acknowledgment of the complexity involved in this item. So this has involved a lot of very detailed thought and work and I appreciate that focus.

MR. ELA: Jenny, in terms of --

MR. BRADMAN: Can I follow up with --

MR. ELA: Yes, go ahead, Asa.

MR. BRADMAN: Jenny, I'm not sure what the economic concerns were, though I can imagine they were substantial. But again, this kind of cross -- it can potentially go both ways.

Actually, it was the OMRI comments, and in their comments, they note that there is a minimum
of three brand name products that were formulated with ingredients that did not appear on List 4 or 4B or the 2004 EPA List of Allowed Inert Ingredients. However, they were included on the scale as a green circle or assigned List 4 status after 2004.

So the point here is, here are three products that could potentially be valuable in the organic market and would have potentially an economic benefit to growers and the organic community, but are not available.

So there's both costs in terms of how do we restructure a regulatory environment for existing materials, but also, there's kind of a cost if we don't do anything as well.

DR. TUCKER: Agreed. And a rule would look at both costs and benefits. Again, the landscape has changed enough in the last few years that quantifying both the costs and benefits and understanding what the real world dynamics are at this time, again, may make this a more ripe topic for taking on through rulemaking.

MR. BRADMAN: Right. And --

MR. ELA: So, Jenny --
MR. BRADMAN: -- just one last comment. Just there's the larger issue here, too, that pesticides are -- the word pesticide and organic, people don't realize that they can go together.

And to the extent that we can support a pesticide industry that still is true to the ideals of the organic philosophy, I think is extremely important.

And if we can move forward in a way that removes things like NPE as potential actors, we really promote the integrity of organic, which is really a key function and something that is a big focus of our work.

DR. TUCKER: Appreciate that feedback and that comment, in particular, thank you.

MR. ELA: Jenny, this is Steve, I have a question, in terms of kind of procedures. Obviously, this sunset, so we have to vote on it next fall, kind of up or down.

And I think Asa laid out the playing field that we know some of these are -- well, it's rare to have a listing that is multiple materials, that always is problematic.

But a lot of the Board, I think, would
like to vote them down, or vote to delist them, just because of some of the problems, but also recognizing that it's very important to relist some of them as well, and that it's not a simple procedure, that it's going to take a lot of cross-department work and pollination and such to figure out how to deal with this.

Do you have any suggestions for how we proceed?

DR. TUCKER: I think this is an interesting problem. And I've been thinking about this and I'm not doing hypotheticals, because I get in trouble with hypotheticals, and I do want to just sort of talk through the challenge here.

So the Organic Foods Production Act does not allow us to add a synthetic to the National List without a board recommendation, right? So if you were going to vote to delist this particular item, you would need to propose listing something else in order for us to list something on the National List.

We don't have the authority to list a synthetic on the National List without you, without a recommendation from the Board. So it would need
to be a recommendation with some kind of a -- so remove this listing, but add this other thing.

So I hate to make that too simplistic, but there has to be -- it does need to reflect that complexity in order for us to be able to have a mechanism to add something to the List that is recommended by the Board. Does that make sense?

MR. ELA: So in other words, we need to work with you to figure out how to proceed and what -- if we were going to say to delist this, we also need to have a work agenda item of how to add something else, to give you the green light to move ahead on some of these other things.

So it sounds like we're not going to solve that today, but, certainly, the Crops Subcommittee needs to, and the whole Board of course and myself, need to work with you on the best way to run this down --

DR. TUCKER: Yes.

MR. ELA: -- and figure out how to do it.

DR. TUCKER: That was a good summary.

MR. ELA: Thanks, Jenny, that really helps, that gives us some ideas. Asa, it looks
like, do you have your hand up for something else and then, we -- we're quickly running out of time here, I want to make sure we get comments from the rest of the Board as well.

MR. BRADMAN: Okay. I'll stop. I'll stop.

MR. ELA: Does anybody from the rest of the Board have questions, comments? Wood, go ahead.

MR. TURNER: Steve, I'd rather give my time to Asa to finish his comment.

MR. ELA: We'll make sure Asa gets another shot here, we're not going to cut him off.

And I'm comfortable, if everybody else is, if we have to go ten minutes over and have a robust discussion on the topic, it's rare we all get together, I'd rather go a little bit over time and make sure we actually have a strong discussion this. So, Wood, go ahead.

MR. TURNER: No comment, Steve, I just want to hear from Asa.

MR. ELA: Okay, fair enough. Scott?

MR. RICE: Thanks. I'd also like to hear from Asa, as well. I appreciate his -- he's
pretty experienced and has deep insight on this.

But as this is the same listing I've got on the Livestock side of things, share a lot of the same concerns and appreciate your insights into this, again, Asa.

But I happen to think, we've been without a National List Manager for a period of time here and I can't think of a better thing for that individual to jump into once the Program has that person hired up and would love to -- and think it ideal to engage with that individual in maybe helping the Board kind of take all of this public comment and kind of insight and help us shape how best to move forward.

Because I do think we have, as has been noted, a lot of great ideas from previous Boards, a lot of great ideas from this Board, and of course, public comments.

And I think we, as a Board, often are faced with these very complex kind of issues to tackle and I think that's fantastic, we all bring a lot of expertise and experience to the Board, but I also think this is one of those ideal opportunities to really draw on the Program
strength and especially their relationships with the likes of EPA and other agencies to really help us in that process. So I just wanted to offer that.

MR. ELA: Thanks, Scott. Asa, back to you.

MR. BRADMAN: Thank you, Scott. And I really want to reiterate what you said and also note that even in the public comments, there was the mention of really the need for a List Manager here.

And again, I think that in many of the public comments that were submitted, there was a very clear and I thought very reasonable roadmap to what steps need to be taken.

And I think as a Board and also as an agency, we should all go back and look at that and use that, or maybe some combination of those suggestions, as a roadmap and come up with a timeline on how we can move forward.

I also wonder, there was some concern about staffing within EPA, and back in the day, I've worked with a number of state agencies in California and we've had situations, for example, where one department will fund or support a
position in another department to achieve a specific task or program.

And I wonder if perhaps EPA could help, I'm sorry, USDA could help EPA designate a staff member or help support a staff member that then could be the liaison between the EPA Pesticides Program, and perhaps also the Safer Choice Program, and USDA to kind of operationalize some of the roadmap that's really needed.

I think there are concrete steps that can be taken. And again, these things cost money, but if we look at the scale of the pesticide market and industry, I think, like we spend money on enforcement for fraud, I think this is a situation where we need to spend some money to strengthen the integrity around pesticide use and pesticide development and that, overall, there will be an economic return to the community.

MR. ELA: This is Steve and I'll jump in. I agree, Asa, this obviously is not going to be something the NOSB works on in a vacuum. It's going to be a hand-in-hand process with NOP and, ultimately, the EPA.

And I'd like to point out, we already
have somebody at EPA that does review some of these things, that worked with List 4 things, in terms of how that complies with OFPA. So it's not a -- this isn't a brand new idea, that there is some work together.

I want to make sure that, personally, that when if we move to Safer Choice and SCIL list and things, that we also, again, guard against that we highlight that and then EPA changes something else and we're back in the same boat, that somehow we keep a way to work hand-in-hand as those things migrate, without locking them in.

So but I think these are -- I think we definitely need to talk with Jenny and the Program Manager with the National List Manager, that's going to be very important moving forward.

I have a concern in that I think OMRI submitted their testimony that 153 of their distinct ingredients would migrate to Safer Choice or the SCIL list, but 212 of their distinct inert ingredients do not appear on the SCIL or 25(b) list.

I mean, that worries me a little bit, when we have -- if it were five or ten, I think, oh, that's -- we can work around those. But
there's certainly a number of materials, some of which, as you noted, maybe shouldn't be in organic pesticide products.

But I think we're going to have to have a, my personal opinion is we're going to have to have a fairly long phase-in time. I don't know if I agree with ten years, like somebody said, but we're certainly going to have to be sensitive to the time it takes to transform and re-register.

And we already know that the organic market, even though it seems huge, is small enough that IR-4 and these things, it is sometimes hard to get some of these materials into the organic market.

I mean, even the Northwest conventional horticulture industry, as big as it is, still has a hard time getting materials registered, because wheat and soybeans and corn are so much bigger.

So I want to make sure as we proceed, we don't shoot ourselves in the foot, but I think we have to proceed. Other questions from the Board? A-dae, you have a question?

MS. ROMERO-BRIONES: It's more of a comment. I do think the NOSB does have to be very
deliberate and diligent about process here. I mean, if we -- I understand the need for cooperation between USDA, NOP, and the EPA.

But, like, as demonstrated in the past couple weeks, like, EPA or federal agencies have their own political pressures and sometimes, like with the Clean Water Rule from EPA, how it's been really rolled back or even how a lot of the EPA regulations are put on hold in times of an epidemic. Like, I do think it warrants some discussion with NOSB on the power dynamics and getting clear, I guess, a clear sense of how powerful or not powerful our recommendations are, in that kind of dynamic, because we do want to safeguard against, I guess, political rollbacks of processes and regulations. That's certainly something that we have to consider moving forward.

MR. ELA: Other comments, questions, from the Board? I'm not seeing any. Do you have any last very quick comments, Asa?

MR. BRADMAN: No. Well, I just, I think A-dae just made a really good point. And one of the recommendation from the BPIA was that review should be based on information, health information
and other information considered by EPA, when we're looking at substances.

And I know I'm in a situation where EPA is now not using certain kinds of epidemiological and other research in their risk assessments. And there's some complex issues there.

But I think the standards for information, when we look at impacts on the health and human environment for the NOSB and for organic in general, should be very high.

And that if we work with EPA, I would just want to make sure that those high standards would be incorporated into any working relationship to address these questions about inerts and potential, how we evaluate them in terms of yay or nay in terms of organic.

MR. ELA: Great. Thank you, Asa. I'm not seeing any other questions. And I think we should move on. Thank you, Asa, that's a great synopsis of a very complex topic, appreciate it. Jesse, back to you for the last two materials.

MR. BUIE: Okay. And, Asa, another great discussions. These last two can be pretty quick.
Arsenic, 205.602. On arsenic, we received seven public comments. Seven public comments were received, all in support of not removing arsenic from its prohibited status on the National List.

Both the Crops Subcommittee and the full Board voted not to remove arsenic from 205.602 nonsynthetic substances prohibited for use in organic crop production. And I think that was in 2017. Are there any questions on arsenic?

MR. ELA: Jesse, I'm not seeing any questions, so it looks like you can move ahead.

MR. BUIE: Okay. And then, strychnine is the final substance for review. And the same public commenters commented on strychnine. And again, they were all in support of not removing strychnine from its prohibited status on the National List.

And the Crops committee and the full Board voted also not to remove it in the vote in 2017. Any questions?

MR. ELA: Jesse, I'm not seeing any questions.

MR. BUIE: Okay. And --
MR. ELA: So turn it back to you and --
MR. BUIE: Okay.
MR. ELA: -- I guess then --
MR. BUIE: Okay. Well --
MR. ELA: -- you can turn it back to me.
MR. BUIE: Okay. And that ends the
Crops Subcommittee discussions and I turn it back
to you, Steve.

MR. ELA: Thank you, Jesse. And, Jesse,
you've done a great job with chairing the Crops
Subcommittee this year. It's greatly appreciated
and I've been very glad not to have to do that,
so thank you for your hard work in keeping things
straight.

MR. BUIE: Thank you, sir.
MR. ELA: You've been great.
MR. BUIE: Thank you.
MR. ELA: With that, this is the end of
our virtual meeting for today.
We will reconvene tomorrow morning
again, at 11:00 Eastern Time, and we will be working
with the Handling Subcommittee in the morning, and
then, Livestock Subcommittee and the final meeting
wrap-ups after lunch tomorrow.
Appreciate everybody hanging in there and all the attendees, it looks like we have 129 people out in the audience.

Greatly appreciate all the comments that have been submitted, and as you can see, the stakeholders and all the time you took to submit items has been very appreciated by the Board. We know you all deal with distractions as well during this pandemic.

So with that, I'll look forward to seeing the Board tomorrow. And just for the Board, we do have a post-meeting wrap-up in a half hour here, to see if we need to modify any procedures or things, and that's certainly optional.

But thank you, again, to everybody, and we will talk to you tomorrow. Take care.

(Whereupon, the above-entitled matter went off the record at 4:13 p.m.)
The Board met telephonically at 11:00 a.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
STAFF PRESENT

MICHIELLE ARSENAULT, NOSB Advisory Board Specialist, National Organic Program
DAVID GLASGOW, Associate Deputy Administrator, National Organic Program
DEVON PATTILLO, Materials Specialist, National Organic Program
JENNIFER TUCKER, Ph.D., Deputy Administrator, National Organic Program; Designated Federal Official
SHANNON NALLY YANESSA, Assistant Director, Standards Division, National Organic Program
Handling Subcommittee

Discussion Document: L-Malic acid reclassification ......................... 8
Discussion Document: Ion exchange filtration . 24
Discussion Document: Fish oil annotation ..... 34

2022 sunset substances review:
Kaolin ............................................. 48
Sodium bicarbonate ................................ 49
Waxes - nonsynthetic (Wood resin) ............. 51
Ammonium bicarbonate ........................ 56
Ammonium carbonate ............................ 56
Calcium phosphates (monobasic, dibasic,
and tribasic) .................................... 58
Ozone .................................................. 60
Sodium hydroxide .................................. 63
Carnauba wax ...................................... 64
Glycerin (CAS #56-81-5) ........................ 70
Inulin-oligofructose enriched .................. 72
Colors (18) ........................................... 76
Kelp .................................................... 94
Starches: Cornstarch (native) ..................... 105
Starches: Sweet potato starch .................. 105
Orange shellac-unbleached ..................... 116
Turkish bay leaves ............................... 118
Whey protein concentrate ....................... 125
Livestock Subcommittee

Discussion document: Fenbendazole
- petitioned ................................. 133

2022 Sunset substances review:
Butorphanol ................................. 161
Flunixin .................................... 162
Poloxalene .................................. 164
Formic acid ................................. 165
EPA List 4 - Inerts of Minimal Concern ...... 166
Excipients .................................. 169
Strychnine .................................. 174
Magnesium hydroxide ......................... 174

NOSB work agendas/Materials update ........... 176
Other business and closing remarks .......... 182
Adjourn ..................................... 187
MR. ELA: Why don't we go ahead and get started for the day. It's the top of the hour and top of the day to all of you, and thank you to the Board for being willing to sit through four to five hours of sitting time. I think one of the biggest problems with virtual meetings is Michelle always buys us snacks, and we don't get to pass our snacks around. I miss that, Michelle.

In honor of today, I put on my -- I had my fruit shirt yesterday for Crops. I put on my Handling shirt in honor of fermentation processes here today and the brining of olives. So we'll move into Handling. But before we move into Handling, I would like to do a roll call of the Board so we can get on record all of the Board members that are attending today. I believe we have them all, but we'll make it formal by reading it into the record. So Sue, are you there?

MS. BAIRD: I am here. Thank you.

MR. ELA: Asa?

MR. BRADMAN: Present.

MR. ELA: Jesse?
MR. BUIE: Present.

MR. ELA: Jerry?

MR. D'AMORE: Good morning, yes.

MR. ELA: Rick?

MR. GREENWOOD: Present.

MR. ELA: Kim?

MS. HUSEMAN: Here.

MR. ELA: Mindee?

MS. JEFFERY: I'm here.

MR. ELA: Dave?

MR. MORTENSEN: Good morning, NOSB colleagues and attendees.

MR. ELA: Emily?

MS. OAKLEY: Present.

MR. ELA: Nate?

MR. POWELL-PALM: Present.

MR. ELA: Scott?

MR. RICE: Good morning, present.

MR. ELA: A-dae?

MS. ROMERO-BRIONES: Present.

MR. ELA: Dan?

DR. SEITZ: Good morning, present.

MR. ELA: Wood?

MR. TURNER: Back at it, Steve.
MR. ELA: There we are. And myself as Chair, Steve, so it looks like we have whole Board here. So our schedule for today is we're going to have two hours set aside for Handling and then have an hour for lunch. And then after lunch, we will go to the Livestock Subcommittee and then our work agenda and any wrap-up items.

So we're in the home stretch here. So thank you to all our attendees and Board members for being part of this. I thought we had some great discussions yesterday. And certainly, while most of our -- oh, I guess not all of our discussions. A lot of our discussions are on materials. There are some that are obviously a little thorny, and I thought we had some good talks about some of the issues before us. But we also had some great discussion documents.

So with that, I would like to turn the program over to Asa as Handling Subcommittee Chair. Asa, would you like to start out with the discussion documents? And Asa, you may be on mute.

MR. BRADMAN: Okay. Can you hear me now?

MR. ELA: We can hear you now. Go
MR. BRADMAN: Okay, apologies. Welcome to everyone, and I just want to reiterate some of the conversations we had post-meeting yesterday. But it's really amazing that we can actually have a meeting right now and still work on these issues. And I'm just kind of amazed at the technology and possibility.

So with that degree of awe, we have a lot of substances and issues to talk about with the Handling Subcommittee today, and we're going to just follow the order here in the agenda. And we're going to start with the L-malic acid reclassification. And Scott, I think you're on board for that.

MR. RICE: Thanks, Asa. This is a discussion document that considered a change to the classification of L-malic acid from a nonagricultural nonorganic non-synthetic allowed substance to a nonag synthetic allowed and moving that from 605(a) to 605(b). This was made in response to recommendations for this change that were made in a number of comments that we heard submitting -- excuse me, submitted last year during
the substances sunset review in spring and fall 2019 as well as the 2019 technical report on L-malic acid. That report found that most commercial quantities of L-malic acid are derived in part via a process of enzymatic conversion of synthetic fumaric acid.

The 2019 sunset commenters noted that while supporting documentation may state -- one second here, I just lost my screen -- may state that the L-malic is produced naturally via enzymatic fermentation, that that statement refers only to the second half of the process. It's the first half of the production where the determination gets a little bit sticky.

So the predominant industrial process to produce L-malic is a two-step procedure, and that production of fumaric is either synthetically from petroleum or by fermentation of carbohydrates and the enzymatic conversion of fumaric acid to L-malic acid is by immobilized microbes producing the enzyme fumarase. This is the part of the production that some point to as the basis for the nonsynthetic determination of the listing. In certification, it's general practice to go just
one step back in a material review. And in this case, we only go one step back. We do not consider how we got the fumaric acid in the first place.

But to get that fumaric acid, there are two options for obtaining it in the first step. The first is the fumaric acid precursor is obtained through fermentation of a carbohydrate, and that's, for instance, with the Rhizopus species. That would be the nonsynthetic source.

The fumaric acid precursor could also be obtained as a synthetic product from maleic acid of petroleum origin. And that, of course, is then when we see -- that would be the synthetic source.

So if you're clear on that, we can turn to sort of the comments and responses to the questions that we asked.

Some consider that fumaric acid to be the substrate and not the source of L-malic acid, arguing that the source is the immobilized microbe or the culture broth, if you will, that produces the enzyme fumarase. That approach also argues that the NOP decision tree justifies not going back any further in the production process, and that would deem the substance, again, nonsynthetic.
That view also argues that there should not be any further review unless the National List requires it, as we see for yeast listed at 605(a).

If verification of the substance is required, then that would deem the substance synthetic and reclassification would be logical. In answer to one of our questions, reclassification could indeed affect the listing of other substances produced through microbial fermentation such as the L-lactic and citric acid, gellan gum, gibberellic acid, just to name a few.

No matter to where commenters fell on this, it's pretty clear that most agree that the decision tree in the NOP's guidance needs to be a little clearer in order for consistent decisions and interpretations to be made. The guidance on materials produced through fermentation hasn't placed restrictions on the use of synthetic growth media in the production of the nonsynthetic input, and commenters suggest that we as a Board offer clarification on the use of the decision tree to classify microbial products and byproducts.

Additionally, some note that any additional restrictions on substrate for a source
should be included in an annotation, as is the case for yeast again. If we moved in that direction, there would be a need to give sufficient time for operations to transition and change to that source, as we see when changes like this go through. As noted in the discussion document, the predominant source of L-malic acid used right now is the synthetic form with certifiers verifying that it was not produced using the big tree and that it is not DL or D-malic acid.

Comments indicated there doesn't appear to be sufficient quantities of a nonsynthetic L-malic acid available at this time to meet current demand and also that it's not clear how much time would be required for such sources to become available. Commenters also suggested that the listing be synthetic, but one option is to add an annotation to require a nonsynthetic form when such a form is commercially available. And also noted in the discussion document, and again in this round, some commenters opposed the move of L-malic acid from 605(b) straight over to 605 -- or to 605(b), believing at first it should be removed and then repetitioned for inclusion at
605(b), or as I just noted, with 605(a) with an annotation, limiting its use to forms produced through nonsynthetic methods. That last one did not include necessarily a commercial availability suggestion.

So moving forward on this one, it's clear products of fermentation create confusion and disagreement. I think before we can really resolve this particular issue as it relates to L-malic acid, we need to come to agreement on how to approach the synthetic-nonsynthetic classification of the fermentation byproducts. It's not such a cut and dried starting point when we're talking about the starting material or the medium or substrate or broth or whatever we want to call it because to get to that starting material, we have other inputs that come into that process as well.

In order to get clarity, we -- again, I think we need to revisit the 5033 decision tree for classification as it relates to products like this and get a little more specific on the starting point. The negative of that is that might get us a little far into the weeds. But as one commenter
pointed out, this is the only example of a nonsynthetic for which the primary source is petroleum or that the primary source is a synthetic.

So that gets us back to the use of an annotation to limit sources to nonsynthetic when commercially available, to hopefully drive folks to use those sources, and drive those sources to become more available. So that's kind of where we're at on this one. I would open it up to discussion, but I see obviously a little more work to do on this thing in the subcommittee.

MR. ELA: Thanks, Scott. Are there questions from the Board?

(No audible response.)

MR. ELA: So Scott, I've got a question. So could you just repeat kind of what you just said? I need to get this clear in my head.

Without -- if we don't go down the path of really revisiting the classification tree which, of course, opens up a quagmire, but may need to be done, I don't know. I mean, that's its own discussion. But if we don't do that, then restate kind of what our choices are. And it was just kind
of what you just said in the last 30 seconds.

MR. RICE: Yeah, sure. I think probably the most straightforward would be to move it to 605(b) and include that annotation that a nonsynthetic source be used when commercially available. I think that's about as cut and dried as we could get on this and do a big sidestep on opening up that larger discussion on how far to go back or how to interpret that decision tree.

And again, I think it's a fair point that this is sort of, kind of an odd man out in that it's a bit of an exception. I think we've seen success with -- I think with yeast and an annotation on that, submitting it or restricting it from petroleum sources. So yeah, I think that's probably the most straightforward way, and you could argue if that's best or certainly not the only way.

MR. ELA: Looks like Mindee has a question.

MS. JEFFERY: Thank you. I think that we can't afford to ignore fermentation right now given the levels of substrate questions in GMOs and the second wave of GMO technology with
synthetic biology and lots of things. They're talking about fermentation and the fermentation process puts out a product. I think that we kind of have to tackle it and look at it from a larger perspective of protecting organic systems from the new wave of GMO technology. So if those things can happen at the same time in this process yet looking at fermentation really carefully, I highly advocate for that.

MR. RICE: Yeah.

MR. ELA: That topic certainly -- oh, go ahead, Scott.

MR. RICE: No, go ahead, Steve.

MR. ELA: Well, I mean, it came up with biodegradable mulch as well of using GMO systems, produce something, whether that -- where leads us. But go ahead, Scott, if you have more to say on that.

MR. RICE: I guess I would just say I'm certainly not opposed at all to really diving into this. Just know that it is a larger conversation and one that I think will require more discussion and maybe some more input. But I think that we got a lot of great comments and useful comments
on kind of a path forward, and I think that gives us a bit of direction on this, so it's certainly not insurmountable.

MR. ELA: Other questions from the Board? Asa, you have one.

MR. BRADMAN: I just have more of a comment. We had kind of some sidebar conversations about this the last meeting -- in-person meeting. And my sense is, is that the issue of fermentation products is large and challenging but of concern in that that is an issue that we should be thinking more about and addressing. And maybe this material can help move us in this direction.

I know for simplification right now, I think, Scott, your cut and dried suggestion might help us deal with malic acid right now. But as a Board, I think we do need to think about the larger challenges. GMOs come up in a lot of contexts too. I mean, they come up in vaccines, plastics, fermentation products. So there's some substantive issues there.

MR. RICE: Yeah, agreed. I think I --

(Simultaneous speaking.)
MR. RICE: Sorry.

MR. ELA: No, go ahead, Scott.

MR. RICE: I would just agree. It'd be kind of kicking the can down the road until this kind of came up again. And so yeah, your point is well taken. We're going to have to deal with it at some point.

MR. ELA: I'm a little worried about this being spoken by somebody in their fifth year.

Sue, you have a question. Sue, we're not hearing you. We still don't --

MS. BAIRD: How's that?

MR. ELA: -- have you, Sue.

MS. BAIRD: Is that better?

MR. ELA: That's much better, yes.

MS. BAIRD: Okay.

MR. ELA: Go ahead.

MS. BAIRD: Yes. Just a comment echoing the same concerns that Asa just expressed. We'll find it in livestock. We saw it in vitamins. We're going to see it today in excipients. Anytime you see anything produced with fermentation, you're probably going to be raising -- and as you said, we saw it in the
vaccines. We're going to be raising issues with GMOs. Are we going to ignore it, or are we going to tackle it at some point because they are probably there if we're using fermenting processes.

MR. ELA: Dave, you have a question?

MR. MORTENSEN: Yeah, not really a question, maybe a reflection. And I agree with Asa that it seems to me that maybe another way of thinking about what we're really challenging ourselves to sort through is where is the boundary before which we're concerned about something in a process. In some cases, we think about a boundary of a pesticide, that should this be allowed in organic or not. We'll look at some of those this afternoon.

And in other cases, it's the boundary of at what point do we say this is allowable up to this point. And anything that came before that is not something that would lead us to not accept it. It does seem that it's like where do you draw the line on some of this. I do think it would be helpful for us to have that discussion in the way that others are saying. I agree.

MR. ELA: Other -- Mindee?
MS. JEFFERY: Thank you. Just in the sense of I was in a retail location in the ten years when GMOs received the most attention and when we had to work the hardest to help the consumer understand what was going on with the non-GMO project verification and what was the organic system doing. And now that I'm in another part of the country, in another retail environment, I see how far away organic is from not only helping retail grocery people who are committed to the food movement but customers to understand the huge difference in what organic does in the food system as opposed to just being non-GMO.

And we cannot afford to lose this landslide any more than we already have in consumer perception. I think that the technology is developing so quickly in the second wave of GMO technology in the sense altering organisms to spit out new kinds of GMOs and the synthetic biology CRISPR-types of technology. The customer doesn't really understand how much that's already in the food system.

And then when they begin to, if organic isn't ahead of the curve of protecting itself from
that and able to communicate that really well, we're in a lot of trouble with the consumers. And I've lived that for the last 15 years, so I want to overemphasize it because I'm standing there talking to the people all the time.

MR. ELA: Fair enough. Dan, you have a question.

DR. SEITZ: I just want to echo what Mindee just said. Being on the Board of a food co-op, there's really -- with a food policy, there are few questions that come up more than, how do I know whether there are GMOs in this food, and then also a subsequent, how do I know whether this was grown with highly toxic pesticides?

MR. ELA: All right. Great questions, great discussion, and thank you, Scott. I have to say this is one of those topics. I'm just reading the comments where I just get very confused very easily. So I appreciate you making that much clearer to me at least. I think I don't see any further questions. So Asa, why don't we move on. And Asa, you're on mute, I think.

MR. BRADMAN: Thank you. Sorry. Thank you, everyone, for the discussion. And our
next topic is ion exchange filtration. And Steve, I think we have your initials first on that. So you want to lead off?

MR. ELA: I will do that. This is one that came up not because of a sunset or a petition but one that came down from the program in terms of trying to help resolve a discrepancy between how certifiers and the programmer are looking at something. Basically, really we have a lot of great comments. They did range from kind of the whole gamut of how we should approach this.

And really, it boils down to we have a column. There are -- for the sake of just visualizing something, there are beads in that that have ions attached to them -- permanently attached to them. And as a material, such as corn syrup or whey protein or something like that, passes by those beads, they suck up ions out of that liquid or substance and exchange them with like a hydrogen or hydroxide ion or something else.

So they're clean, filtering in essence, kind of chemically filtering those substances and pulling those impurities out of the substance and attaching them to the resin in exchange for a fairly
simple ion that arguably does or doesn't change the material. And so given that kind of process, they are slightly different than a straight mechanical filter where you're just literally sieving something out. And yet they also are a filter of their own type.

And so the argument really comes down, what do we need to have on the National List? Is it simply the material that once those resins become, quote-unquote, clogged with the impurities, another material has run over those resins to recharge them, basically strip those impurities off and to recharge them with -- I'm just going to say for sake of simplicity -- the hydrogen or hydroxide ion. Do we just need to have those recharge materials on the list, or do we need to have the resins themselves on the list or anything used in that process?

And the public comments basically fall into the three categories. We just need to list the recharge materials that are used to recharge those resins. We need to list -- on one extreme, we need to list everything that's in that process. On the other extreme and in between, it's kind
of some things yes, some things no.

Given that kind of simplistic overview of where things fall, part of the argument really comes down to FDA and their definition whether the resins are a food contact substance. And if they're listed as a food contact substance, then according to NOP protocols, they do not need to be listed on the National List. And so people use boxes and handling materials and things as parallels to that. Arguably, slightly different, but it's true. If it's a food contact substance, then we cannot just say this needs to be on the National List.

However, there is some interpretation that these resins are also secondary direct food additives. And if they're secondary direct food additives, by protocol, those do need to be listed on the National List. And the confusion really comes down to that FDA lists them as both.

And so just to give a little more background, OMRI really in their memo to us or their statements to us, they found in 2002 that ion exchange is a chemical process because these ions are being exchanged. Ion exchange resins are
processing aids, so those secondary processing aids, and that ion exchange resins are functionally different from other polymers used in packaging.

So those statements served as the basis for OMRI's current policy, but they also note that if the classification of ion exchange resins is as food contact substances rather than processing aids, they might have to revisit those thoughts.

Let me just scroll down here. It also was noted within the NOP that some secondary direct food additives -- according to FDA guidance, some secondary direct food additives also meet the definition of food contact substances. So that keeps the water -- this is going to be a bad pun -- very muddy and unpurified. And so I think the bottom line is really that definition, and I don't know if we have -- I believe we have a TR out on this that may help with that. But which way we go really depends on kind of the FDA definitions there.

One of the commenters was a law firm that argued very vehemently that they are secondary direct food additives, and therefore we must list the resins. And then others argue, again, citing
FDA guidance, that they are simply food contact substances. There are a large number of products that are made using ion exchange filtration. They range again from whey protein to infant formula to corn syrups and a number of others.

So it is a widely used technology in the organic world. So the decision we make could have fairly wide implications. And again, the comments from some certifiers where we think everything should be listed including the resins. Some companies agreed with that to the opposite end of just list the recharge materials and go on.

I think that the final thing I'm going to say is that the NOP has written that more broadly, material conflicts between certifiers are rare. But when they occur they are often complex, and initial information is not always the complete picture. The NOP recognizes that we need to enhance our process to allow for earlier information gathering and increase organic stakeholder engagement when these complex conflicts occur. And this is certainly one of those where it really does come down to kind of both sides being right, but yet we do need to
resolve this. So with that, I will open it up to questions from the Board.

(No audible response.)

MR. ELA: Any questions? I'm not seeing any at this point. Asa, you have one.

MR. BRADMAN: Just a couple thoughts on this. One, food contact materials have been a concern for the Board. I mean, for example, some of the debate around EPA and maybe even in the future, the potential for phthalates or other materials to come from food contact materials and contaminate or affect the food that's being packaged, those are real concerns and have been on our agenda, at least for BPA, and hopefully will in the future also be. So I think even if it's simply considered a food contact material, it's also something we need to think about.

And then to me, I think is there chemistry involved? And it seems like the answer to that is yes, there's chemistry involved here. So it's a little bit more than just a food contact material. Whether there's a concern about any of these substances being listed and somehow taking away a process that might be essential to some
organic products, I still think it's worth considering this. And there'd be a lot of work involved, but maybe listing these is appropriate.

MR. ELA: Yeah, and that's -- I think that's a fair argument, Asa. I think there is some chemistry involved personally. It's very minor, but it is a chemical exchange. And I think Beyond Pesticides noted this is very similar to a water softener where you're exchanging sodium. The resin has sodium attached, and that is being exchanged with calcium and magnesium.

I'm not sure that I buy the argument -- and again, this is me personally. I think the resins are relatively -- I was going to say inert. That's not the right word, but stable. And literally, the resins are essentially permanent, and then it's just their charge on those resins, ionic charge that allows for the exchange of the ions.

So I think there is a pretty good argument that those resins really aren't part of the chemistry except for the fact that they have a charge attached to them. Clay mineralogy is where I come from in geology, and that's you alter
the structure of the clay by exchanging those magnesium, calcium, potassium, salt ions. But the clay itself, I mean, except for the attachment of those things, is quite stable. And there again, I think that you pegged some of the arguments that some people say those resins do break down slightly and just like what you see in packaging. Rick, you have a question.

MR. GREENWOOD: Yeah, I just wanted to echo what Asa said in relation to the BPA. I mean, if we're worried about contact of one chemical, which I think we are, then I think this is obviously something that needs to be looked at. And he also mentioned phthalates, and one of my experiences is trying to find decent water for analytical chemistry.

If you have any water that's touched plastic, you find huge spikes of phthalates and you end up having to use glass-distilled water. So contact really is an issue. And if we're concerned about the quality of the product, I think we need to be concerned about all of it.

MR. ELA: Fair enough. Good points from both of you. Other questions from the Board?
I don't see any more. So Asa, I think this is something we'll look at the TR and we'll probably come back with probably some kind of final report in the fall to submit to the program. We may -- it'll be an interesting discussion. I think we may -- I don't know if we'll clear the waters or not. But looks like Scott has one final comment or question.

MR. RICE: I just wanted to make sure you saw Jenny had something, I see her --

MR. ELA: I think she was going to say something, and then we answered it. But I'll give -- Jenny, is there anything you want to add to that?

DR. TUCKER: No, Steve. I appreciated your sharing the background of how this came to be a work agenda item. So thank you for that, and that covered it.

MR. ELA: You're welcome. All right. And this is -- it's certainly one of those things that just kind of like our discussions about degradable mulch now where the program is a two-way street. I appreciate the program just not making unilateral decisions but actually kicking things back to the NOSB so that we can get stakeholder
comments engaged and see what the nuances of a complex topic are. So Asa, back to you.

MR. BRADMAN: Thank you. And I think the next item up is the fish oil annotation and that's in my court. So to dive right in, I just want to provide a little background, especially for the new members. In -- I think it was in May, spring last year, the subcommittee and then ultimately the Board approved to re-list fish oil, excuse me, on the National List.

But among Board members, there was concern about exploitation of marine resources and whether this was another situation where we're using marine products that could have implications on the environment. So for some members, it was actually contingent -- agreeing to re-list it was contingent on also an agenda item that would allow us to address questions about sustainability and potential overexploitation of fish oil and the fish that it's produced from. Sorry, I don't feel very articulate this morning.

But -- so this was added to our work agenda. I want to mention too that in the vote that spring, no one voted against re-listing fish
oil. Two people abstained, and then the rest were all in support. And there's been some objections to fish oil, and I'm sympathetic to those as well in terms of whether this product -- some of these products are a gimmick and not really consistent with -- not essential and therefore not consistent with organic principles.

I know I tend to think of this as a consumer choice issue and especially when we talk about infant formula and things like that. So we're not really dealing with this larger issue of whether fish oil should be allowed or not, but whether we want to annotate the listing to introduce some environmental sustainability concepts into the material that's sourced.

And if you -- for those of you who've reviewed our discussion document, kind of the idea here is that we use third party classifications to determine whether a given source of fish oil is sustainably harvested. And the idea proposed in the discussion document was one within U.S. waters to use the NOAA categories of fish exploitation and overfishing, overfished or rebuilt as a characterization of a marine
population.

Or in situations where their material is being sourced from outside U.S. waters, use the Food and Agriculture Organization definitions which in the discussion document are described as underexploited, moderately exploited, fully being kind of a stable but maximum harvest but potentially sustainable and then additional categories of overexploited, depleted population, and a recovering population. And the proposed idea was to source from populations where in the U.S., they were not overfished or overfishing was occurring. And then using the categories in the FAO, if a population was categorized as overfished, depleted, or recovering, then fish oil derived from organisms from that population would not be permissible.

There are also other private marine animal standards. There's the Marine Stewardship Council, Friend of the Seas. Many of you may be familiar with the Monterey Bay Aquarium program. So there also are a number of third party, in many cases, nonprofit organizations that are also trying to define standards for sustainability for
marine fish and other populations. In terms of for our thinking, one of the points from one of the manufacturers of these materials is that almost all the fish oil that comes into the U.S. is from outside U.S. waters. So it would be most applicable to the UN FAO categories.

One thing I want to also mention here is that we received a number of comments on these issues, and most of them were from organizations, either nonprofit watchdog groups like BP and NOC or from some big producers and then also from some of the organizations. Very few comments from consumers which I think was kind of interesting. Of course, many consumers don't follow the nitty gritty of this.

But I kind of see this as a consumer choice issue that people tend to want the material. And also, it's something that's on the ingredient list and labeled. And if you don't want it, you can buy milk that doesn't have it or other products that aren't fortified with it. Some of the consumer products are very basic, basically, keep it sustainable but not much beyond that.

Some of the comments in terms of from
larger organizations are, one, clarify -- there needs to be clarification, whether we're talking about wild versus farm populations, and that this is really part of this larger discussion of marine resources that we're having as a Board. And this should be folded into a larger kind of structure of our discussions on these products. And I agree with that at some level.

In some cases with ocean resources where pulling nutrients out of the ocean to put them on land as an input to either feed the soil or foliar applications. We're feeding the plant, not the soil there, also as a feedstock for cattle and other uses. And then in this case, this is a little bit more like fishing where we're pulling a resource out of the ocean to feed people.

The -- some of the industry sources are concerned about this crop. CROPP Cooperative is concerned about loss of product. And from their perspective, they don't feel like NOAA and that FOA definitions are necessarily appropriate. And those concerns were echoed by some of the producers and trade organizations like DSM and GOED, the global organization for these omega-3 fats, GOED.
They have some concerns about, again, the NOAA and FOA being appropriate, also partly because just functionally they may have different standards for defining what's sustainable or not. They may have different temporal assessments of populations. We might be looking at one report that's five years old or eight years old and another one that's one year old.

There's concerns about whether how certifiers would deal with this. As a side note here, one certifier said that they would ask for an affidavit from their producers that they had sourced the material from some sort of -- or the source material met their criteria, just a little side note on certification issues. But that the proposal as it stands could create some, I guess, confusion and difficulty in implementation.

Some of the major producers like DSM and GOED actually kind of harmonized their recommendation, and none of them are against some sort of reference or annotation that addresses issues of sustainability. And there was support for the idea of sourcing fishing industry -- sourcing material from the fishing industry
byproduct only. And also, there's a suggestion to replace the reference to FOA and NOAA with a more simplified statement, certified as sustainable by a third party certifier. And again, that ties in with some of our discussions with other marine resources.

I should mention that the proposal for our annotation is to limit fish oil sources to byproduct. In other words, there's concern like we've had in other situations that we don't want fishing exclusively to produce fish oil, that it should be a byproduct and, again, some sort of reference to sustainability. I think -- let's see.

There's some concern that if we make this too complex, it could result in removal from some of these products from the market. It was also suggested by CCOF that, is an annotation really necessary if U.S. and internationally there are already protections for fisheries? So that's -- I kind of want to throw that out there. So I think that's kind of a summary of the issues here, and maybe now we can open this for discussion. Thanks.
MR. ELA: Thanks, Asa. Are there questions from the Board? Emily has one.

MS. OAKLEY: Thanks, Asa, for your work on this, and I definitely think we should circle back together between crops and handling just a little bit to see where both of us might be headed with this. But I also just wanted to say it was heartening to hear how much support there was for the byproduct only provision within the annotation. So that seems like an easy first step at a minimum.

MR. BRADMAN: Yeah, I agree with that. And some of the same issues come up, though, with byproduct are having the fish oil as one of the revenue streams. Is it part of a larger system that may be exploiting this resource? So we have that question as well.

One thing I wanted to add too is that some of these omega-3 fats that people are interested in adding to their diet are also potentially available from algal oils. Looking on this issue, I know that's also potentially controversial. And, like, Horizon Organic and I believe some other products use algal derived
omega-3s. That raises its own sort of issues in terms of really an industrial production system there.

But there is potentially a non-fish source for some of these omega fatty acids to also consider. But I'm sure many hearing -- being reminded of this right now might be groaning a little bit about the tendency to use kind of these industrial methods to produce something that may not -- it's not natural to many products and may not be necessary.

MR. ELA: We have a question from Sue and then one from Dave. Go ahead, Sue.

MS. BAIRD: Hi, I just want to commend you and Emily for all the work you've done on these issues and spent hours and hours, you can tell, doing work and research on it. I was just thinking we're seeing this in crops. We're seeing it in livestock. We're seeing it now in handling, the very same issues of sustainability of our aquatic and fish populations. And how do we limit our harvest of these in a sustainable manner?

And perhaps one way -- and I know it's harder to do. But perhaps one way would be to --
instead of addressing them in each individual category, perhaps we could address it by a new definition and in writing into our definitions statement about what we consider to be sustainable harvest of some of these crops. Just a thought and it may not work, but it seems as if we're addressing the same one all across all of the scopes and categories.

MR. ELA: Thanks, Sue. Dave?

MR. MORTENSEN: Yeah, it seems to me that -- and I think it's a point that you made in your summary, Asa, that there are dependent aims here. The idea that yesterday we were discussing the merits, or lack thereof, of paying a great deal more attention to fish harvested for fertilizer use when one of the other values in it is oil. And then companies would tell us, we don't harvest fish solely for fertilizer. We also harvest them for oil or for solubles.

And so it's almost -- in some ways, it seems like the argument is somewhat circular that we're harvesting them for fertilizer and also for oil so that the at the end of the day, we could fall into the trap of just harvesting them for
things -- for each -- any intended end use, it would not be acceptable to us. But perhaps if you've got two or three uses, then you say, well, we're not harvesting it for fertilizer. It's for something else. And therefore, the use for fertilizer is just a byproduct of the process.

That part of this conundrum in my view needs to be teased apart pretty carefully so that we don't find ourselves thinking something is okay because there's three valuable outcomes, any one of which is unacceptable. But three taken together is better than one. That's a concern I have.

And then I also would -- in addition to the algal sources of omega-3s, we also have them in walnuts and flax seed and other things. So there are some interesting alternatives that we could be looking into. But I guess that first point is just one that I continue to struggle with.

MR. BRADMAN: Yeah, I agree with that, and I think your point about plant sources is important. I mean, we do have this algal methods for producing some of these materials from algal, essentially almost fermentation processes. And
during the oral comments, I mentioned the plant sources to one of the commenters.

And I guess their concern there is that the precursors to some of these omega-3 acids are not -- in the body, there's relatively low efficiency. So it doesn't -- I think it doesn't meet the goals for what people want in milligrams per kilogram, say, in these products. But I agree.

It seems to me if a manufacturer could produce these materials differently from plant sources, that would solve the problem.

MR. ELA: All right. And I just want to say to the Board and just to be clear. I often say questions, but I mean questions or comments interchangeably. So don't take my syntax exactly.

So if people do have questions or comments, that is fine. And it looks like we have another one from Emily.

MS. OAKLEY: Thanks, Steve. Yeah, I do. I just really want to echo what you said because that was a really articulate way of phrasing the issue because we're looking at meal, also, for livestock feed. So it's across all three uses.
And absolutely if we were to parse them individually for harvest, that might be more easy to determine unacceptability. But because there are these three potential streams of use and then revenue, it does complicate the issue. But I think you're right. It's important for us to explore this further, especially because these are foundation species within the ecosystem in many cases.

MR. ELA: All right. Asa, I am not seeing any more questions. And looking at the clock, we probably should move on. So thank you for that. So back to you, Asa.

MR. BRADMAN: Okay. So now we're shifting over to summaries for the 2022 sunset reviews. And I think we are first on deck with Kim and kaolin.

MS. HUSEMAN: Thank you, Asa. So with kaolin, there were very few comments on the written commenters, and I didn't hear so much also in the oral comments. But kaolin is -- it's a fine clay consisting primarily of aluminum silicate. It does have a few comments, I guess, just a couple from certifiers saying they do have a couple of
handlers that are using the product.

Like, I think I would be curious to know if the material is essential in inorganic production, or if there are some alternatives, or if it is essentially needed. But other comments that were made, the only thing that came about was kaolin is also produced in nanoparticles. And there was a comment for annotation to specifically allow uses and also them to prohibit the use of nano kaolin. Any other comments? That was all that was mentioned on this product.

MR. ELA: Are there questions from the Board? I am not seeing any. Congratulations, Kim. You have now done your first official presentation. Welcome to the Board. Asa, back to you.

MS. HUSEMAN: Thanks, Steve.

MR. ELA: And Asa, you're on mute.

MR. BRADMAN: Okay, sorry. Well, that was great, and it's always nice to have an easy one. My first thing, I think, was BPA. So moving on to sodium bicarbonate and Mindee.

MS. JEFFERY: Thank you. For the record, I have on two pair of cozy pants. And there
were lots of comments about sodium bicarbonate, especially from the certifiers. I really appreciate the detail of how many people and they're using this substance pretty ubiquitously.

There were some considerations around the difference between the trona process and the Solvay process in that one certifier only allows the trona process because the Solvay process is viewed as synthetic. The ACA has commented that they would support considering reclassifying as synthetic, and this might be a substance we would want to look at how that is today in the common formulation, whether or not a change is warranted.

And that the substance is really essential across many categories in lots of different uses, and people support relisting it.

MR. ELA: Are there questions? I am not seeing any. So congratulations, Mindee, on your first presentation. Asa, back to you.

MR. BRADMAN: Okay. Thank you. Our next topic is ammonium carbonate, I think in the same family as the bicarbonate. And Mindee, you're on deck for that too.

MS. JEFFERY: Oh, okay. I thought we
were going with waxes next, but --

MR. BRADMAN: Oh, I'm sorry. Actually, you're right. Oops. I skipped ahead, sorry. Yes, waxes. And Kim, actually, you're on deck now.

MS. HUSEMAN: Mindee, I was going to let you go ahead. Just kidding there. But okay, so the next one that I have is the wood resin. So waxes, and I'll speak to this a couple more times through the handling sunsets. But this one in particular is used for a lot of fruit coatings. It's one of many -- or one of few other options that are available for use.

Reading through the comments, there are some questions and concerns. Most of the commenters do want this product to be relisted, and it is quite useful for ensuring or try to help with bruising. There's an annotation that would be suggested to state that the word, resin, is not extracted using volatile synthetic solvents. So that statement came up from a few different commenters with some concern that there may be production with the use of synthetic solvents, volatile synthetic solvents. So that would be
something to look into further.

And then another comment that was made is the purchasing of organic fruits and vegetables, the consumer perception is they're 100 percent organic product. But should there be some labeling or something that's noted stating that there is a wax coating on the product itself? So that would be something to look into, I think, a little bit further. But overall, the listing of the product back onto the National List is supported, and that's all that I have.

MR. ELA: All right. Are there questions? Asa, you have a question.

MR. BRADMAN: I just want to echo the comment that you just raised about whether there should be some sort of labeling. And I actually personally think that is something to consider. I have always felt uncomfortable with especially products like apples.

Not to single them out, Steve, but where you might have some sort of wax cover on the fruit that you really can't remove. It's different from an orange or an avocado if they're present there. But you eat the whole thing. And to me, that's
a unlabeled ingredient, and it should be labeled.

MS. HUSEMAN: And this same sentiment will come up again as I go through a couple other products. But I hear what you're saying, Asa. I want to look into this further for that same reason.

MR. ELA: Yeah, and as an apple grower, I mean, we do not wax all apples. I think a lot of organic apples aren't. But we often get the question because apples have a natural pectin on the skin which is why you can shine them on your shirt and make them shiny. But it doesn't -- that fades after a while and you have to reshine them.

But we often get questions like, what is on this? And for us, since we don't put anything on it, it's the natural wax. But if you're going to ship them and want them to stay shiny for a much longer period of time, then some processors, as you noted, Asa and Kim, do add that. And I would tend to agree. I wouldn't have any problem having that labeled so people would know and so people would know ones that are not waxed. Looks like we have Emily and then Sue. So go ahead, Emily.

MS. OAKLEY: Thanks to Kim and Asa.
I just wanted to echo Asa's comments and those raised by commenters just regarding the fact that it is, in essence, an ingredient that we're ingesting that is unlabeled. And I would be interested to see what you guys discuss in terms of the possibility of the potential labeling.

MR. ELA: Sue?

MS. BAIRD: Yeah, and I appreciate that concern. I do want to point out that it's not something that we can change in annotation during the sunset review. It would be something that would have to be done later. And if we -- I think it would be -- it just has to be a voluntary thing. I think if the producer wants to voluntarily label that there's no wax on it, that would be acceptable. It's a truth of labeling thing, and it would be allowed.

I think if we required a labeling -- if we decided to require a labeling of a wax product on fruits or wherever we're going to put this wax, I think it would be a little more challenging because we would have to go into either the labeling section. We talked about that for hydroponic products. We'd have to change a whole section of
the labeling section of the regulations, or we'd have to add a new annotation. And neither of those things are pertinent to the sunset review.

MR. ELA: Any other questions? I'm not seeing any. So Asa, back to you.

MR. BRADMAN: Thank you. So next up, we have ammonium bicarbonate with Mindee. And since we have a bicarbonate and carbonate in a row, when we finish the first, why don't we go directly to the second. And Mindee, I think you're on deck.

MS. JEFFERY: Thank you. So for ammonium bicarbonate, not a lot of use for some of the certifiers who reported. And others said that it's commonly used. There was support expressed for relisting, and some -- the one expression of it's really important as a leavening agent and essential as the alternatives are not identified and it could threaten the ability to remain organic. Beyond Pesticides noted that it should be a candidate for delisting because of the emissions of ammonia and carbon dioxide. So a little of both.

MR. ELA: Are there questions for Mindee on ammonium bicarbonate? I'm not seeing
any. So Asa?

MS. JEFFERY: So that's me again, ammonium carbonate?

MR. BRADMAN: Yes.

MS. JEFFERY: And less information on ammonium carbonate and more certifiers saying, no member use listed, little or no record of use, no handlers using the substance currently. So that was three certifiers. And then same concern about the emissions of ammonia and carbon dioxide expressed, and one support for relisting from Taylor Farms, Earthbound Farms. So similar but maybe less usage expressed for ammonium carbonate.

MR. ELA: Are there questions for Mindee? Mindee, I have one question. I originally did this writeup, but it was back in November, I think. And I can't remember. Is ammonium carbonate simply a substitute for ammonium bicarbonate, or are there distinct uses?

MS. JEFFERY: I'm just seeing as a leavening agent, and it looks like similar uses under use.

MR. ELA: I'm just wondering if we would shake the apple tree too much if maybe --
we're not voting today. But down the road, vote
to delist ammonium carbonate but keep ammonium
bicarbonate if we would raise too many hackles.
But that might be something to look into.

MS. JEFFERY: So this is your --

MR. ELA: With --

MS. JEFFERY: -- official announcement
that if hackles are going to be raised, they better
say it?

MR. ELA: That might be a good
interpretation of that comment. Yes, it's always
good to get comments to justify why we should do
one thing or another. Asa, back to you.

MR. BRADMAN: Thank you, Mindee. So
next, we're on to calcium phosphates. And Jerry,
I think you're on board for this material.

MR. ELA: Jerry, we're not hearing you.
Still not hearing you, Jerry. Let's see here.

MR. D'AMORE: How about now?

MR. ELA: That's much better. Go
ahead, Jerry.

MR. D'AMORE: Thank you, and thank you,
Asa. There were 16 total public comments. Most
of them were written and nearly all of them
supporting a relisting with only one strongly opposing. The product is widely used and considered essential by many stakeholders.

In terms of concerns, there are concerns about human health, particularly the cumulative effects of phosphates. Only one commenter sees human health as a disqualifier. Some questions about organic sources but not to the extent of inulin-oligofructose which I have a little bit later and I'll talk about it then. Some discussion also around commercially available organic sources of supply but with general consensus that there is not a reliable consistent alternative at the moment. And that's it.

MR. ELA: Are there questions for Jerry? I am not seeing any. Congratulations, Jerry. You have now joined the group of having given at least one or more presentations.

MR. D'AMORE: Thank you, sir.

MR. ELA: Back to you, Asa.

MR. BRADMAN: Thank you. So our next material is ozone. And Scott, you are on deck for that.
MR. RICE: All right. Thanks, Asa. Ozone, we did get, between the certifiers that we heard from, about 51 operations that use it in their businesses. It's a common disinfectant that's highly effective and generally regarded as safe.

Some conveyed its importance in their operation in controlling microbiological microorganisms or effects rather.

There was one comment expressing concern around the use of the irrigation water treatment and the offgas that is produced and its potential for adverse health effects on workers.

But overall, this is seen as a material highly regarded and widely used. And that's it.

MR. ELA: It looks like Rick has a question.

MR. GREENWOOD: Yeah. Hey, Scott, I have ozone for the 2023 sunset for water sterilization, and I found a 2002 TR. Did you find anything newer than that? Or my question is, do you think we have enough information, or should I request a TR for the review for 2023?

MR. RICE: Yeah, thanks for that reminder, Rick. I was going to mention that. In
our discussion, we noted on this particular use that the most recent was a technical advisory panel report from '95. And we did suggest that NOP contract, an updated ozone TR in advance of the next review. So it's hopefully on the program and Devon's radar. But that would be helpful. Thanks for bringing that up.

MR. GREENWOOD: Okay, good. Well, then I'll request it too, and then we can go forward just to see if there's any new information.

MR. RICE: Excellent.

MR. ELA: Asa, looks like you have a question.

MR. BRADMAN: Yeah, just to emphasize that ozone does have some potential health problem as a criteria air pollutant. It's associated with respiratory and other problems in general populations and places especially during the summer when it's hot. I think this like other materials for food safety and things like that in the organic community, there needs to be adherence to standard procedures to protect workers.

I think this use is tiny in terms of its contribution to lower surface level
atmospheric ozone and the kind of things we have from -- problems we have from combustion cars and things like that. But just a reminder that some of these sanitizers and other materials we use have potentially serious occupational health concerns.

MR. RICE: Indeed. Thanks, Asa.

MR. ELA: Are there other questions? And just on that note of what Asa said, we know stakeholders have long asked us for a larger review of all the sanitizers on the National List and potential new ones and food safety issues as well as environmental risks, as Asa just mentioned. And we were planning on having a panel discussion at this meeting and put it off because we did not feel a panel discussion be as widely and as useful in the virtual environment.

But at this point, we are planning on having that discussion at the fall meeting as long as we have a live meeting. So just want to let people kind of know the future plans of trying to at least get the three panelists in to discuss that larger question. No other questions, Asa, so back to you.

MR. BRADMAN: Thank you. So we're now
moving to sodium hydroxide. And Mindee, we have you on deck.

MS. JEFFERY: Great. I'm excited for the TR results to come through. We've been working on that one, and good responses from stakeholders generally supporting the relisting of sodium hydroxide, essential for soap, body care, beverages, baby food. Juice producers association supports relisting it. Happy Family, thanks for your comments. Beyond Pesticides noted that the annotation only lists prohibitions and suggests investigating the essentiality of sodium hydroxide and potentially in the future annotate the listing to limit it to those essential uses.

MR. ELA: Are there questions for Mindee on this? Not seeing any, go ahead, Asa.

MR. BRADMAN: Thank you. And now we're moving on to the carnauba wax with Kim.

MS. HUSEMAN: All right. So back to waxes again. This is another wax that can be used on fruits and vegetables. It's also used in gummy bears and jelly beans as a coating. Very mixed for relisting or delisting from the commenters.

If I go through the people that said
to delist, there's several comments saying that the commercial availability is sufficient. This is actually one of the waxes that there is an organic form that's approved. There's, through the USDA, Organic Integrity Database, between 15 to 19 depending on the comment. So I would say over a dozen suppliers.

And again, back to the same comment that was posed in the wood resins is that there's reason to believe that it can be processed using volatile synthetic solvents in a nonorganic form. So again, a reason to want to delist it and only have the organic form available but, again, at the very least, to annotate. And I know it's during sunset annotations, but having the not extracted using volatile synthetic solvents. And the other point of fruits coated with waxes, having labeled or just bringing that again to the attention that, is that organic? So that was on the side to delist.

On the side to relist, the opposite is true of concerns that there's not enough organic supply. Also important to point out that some countries from an export perspective if you're exporting your products is that some countries only
allow certain formulations of waxes. And so having the ability to use one of three, and there's one more that I have to present on, using -- being able to have that multitude of tools in the toolbox allows for export to different countries.

And then finally wrapping it up was that the carnauba wax may not be as effective in some applications as in others. We did have one commenter say that in the production of jelly beans and in their manufacturing that it was the organic form had been working well. They've been using it for the last six years. They had heard from other industries maybe that it wasn't as effective.

And then we did have a certifier say that there's several handlers that list this product in their organic system plan. Most use the organic form, but the blended processing aid containing the carnauba wax is not certified organic. So some mixed reviews on this wax.

MR. ELA: Questions for Kim? Kim, I have a question. So -- or actually, I have a question I think is really more directed to Scott or Nate. Like, for this wax when you're looking at let's say a processor is using it, are you
looking at whether it's organic or synthetic form and documenting -- making them document that there's not commercial availability?

MR. RICE: Yeah, if it's on 606, we're going to look for whether there's an effort to source the material organically.

MR. ELA: So there would be some differentiation between those two forms as the inspection is occurring.

MR. RICE: You're going to see that that's been explored and determined prior to the inspector actually getting there, and there's not going to be a lot of (telephonic interference).

So usually, that's an established ingredient that's going to be fairly static. But I concur with Scott. That's going to be established and confirmed at inspection.

MR. ELA: Thank you for that clarification. Looks like Wood has a question. Wood, we're not hearing you.

MR. TURNER: Sorry, I lost the feed there for a second. Can you hear me now?

MR. ELA: We can. Go ahead.

MR. TURNER: Just a question. I know
this is -- forgive me. You're literally apples and oranges. But we were thinking about sources of sort of marine materials and sort of how different inputs are -- how different ingredients, different materials are sourced. Whenever I see that the source of the material is Brazil, it gets my hackles up.

And so I just want to make sure we're asking the same questions about sort of how this materials is -- where this material comes from, what's involved in getting that material to market in the same we are in other areas. I don't know if anybody has any background on that, but I'd like to know more about that.

MS. HUSEMAN: I don't have any background, Wood. But I will echo and agree that when you speak to sustainability and especially the region in which we're discussing, that should be addressed at the least.

MR. TURNER: Thanks.

MS. HUSEMAN: I have nothing else to follow with, Steve.

MR. BRADMAN: So Steve, are you there?

MS. ARSENAULT: Steve, if you're
talking, we cannot hear you.

MS. HUSEMAN: Or I guess I can turn back to Asa.

MS. ARSENAULT: Yeah, Asa.

MR. BRADMAN: Steve, if you can hear us, let us know. The next topic we have is a complex one, colors, and you're on board for that, so --

MR. RICE: Steve conveniently left during this session.

(Laughter.)

MS. ARSENAULT: So Steve said he'll be back in. It seems that he lost his sound feed. So Asa --

MR. BRADMAN: Okay.

MS. ARSENAULT: -- while he figures out his technical difficulties, you want to move on to glycerin?

MR. BRADMAN: Sure.

MS. ARSENAULT: Skip over colors?

MR. BRADMAN: Yeah, that sounds good. So we'll move on to glycerin. And Jerry, you're on deck for that.

MR. D'AMORE: Great. Can you hear me
now?

MR. BRADMAN: Yes.

MR. D'AMORE: Well, thank you. I will share with you that ten minutes ago, I completely lost my screen and I had no control. So I need to be muted and unmuted, please. And I just didn't -- it's reverted back to my calendar, and I don't want to touch anything because I could mess that up entirely then. So thank you.

Glycerin, we had 18 public comments. Again, nearly all of them were in written form, and nearly all of them supported renewal. It is so widely used and considered essential by many stakeholders. The key question was about the 99 percent pure designation but all seem comfortable with the written material discussing the make of the one percent, namely, water, remaining fatty acids, and some portion of the ancillary substance for the processing aids.

One concern expressed as a question. So a direct question to me as the interviewer is, quote, is the current supply of organic glycerin really immature, or are you keeping the increased supply potential undermotivated by keeping it
listed it under 606? So that's what I have on that.

    MR. ELA: All right. I think I'm back. I don't know what happened there. Other questions of Jerry? Asa has a question.

    MR. BRADMAN: I kind of have just a general comment. I feel like having been on the Board now for a couple years that there's a lot of concern about listing on 606, preventing markets from developing for organic resource material. And it's hard to evaluate that. And also, when do we make the cut?

    We certainly have it coming up with whey protein concentrate. Well, it's actually come up before and with other materials. And I wish we had some criteria to kind of -- to evaluate that, and maybe that's not possible, product by product.

    But that's just a real common concern about, does 606 create this perpetual lack of organic resource material? I know it's not specific to glycerin.

    MR. D'AMORE: If I may, could I continue with that lead in of yours? Steve, I'd like to go next with my next one anyway and then give it back to you. Would that be acceptable?

    MR. ELA: That is fine with me if it's
fine with Asa.

MR. BRADMAN: Absolutely.

MR. D'AMORE: Thank you. So this is inulin-oligofructose, 23 public comments. Nearly all of them, again, were written. About 75 percent in favor of renewal, a good 15 percent really opposed to renewal, and 10 percent expressing concern. It is still fairly widely used.

So as with glycerin, most of the opposed to renewal were concerned about the potential for an organic alternative with some being adamant that alternatives would be relatively available or reliably available were we to phase out inulin-oligofructose from 606. So that follows directly on what you just said, Asa.

So if I may, I'm going to give you a comment of my own that is maybe a little off-topic, and that is that as I joined the team, I was initially overwhelmed by the science but have gotten to the point where I know the science is knowable if you spend time looking at it. And where I'm reading guidance and I wasn't going to get into this. But Asa, with your lead-in, is I'm concerned about understanding our emphasis. Not
our science, but our emphasis.

I have seen that we're very concerned with our stakeholders having the tools to work with in the organic framework. I also see that we are committed to continuous improvement and innovation. But does one trump the other?

And here, I won't be a coward. I usually embrace the statement, don't let the perfect get in the way of the good. And I would normally protect the tools. With that said, I will be seeking a sense of emphasis on all three of my sunsets with the help of the team. Thank you.

MR. ELA: Are there questions for Jerry on this? I know it's been a material where we've gotten conflicting statements, and so it's not entirely noncontroversial. How was that for a double negative? Sue, go ahead.

MS. BAIRD: Just a comment. Jerry, thank you. I think we're all conflicted on the Board the same way. We all go in, except maybe Asa and Dave, a little intimidated by the science.

We learn that we can rely on TRs and all those things for the science.

We all want to protect all the tools
that we can for our farmers, and yet we're all absolutely concerned that we maintain organic integrity. So you articulated it well, and I commend you for being up front in saying that. We're all there with you. So that's just my comment.

MR. D'AMORE: Thank you, Sue. Appreciate it.

MR. ELA: There's a comment, question from Scott.

MR. RICE: Yeah, I just wanted to offer again. I know it is a challenge with 606 materials and whether this is creating incentive or perhaps, for lack of a better term, excuses. But I would just also offer we, on the certification side, are going to be looking for the use of an organic version or material, if you will, or at least some work and effort at finding that.

We have seen success stories with 606, and I think a more memorable one is hops. And we went from one of the main things somebody thinks about when you're drinking a beer is hops, then it seems sort of nonsensical to have that as the ability to use a nonorganic version in an organic...
beer. But we saw that that industry developed, and we were able to see that exit 606. So there's definitely, I think, successes with 606 but certainly some challenges and recognize your concerns, Jerry.

MR. D'AMORE: Thank you.

MR. ELA: Other questions? I'm not seeing any. So back to you, Asa. Thanks, Jerry.

MR. BRADMAN: Thank you, everyone. And now we're going to move on to colors with Steve which also has a lot of these issues around organic versus non-organically sourced material. Thanks, Steve.

MR. ELA: Thanks, Asa. It was convenient to drop out right at the perfect moment on a controversial subject. I may drop out of here just for the excuse. Colors, I took this over from Tom and Lisa, and it's one that certainly has a lot of nuances and kind of goes back and forth.

It's actually 18 different colors, each individually listed on the National List. So why we often talk about as one listing, there's actually 18 different listings. And in the 2015 sunset, the Board voted to delist a lot of these
colors -- the Subcommittee, excuse me, voted to delist a lot of these colors and keep just a few of them. And then when it got to the full Board discussion and the vote, things became much murkier and whether sufficient forms and quantities and specific colors were available.

From what I can tell, and this is not something we use in our handling operation, but there are very specific attributes to some colors in terms of form and consistency of the color that are very important to product manufacturing. There've been a lot of comments based on whether there's significant organic production of some of these materials. But from some of the comments, written comments and oral comments, part of the issue is that some of the crops have to actually be specifically grown for colors. The color isn't a byproduct of the crop.

And so there just isn't enough incentive at this point to grow those crops for color production versus fresh market. That argument can be made, but that incentive is based on price. And if there were higher price for colors, that they might be more available and that
the market -- the growers wouldn't market things fresh market if there was a higher value in the color production. And that's a valid argument, but it also -- at this point, the form and function and number of these colors seems to still be an issue.

We got a fair number of comments, and all I can say -- I'll go kind of through each one individually. But it really is -- we really received some conflicting comments on individual colors. And I would hope -- I know that the IFAC person on the oral comment gave a fairly general comment, and he committed to getting us more detail.

I think what I'm going to have to do is between now and the fall is reach out directly to some of these both users and manufacturers because in the case of some of them, they gave a listing of all the colors they wanted relisted but didn't ask for all 18. They would ask for 14, and I don't know if by process of elimination it was a mistake that they missed those 4 or they were subtly saying, relist 14 but we don't need the other 4 relisted, without actually saying that.
So just in my initial -- kind of going through color by color, beet juice extract, that was one that appeared in 2015. There were comments even from the Board that that was a keeper. And there are definitely conflicting data at this point. There are a number of Organic Integrity Database listings. Beyond Pesticides noted 47 listings for this.

There was one company that makes colors that says, delist this. We have sufficient supply. But then other companies, like one company that makes colors said, we make colors, but we don't have enough of this. A gummy bear manufacturer specifically asked to keep this, and they were pretty proud of where they said they were able to find some that they would ask or they found sufficient supply.

Beta carotene seems to be one pretty consistently that people say they need to keep, so that one is maybe a little bit -- I'm going to say clear even though it's a color. Black currant juice, again, conflicting data. There are users of it. Scott's group, WSDA, mentions the gummy bears there is -- but they say there is a sufficient
supply. Another color company says there isn't sufficient supply. So that one is conflicting.

The same for black/purple carrot juice, again, conflicting data. Some people say keep it.

Some -- Stonyfield, for example, says this is one they have not been able to source. And then you go down and the gummy bear company says there's sufficient supply, and another color manufacturer says there's sufficient supply. And Beyond Pesticides notes 47 listings in the Organic Integrity Database.

Blueberry juice, this is one that seems to probably keep it, although there's a little bit of conflicting data, same for carrot juice. Cherry juice may be available but maybe should keep it on the list. Gummy bears seems to have done some fairly good research on this, says, keep them.

A couple of other companies say, delist them, and 23 listings on the Organic Integrity Database.

Chokecherry juice seems to probably be a keeper. Elderberry juice is a real question mark. Some say keep. Some say delist. And the same for grape juice, grape juice skin extract similar. Probably keep it, but a few question
marks are on that.

Paprika, dairy farmers say they have sufficient supply already. So that looks like one that we maybe most likely could delist. We also have one company that makes paprika for colors, and they say they have sufficient supply. So that's one that would indicate to me a couple companies saying there's sufficient supply and that a company that uses it saying there's sufficient supply, although the company that uses said they might like to keep it on. So I don't know if that is a -- if it's right on that edge of having enough.

Pumpkin juice, again, organic integrity listings, but maybe keep it. Purple potato juice is probably a keeper at this point. I'm not seeing a lot of confusion there. Red cabbage extract, again, Organic Integrity Database listings but maybe keep it, although there again one company -- color company says, delist it.

Red radish extract, probably keep it, and that seems to be fairly consistent. Saffron has conflicting data, again, where a couple companies say they want it relisted, another one
says delist it. And then finally with turmeric extract, Stonyfield noted that they have sufficient supply. Another company says delist it. Beyond Pesticides notes 40 listings on the Organic Integrity Database, but then two companies, including the dairy farmers, say they would like it relisted.

So I think the bottom line on this is really I just tried to go through the comments and made up a spreadsheet with color by color. It's confusing. There's conflicting information. I'm sure certifiers -- I am guessing that it is not hard at this point for a company to make an argument that form or function is not available, and yet it also seems like a number of these colors, if push came to shove, there might be able to be more organic supply. Not all of them. There are certainly some that do not.

And I do buy the argument that there may not actually be enough organic fruit or vegetable production to make enough of these. I think that could be the case, and we've seen that in other products as well. So very confusing. I think, as I said, I need to reach out to more
of these companies and really try and tie them down.

I would also be very interested to hear from certifiers as to what they're seeing in terms of this being on 606 and commercial availability being important as to whether some of these companies that are using the nonorganic form what they're seeing and have they made a rigorous attempt. But again, some of the companies also said, give us three to five years and we'll have a lot of these ready.

Of course, that was what was said in 2015. So it's definitely a chicken-and-egg thing of, do we force the issue or do we keep kicking the can down the road? So with that, I would take questions. Dave, looks like you have one.

MR. MORTENSEN: Yes, Steve. This is the case where we would vote on individual colors in the fall. Is that right?

MR. ELA: I think so. It's a mess. But ultimately, they're each listed separately. So yes, that would be, I think, the proper way to go. So it'll take some time, but there could be differences between individual colors as well.

So that would be the plan at this point. That
could change. Asa, you have a question.

MR. BRADMAN: Maybe just a quick follow-on. It seems to me that if suppliers and users are -- well, the users, those that are incorporated into production methods, are finding adequate sources of the color, then it would be an important flag that we could consider delisting. And then on at least one of these, if not more, the boundary question comes up again that we discussed earlier.

For example, beets, I think 95 percent of beet production in conventional beets is genetically modified. So if -- not if. I think Mindee's point earlier was I think a very thoughtful one that we could consider at least on one or several of the colors as well on, what is the conventional system that yields the fruit that yields the color that would be used in organic food?

MR. ELA: Yeah, good point, Dave. And I really think on some of these, there were certainly some comments from people that said, oh, this -- the price of this color is 40 percent more than conventional. Well, that's okay. It is, but that's -- 606 does not say that it has to be the
same price. It says, organic supply.

And I suspect that some of these colors, if we delisted them, there might be sufficient organic supply. But yeah, it is higher price and that's the way it is. The list doesn't differentiate by that. Others truly seem to be not available in particular colors or hues or quantities. So it is a real mixed bag. Asa, you have a question or comment?

MR. BRADMAN: Yeah, I had a few comments I think that yielded some questions. I should say also full disclosure right now, I'm working on a risk assessment of the FDA artificial food dyes. But I don't think that's a conflict here, and I'm certainly not profiting off of that.

So one thing, I mean, colors seems to me are not essential, although they have a lot of purposes in products. And I think that's a point here. In terms of the comments, there are a few things I didn't quite understand. Like, there was some argument that some of the organic sources were not -- didn't yield the same quality colors as the nonorganic.

And there's also a question about
whether you can get the desired hue with organic versus nonorganic. And it didn't seem like an availability issue. It was more, like, what the ultimate product was. And I wonder, why can't we have different hues in organic?

Also, could producers contract for some of these products? I mean, in general, if I look at yogurt or some other product, it seems to me the color is just a tiny fraction of the content. So in terms of cost to the food, I can't imagine that it would increase substantially the price of, say, a dairy product if they used organic versus not organic.

And for the producer, I can see that they would have a more expensive product. But if there's a market for it, it'll get sold. So I don't quite understand the obstacles to producing these materials from an organic source.

MR. ELA: Yeah, fair enough assessment, Asa. I think on the grape colors, there was a comment that literally all of the organic production of grapes would have to go into producing those colors to have enough supply. And that may be the case. I don't know all the
technicalities of that, but we sort of saw that with, what was it, orange -- some of the orange stuff a couple years ago where there was transportation and supply issues.

But I agree with you. I think some of this is -- some of these are -- well, I don't want to say truly needed, but they are truly needed for consumer acceptance and others, there's an ease issue that it's easier to use some of these nonorganic colors. But it's a real mixed bag.

And like I say, I don't have -- this is not my technical expertise. But I think we do need more public comments on this that are very specific by color, and we asked those questions very specifically because the Board really got bogged down in 2015 on this. So Jerry, did you have a question?

MR. D'AMORE: Yes, sir. I still can't control my screen, but you were kind enough to leave me unmuted. So thank you. I have a procedural question. I just don't know what we're allowed to do and what we can and can't do. Can we put varying dates on the -- does everything have to be pass/fail on this? Does it have to be five
years, or can we use various phase-out timing for the substances as they show promise for an alternative or not?

MR. ELA: Five years till the next sunset unless there's -- I mean, there could be a work agenda item, I suppose, in between. But it's generally a five-year sunset cycle.

MR. D'AMORE: So all of them would be under a five-year. Do we do them individually, or is it a group of five -- they're all grouped in five years?

MR. ELA: The sunsets we review this year get a five-year extension.

MR. D'AMORE: Okey doke. Thank you.

MR. ELA: And Scott, do you have a -- yeah. Scott, do you have a question on that or a comment?

MR. RICE: Yeah, just a quick follow-up on that. For a little background, Jerry, when we look at kind of throwing time frames into sunset materials, methionine was one of those that we tried doing that, and it really messes with the sunset process because you get these dueling dates and it creates some significant challenges for the
program. I see Jenny just said that she could offer something on this.

DR. TUCKER: Just very briefly where there might be time flexibilities. If the Board voted to remove something during the sunset process, during the rulemaking process, we could put an implementation timeline that would give people time to phase it out of their operations.

That would happen as a result of public comment during the rulemaking process. So the Board's review is every five years. In rulemaking, there can be varying implementation periods depending on what the phase-out needs were because that would have cost implications for reformulation sometimes.

MR. D'AMORE: Thank you. I could have asked my question better. That's perfect. Thank you.

MR. ELA: Thanks, Jenny. That's very, very helpful as well. So other comments, questions? And Jerry, especially if you're not able to raise your hand, just jump right in at some point and give me a heads up. We don't want to ignore you. And any other Board member, if you
have a question and I'm not recognizing you, don't be hesitant to jump in. Asa, it looks like you have another comment, question.

MR. BRADMAN: Yeah, I just wanted to follow up on this question of functionality, and one thing I'd like to hear more about from stakeholders is the use of the colors in products and as a liquid versus powders. There was some reference to that in one of the comments, and I know in the synthetic color wheel, there's straights and lakes. Lakes are the solid form, and I'm just curious if that is a factor in whether we're using organic or nonorganic source material.

MR. ELA: Great comment, Asa, and that was one of the things that hung up the 2015 Board. They were ready to delist a lot, and that issue came up of how -- what did you call it, straights versus lakes?

MR. BRADMAN: Straights versus lakes, and lakes are a little bit different with respect to synthetic colors. But generally, we're talking about liquid versus solid powder form.

MR. ELA: Excellent. Yeah, that was a big issue where the Subcommittee voted to delist.
And it got to the full Board, and it looked like a lot of these are going to be delisted. And that exact question came up of form and there may be commercial availability of one form and not of another.

And that's where the Board then pretty much ultimately decided to relist all these colors. But it was because they didn't have full information on things like that. So I think I had really hoped that we would get more information from this.

And so it's another one of those shots across the bow of the color industry and users that information really helps us make decisions. And I have an inclination to propose delisting things unless we get people that really chime in and say, wow, I have really done the research and this is not available. And it happens in rulemaking sometimes, but I would rather hear it now. So just as a note to stakeholders, give us information that's really useful. That's all I have, Asa, and I don't see any further questions. So go ahead.

MR. BRADMAN: Thank you. So our next material is kelp with A-dae.
MS. ROMERO-BRIONES: Sure, okay. So we got a lot of public comments about kelp. I have -- it's hard to count the comments. I have, like, 75-plus because kelp was also mentioned in comments about other materials. Specifically, there were comments in -- or references when folks talked about fish oil, when they talk about the proposals for marine materials.

And generally, there was -- again, it's hard to numerically talk about kelp because it was mentioned in other proposals. And it's hard to say the large majority is for delisting or the large majority is for relisting. I would say that there are comments on both sides about delisting and similar comments that suggest just relisting as stated.

I will note some of the comments. Specifically, the comments from NOC were really helpful. NOC referenced the listing of kelp under 606 and mentioned that NOSB does have a responsibility to look at the impacts of kelp on ecosystems and also mentioned the numerous kelp and seaweeds that are listed separately.

So in general, there were a lot of
comments that said kelp was listed too -- is not well defined and too generic and that we need to look at that. And I would also note IOIA had a wonderful diagram in their comments, and let me pull it up for just a second because it's worth mentioning. And that diagram did give a great overview on what is considered marine, algae, kelp which are all interchangeable terms.

And so we have different listings that could all be applied to kelp, although this is specifically for the 606 listing that we're reviewing. We do have other listings such as kombu seaweed, wakame seaweed which have already been reviewed but are still considered kelp. And so the comments mainly focused on the ill-defined term of kelp. And again, NOC suggested delisting kelp under 606 so that there could be a greater chance of monitoring, I guess, ecological impacts under -- not 606 but under 205.07(b) which is the wildcrafting.

So in general, again, just to rehash what I just said because it's a very -- there were a lot of comments. Many of the comments came directly in reference to the 606 listing, but kelp
is also mentioned in many other areas like the marine materials proposal, the fish oil annotations. We have reviewed other species of kelp and wakame and kombu seaweed. And generally, there's a sense that kelp is not well defined and should not be relisted, although there are some comments that say to relist as is.

MR. ELA: Looks like there's a question, comment from Emily.

MS. OAKLEY: Surprise. Just kidding. So I was wondering what you got -- or what your sense was in terms of the responses for Question 3. Are there sufficient organic supplies of kelp available for human consumption? That's the first question.

Then I just also wanted to echo what you were saying in terms of nomenclature and use of kelp which is part of what spurred the 2016 TR during their 2015 sunset and helped kind of craft the proposal that Jean and the Handling Subcommittee came out with, that I'll note got put back out there for the fall 2017 meeting when public commenters said that they needed more time. But we did not hear back at all in the fall. But it
is a challenging issue in terms of nomenclature and one that is kind of overwhelming, quite frankly.

But I will sit in on one of your Handling Subcommittees when you guys are discussing this. If you could let me know when it's coming up because I'd like to hear what you guys say. But then back, yes, to my first initial point which is the question, what are your thoughts on your third question? Are there sufficient organic supplies of kelp available for human consumption?

MS. ROMERO-BRIONES: There was a specific comment that referred to the regeneration of kelp and that it occurs pretty fast. But there were comments that said that we need to delist specifically because it's hard to monitor the consumption and the gathering methods of kelp currently because it's listed under 606 which is production for approved use in organics. NOC did suggest we delist it from 606 so that we have a better idea about availability and gathering techniques to ensure that they are environmentally sound and supportive of ecological environments.

But the comment specifically about the
regeneration of kelp suggested that there is enough for human consumption and that it regenerates pretty fast. But we still need to take a look at the ecological harmony of how it's gathered. If anybody else wants -- has a different read, please add. But that's my reading of the comment.

MR. ELA: Are there other questions?

Emily, I don't know if I just didn't lower your hand or you have another comment.

MS. OAKLEY: I did just have another comment. So last fall when we were relisting some seaweeds and handling, it was a complicated time. But I think we relisted some things that were definitely on the Organic Integrity Database as available as organic. And kelp, as broad of a term as it is and as challenging of a term as that may be, is also on the Organic Integrity Database and a large number of handling listings. So I think it might behoove us to do a little bit more research on that front before our vote in the fall.

MS. ROMERO-BRIONES: Absolutely. It's so complicated and it's only complicated by the fact that, again, as commenters said, kelp is so ill-defined and we have relisted certain species
of kelp already in previous sunset reviews. So there's somewhat of a conflict and not a clear understanding, I think, of how we're handling kelp generally or how we're handling -- or how we give permissions for specific types of kelp which are listed separately.

MR. ELA: Any other questions? All right. Asa, I think it's five minutes after we were scheduled to break for lunch. I think we have some extra time this afternoon anyhow because I don't think we'll have other business and some of these other things will go fairly quickly. So I'm going to say that we're going to break for lunch at this point since I know especially East Coasters, it is getting later there. And we will come back and finish the last five handling materials after lunch and then move on to the Livestock Committee. So Asa, is that okay with you before I make it?

MR. BRADMAN: Yeah, totally fine.

MR. ELA: Okay. So why don't we break for lunch. We will come back actually at 2:00 o'clock Eastern Time, so only 55 minutes, and we will start at the top of the hour. So thank you,
everybody, and we will see you after lunch.

(Whereupon, the above-entitled matter went off the record at 1:06 p.m. and resumed at 2:00 p.m.)

MR. ELA: Hello, everybody out there.

It looks like we've got a bunch attendees. It sounds like we have the whole Board, but I am going to do a roll call for the Board just to read it into the record. And I would like for all those attendees to note that it is -- we're still in handling, but we will have the livestock section here first.

So I have my livestock shirt. I don't actually have a livestock shirt. But in honor of livestock, I have a cow and chick on the apron that Rick sent me to promote California avocados. So is that a good enough nod to you, Rick? Did I help your marketing effort?

MR. GREENWOOD: Yeah, that's pretty good. We'll work on you. Maybe next year when you're Chair again, we'll do something else.

MR. ELA: Oh, thanks. On that note, we'll do a roll call. So Sue, I can see you. It sounds like you're here. Okay. Sue is here.
MR. BRADMAN: Hello.

MR. ELA: Jesse?

MR. BUIE: Present.

MR. ELA: Jerry?

MR. D'AMORE: As well.

MR. ELA: Rick?

MR. GREENWOOD: Here.

MR. ELA: Kim?

MS. HUSEMAN: I'm here.

MR. ELA: Mindee?

MS. JEFFERY: Yes.

MR. ELA: Dave?

MR. MORTENSEN: Yes.

MR. ELA: Emily?

MS. OAKLEY: Present.

MR. ELA: Nate?

MR. POWELL-PALM: I'm here.

MR. ELA: Scott?

(No audible response.)

MR. ELA: Scott, do we have you?

(No audible response.)

MR. ELA: You were here before. We'll come back to Scott here. A-dae?
MS. ROMERO-BRIONES: Here.

MR. ELA: Dan?

DR. SEITZ: Here.

MR. ELA: Wood?

MR. TURNER: Here.

MR. ELA: And Scott, are you out there?

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

MR. ELA: There we are. Yeah, we've got you now. And --

(Simultaneous speaking.)

MR. ELA: Well, we know you're there. And Steve is here as myself, so it looks like we have the full Board. And we will continue with the Handling Subcommittee. Asa, I will turn it back over to you to start with.

MS. ARSENAULT: Steve?

MR. ELA: I think we're down to orange shellac. Yes?

MS. ARSENAULT: Sorry. If I can --

MR. ELA: Go ahead, Michelle.

MS. ARSENAULT: If I can just interrupt. I just got a couple messages from Board members saying they froze. So Board members, you can turn your video off. It might be a bandwidth
issue, and that usually helps. Let me know if it doesn't.

MR. RICE: Yeah, mine just totally crashed. I'm solely on Chrome now.

MS. ARSENAULT: All right. Thank you.

MR. ELA: All right. Asa, are you ready?

MR. BRADMAN: Yes, so I think we're at orange shellac. And Kim, you're on board for that. Hello, Kim?

MS. ARSENAULT: So Kim is the one who froze. So Kim, it looks like she dropped off the call. She may be trying to call back and restore her connection.

MR. ELA: Okay. Well, maybe, Asa, why don't we move to starches.

MR. BRADMAN: Okay. I'm on board for starches, so I will move ahead. Kim, we just heard a ding. We're going to cover starches and then go back to orange shellac, if you can hear me. So let me look at my notes here.

So just to summarize some of the comments, cornstarch, of course, is used in processing as a thickener and a number of different
purposes in producing food products. A few things, one, kind of a real issue with cornstarch right now in particular is again this issue of listing on 606 and whether there's enough organically sourced material that can fill the needs of the organic community.

And I had done a search on the word cornstarch, a number of commenters pointed out when you look at cornstarch as two words, you get additional listings on the OID database. In fact, it jumps up to 55 total from just about a dozen looking at cornstarch as one word. So my bad there. And I think that just underscores the question, do we have enough organically sourced material to take it off of 606?

It's commonly used, but some -- there's definitely a lot of interest about this material. Stonyfield submitted some comments that some of the organically available cornstarch did not work in yogurt production, and it seemed like that was a characteristic of the material. It sounds like there's slightly different -- well, not slightly different, but there are different forms of the starch -- cornstarch products.
I think in one comment, there was up to eight different and maybe even more, and that for some reason, the organically sourced material did not work. Although I must say in the comments from Stonyfield, there wasn't quite an explanation of why -- what was the reason. I think that'd be helpful if someone is listening for the next round of comments for the vote that we understand why it didn't work and what was needed to make it work.

There were a number of other comments. The Association for Dressings & Sauces, basically, there's often a statement that there's not enough organic available. But there's been really no kind of market analysis or justification for those statements. So I'd like to hear about that.

There's a number of aggregate comments that were summarized in the OTA submissions, and they assert that the organic alternatives are not sufficient because, one, some manufacturers aren't able to find organic forms and that consistency for supply is not reliable, that there's been shortages at least in the past ten years, although I wonder if that is still going on. And then again
this issue of functionality and that some forms of cornstarch are essential.

Some of the trade organizations, others have -- look at my notes here a little bit -- that you just kind of do the numbers and look at the number of certified acres of corn in the U.S. that there's just not enough kind of source material for cornstarch and that some of the organic starches available now are mostly imported from Europe. And that when we look at the proximity of where organic corn is grown to the mills producing cornstarch, there's just not enough kind of infrastructure to support that, kind of like I think we heard about orange rinds last year.

IFAC states that their members are proactively seeking ways to promote organically grown corn, but there's no -- I'd like to hear much more detail on what they are doing to actually promote it beyond just the statement and again really justification of why there is not enough organic supply. There seems to be some forms of cornstarch that may be unique, and there was -- well, actually, I'll skip to that in a moment.

Given the comments I made about supply,
there are suppliers. I mean, one company, Marroquin Organic International, note that they produce almost 8,000 metric tons of cornstarch. I'm assuming that's all organic. Another company, Puress, believes that the cornstarch and when we get to sweet potato starch should be removed from the list because there are organic alternatives available, that organic pea starch is also an alternative.

But also related to some of the statements by the trade and organizations and other companies, there's no real market analysis what the supply and demand is, and I know that would helpful. We've asked for that kind of information for whey protein concentrate, and it's often hard to get. But it'd be interesting to have a better idea of what's available, how much, what's used, and where the gaps are.

One suggestion coming from NOC and also BP was that if there are forms that continue to be unavailable in organic form, maybe we should have an annotation that specifically addresses the need for those forms. So in other words, cornstarch would be taken off 606 except for maybe
some categories. One is high amylose.

Honestly, I'm not quite sure what that means. I'd like to have a little better definition of what the differences of cornstarch -- definitions of cornstarch are that are in lower supply. And then apparently, some have freeze-thaw properties that are also useful for processed food products. So that would also be an approach to annotate the listing, get the majority off of 606, but have some special cases for forms that are in low supply. So that's the end of my comments. And Steve, I'll just jump in and say I think we're ready for comments or input from Board members.

MR. ELA: Thanks, Asa. Questions, comments from the Board? Dave has his hand up. Go ahead, Dave.

MR. MORTENSEN: Yeah, thanks, Asa, for that review. I thought that was very helpful, and this is an example to me, just to pick up on your point about where we've discussed this in the past. Orange rinds, I also remember we had a very lengthy discussion about sausage casings.

And in a case like this where directly
consuming the corn, and I believe the latest statistics indicate that something like 89 or 91 percent of maize produced in the U.S. is genetically modified with multiple gene inserts of a variety of traits. I have trouble wrapping my head around the idea that it could be that limited in availability, that there isn't enough organic corn to drive the production of organic cornstarch. And as far as high amylose or there are different -- there would be different cultivars of maize that farmers would choose to grow to meet a certain niche market, high amylose being one of those.

So this one, to me, unlike some of the other ones, oranges, where things are perishable or there's the actual production of things is highly distributed or it's hard to aggregate the material, here, we're talking about a nonperishable maize crop relative to oranges or sausage casings. That seems to me to be tractable for this to be working off of the 606 listing.

MR. BRADMAN: Yeah, I think you make some really good points there. One thing I should note that all the producers assert that they're
not using GMO corn. And that's pretty well regulated and also enforced by certifiers. So it sounds unlikely that there's GMO corn that's being sourced for the cornstarch products that are being used.

I also want to hear again too, can't producers contract with growers to produce the forms of corn they need? One of the producers or trade agencies noted that costs are higher for organic corn and that yields may be 50, 60 percent of nonorganic corn and that creates kind of a bottleneck for availability of organic material.

But one, cost is not our primary concern here in terms of promoting organically produced products. With organically produced product, more of it, the price will also go down. And then -- well, I'll just leave it at that. So yeah, I agree this is another one of those conundrums.

MR. MORTENSEN: Thanks, Asa.

MR. ELA: And Asa, you had your hand up, and I'm assuming you made the comment that you wanted to make?

MR. BRADMAN: Yes.

MR. ELA: Looks like we have a question
from Nate.

MR. POWELL-PALM: I just wanted to jump in a little bit to that and just make a comment as both an inspector of many grain farms and as a grain farmer, I don't foresee this one as really a bottleneck issue. It's very easy. It's an annual crop. It's a shelf stable crop.

We've -- it might be a broad statement, but we're really good at growing organic corn in the States. Like, we're getting incredible yields on organic acres. And so I would be hard pressed to think that this isn't one that would be very addressable, and there's plenty of source material out there and a great opportunity for organic grain farmers looking to up their game as far as varieties and other growing opportunities. So that's just my two cents from the grain world.

MR. ELA: Other questions from the Board? I am not seeing any, Asa. So would you --

MS. BAIRD: Could I --

MR. ELA: -- like to move on?

MS. BAIRD: I'm sorry. I've got my hand up.
MR. ELA: Oh, I'm sorry, Sue. I missed it. Go ahead.

MS. BAIRD: Just a comment, reflection. The reason we're having so much -- so many problems with fraud from corn shipments from the Ukraine and different areas is because we are limited in our corn -- organic corn supplies. To be able to meet the demand for livestock feeds and other things, they are having to import their corn.

That being said, I do agree. Perhaps this would be -- if they grew it on a contract for the higher, different attributes of that corn, perhaps that would give a reason. But then you would have to sort that at the processing facility, and there's such -- this is what I've heard over the years of comments anyway. There's such a small demand, the organic industry is so small that companies are not willing to stop their production and to make these organically, colors or for whatever reason -- and I think we're talking about starches instead of colors and I apologize for that. But there's just not enough demand in the organic world for the companies, the processing
facilities to want to stop production and go into that. That's what we've heard in the past.

MR. ELA: Thanks, Sue. And I apologize for not seeing your hand. All right, Asa, back to you to continue.

MR. BRADMAN: Okay. I really don't have many more comments related to sweet potato starch. Some of the same issues were raised with sweet potato starch. There were very few comments about sweet potato starch. Some were kind of generically supportive to keep it. There was some argument that, like cornstarch, there's enough organically sourced material available to support the current standards in food products that are made. I think Puress was one of those groups that supported removing it from the list.

Again, I think I would like to get more information on the market demand and kind of help with analysis of that. We're trying to also find out more information on where it's produced, and it seems like a lot of the sweet potato's starch may be produced in East Asia. For this sunset review, I wasn't really able to find good information on where we're sourcing this material,
and I'm hoping that we can get some additional comments on this and maybe we'll have some better input on that for the fall meeting.

MR. ELA: Are there questions for Asa? Asa, I'm not seeing any, so back to you.

MR. BRADMAN: Okay. Thank you. So I think we have to shift back to orange shellac. Kim, if you're online now, it looks like I see your mic active.

MS. HUSEMAN: Yes. Thank you, Asa. I apologize for the technical difficulty I had earlier. But with orange shellac unbleached, it falls under the same type of category as far as a product that is used to poach fruits. Unlike the two waxes that are produced by wood chips and palm leaves, orange shellac is produced through the secretions of the lac insect. So it's got quite a few different properties.

As I look through the comments, a few things that came about. Handlers did list this as several -- sorry, several handlers, a few that might be handlers under one organization and 9 under another. It is used in the jelly bean manufacturing process.
One comment was the material was essential because it prevents jelly beans from sticking together. Organic alternatives are not sufficient because other alternatives have not provided functional equivalence. And if the material were to be prohibited, organic jelly bean production would be discontinued or would be adversely impacted.

Most comments were for the relisting.

There was an aspect that was brought up. The TR that had been done previously, I believe 2014, mentioned a number of possible ancillary substances, including the toxic antimicrobial morpholine. So the comment was it was important to identify which of the ancillary substances are allowed in organic shellac to be used on organic produce. So I would say those are -- it kind of encompasses the overall comments. And yeah, but for the most part, it was in support to relist.

MR. ELA: Are there questions for Kim? I am not seeing any, Asa. So back to you.

MR. BRADMAN: Okay. Thank you.

MS. ARSENAULT: Asa, you're on mute.

MR. BRADMAN: Can you hear me now?
Sorry. I think we then want to move on to Turkish bay leaves. Thank you.

MR. RICE: All right. This appears to be one of the few ingredients we're reviewing today that doesn't appear in jelly beans. At least that I've counted.

This is Turkish bay leaves. I'm sure many of you are well familiar with these in a stock pot or as a flavoring in soups and stews. This is also a material that was unanimously voted by the Board to be removed at the last sunset review.

During the rulemaking portion of that sunset process, we had one manufacturer put a public comment in saying that the bay leaves that they required for their product were not available and wished to see this still remain on 606, and that is where it remained.

In terms of public comments this time around, we've had a number of certifiers report no operations listing with the exception of one noting four. We did have in response to OTA sunset surveys one of their operations noted or one member noted they use bay leaves in a wide range of canned soups. But that respondent stated that there is
full availability of organic forms and there would be no impact from removal because organic forms can be used and are available.

So I would say aside from those comments, numerous letters and comments supporting the removal of Turkish bay leaves from 606. And I would see us moving in that direction in the fall barring any new information that we receive. But it sounds like this is perhaps one of the success stories of 606 in the supply meeting the demand and having a state of supply that would justify its removal. Thanks.

MR. ELA: Are there questions for Scott? Dave, go ahead.

MR. MORTENSEN: Yeah, Scott, a point of clarification. I don't understand a point here that would be helpful just to know. If Turkish bay leaves weren't listed on 606 and a food producer was searching for organic Turkish bay leaves and couldn't find them, could they use conventionally produced Turkish bay leaves without it being listed in this way if the certifier approved so?

MR. RICE: They would not be able to, and the certifier would not be able to do so because
bay leaves would not appear on 606, where it would have to live in order for that producer to use it in a nonorganic form.

MR. MORTENSEN: Okay. Thank you.

MR. RICE: Yeah.

MR. ELA: Wood, do you have a question, comment?

MR. TURNER: I do, Scott. Just out of curiosity from a process perspective, did the producer or the person -- did the producer that intervened during rulemaking last cycle, did they weigh in this time?

MR. RICE: It's not clear that that individual is the -- or that manufacturer is the one that participated in the OTA survey of sunset materials. So I can't answer that question, unfortunately.

MR. TURNER: I guess I'm just curious, Steve and others, how do we -- I just want to understand how that happens and how someone -- during our thorough process, we're doing a careful review here in the NOSB process. And then something happens during rulemaking like that that changes the outcome. And I just -- I don't -- we
can talk about it another time, but I just wanted to raise the question. I don't quite understand how that happens.

MR. ELA: I can jump in, Scott. Would you rather?

MR. RICE: Yeah, I'm happy to answer. Or if you'd like to, go ahead.

MR. ELA: Go ahead, Scott.

MR. RICE: Yeah. This was -- I would say generally speaking, the sunset process has worked in that we have these two periods of comments to learn what the status is of the supply. In rare instances such as this one, we've seen in that rulemaking step an operation step forward to whether they made comments during that process or not. And to that, I'm trying to remember if they had or not and that was just not persuasive to us. I'm trying to recall.

But the rulemaking process doesn't stop with our recommendation. So whether we like it or not, there's continued opportunity for comments. But that's also an opportunity for -- be it us or you as an individual or interest groups or whomever who had commented during the sunset
process that the NOSB undergoes, these exceptions are a reminder that it's important to be participating in the rulemaking process all the way through final rule because even one comment during that proposed and final rule process can have -- can be persuasive to USDA. Does that help answer that question?

MR. TURNER: Thanks, Scott. Yeah, apologies to everybody for the request for a primer here. But I just want to make sure that the community understands that process and that we all understand that process because I think it's just a good reminder. Thank you.

(Simultaneous speaking.)

MR. ELA: Yeah, this is Steve. No need to apologize. I think I was going to make a similar comment anyhow that we've seen several things. It used to be once we went through the NOSB process and received lots of public comments saying it's available or delisted, it's okay. But that pretty much is what followed.

But we've seen over the last number of years a couple products like this that basically one person stepped in during rulemaking and made
a comment and derailed the process. It's certainly their right.

But on the other hand, if 30 companies had jumped in at the same time in that rulemaking process and said we have no problem finding an organic source, then USDA would have to take into account, well, 30 people said there's no problem and one company said there is. What's going on here?

And so I think it continues the stress even though we feel like we've done our due diligence in commenting to the NOSB that, as Scott said, it's important for our stakeholders to pay attention to the rulemaking process and weigh in those same comments during the rulemaking process because the comments to the NOSB do not carry forward through that rulemaking process.

I think it's something also where the NOSB has learned in our cover letters, when we finish this process and let's say we vote to delist this, in the cover letter with the writeup that we've already done that we send to the NOP, it's very important to stress, we received X number of comments from a company that's saying this was
readily available. And this is how we justified our vote, rather than just saying we voted to delist it.

We're learning that we kind of give our rationale so that the NOP has a written document from the NOSB justifying why that is in addition to our vote and our previous writeup. That gives them fodder to make -- help justify their decisions. So it's an excellent question, Wood.

Are there further comments, questions? Not seeing any, Asa, let's move on.

MR. BRADMAN: Okay. So we have our last material today in handling, whey protein concentrate. And, A-dae, you're on board for that.

MS. ROMERO-BRIONES: Yes, whey protein concentrate. So we received approximately 30 comments regarding whey protein concentrate, and I say that hesitantly because there was a lot of comments that came in a form letter. So I was hesitant to count them because they all said -- pretty much said the same thing.

But we had several very poignant comments. I do want to point out Harriet Behar's
comments, and let me just summarize really quickly, who went through a very detailed sort of history about whey protein concentrate, specifically about -- she was very specific about the votes in previous NOSB reviews about delisting. And she says that she doesn't understand why it hasn't already been delisted.

Other comments in general, I think the large majority was for delisting whey protein concentrate. There were a few comments that suggested relisting as is. Another notable commenter was CROPP, the CROPP Cooperative, and they're a major supplier of whey protein concentrate.

And in one of the questions we asked to commenters was about the supply of organically produced whey protein concentrate, and they did say that they are a major producer of this product and that they produce so much whey protein concentrate that it actually spills into the conventional market. And they -- there were several certifiers that said there was approximately about six or seven folks who had this in their organic systems plan. So it is used by
several organic producers. And then to further complicate the conversation, we do just -- I would just like to note we do have a petition that was submitted to delist whey protein concentrate which is a whole separate process.

MR. ELA: Are there questions for A-dae? A-dae, I'll jump in. I found it fairly compelling that the CROPP Cooperative jumped in and said we have lots of supply. We can make more.

We're already selling some on the conventional market because we have too much. To me, that was -- I mean, they're not small. I found that a pretty strong comment. Looks like Dave has a question, comment.

MR. MORTENSEN: Yeah, I guess I agree with what Steve was saying. And I guess the other thing that strikes me and just -- even just since the last review where the NOSB voted unanimously to remove, the economic and production constraints that organic dairy farmers are under would seem to argue that we have a much stronger case now than before to delist because of the need to support the organic market that can provide this from what we can tell.
So I know out here the milk contracts are being capped and limited. Farmers are getting less for their milk, organic milk. So I would hope that we would do what we could to support that industry, the organic one.

MR. ELA: Looks like --

(Simultaneous speaking.)

MS. ROMERO-BRIONES: I will note in our subcommittee discussions, this goes back to Asa's earlier comments about 606 category ingredients in that this category can either be seen as a detriment to organic production of certain ingredients or a safehouse until that market is more robust. And I think that is the case for whey protein concentrate. Like, it's outgrown 606.

MR. ELA: Looks like Emily has a question, comment.

MS. OAKLEY: Yeah, I think in the discussion you guys really addressed it. I was wondering what the prospects for success of delisting it might be this time around. But that might also be a question for the program, but it sounds like that's the direction the subcommittee will be going in. And hopefully, that will be the
will of the stakeholder community as well.

MR. ELA: Any other questions, comments from the Board?

MS. ROMERO-BRIONES: I do just want to address Emily's comment because in Harriet's comments, she does note that she doesn't -- she was a pretty strong advocate in our Handling Committee before she left why -- she doesn't understand where that breakdown in the process went because NOSB in the past has suggested delisting, and it just hasn't been delisted. So that is an area that is not quite understood.

MR. ELA: Asa, go ahead.

MR. BRADMAN: I don't know if that's something that the program can comment on now.

DR. TUCKER: I'm back. Steve, do you want me to comment on this at this time?

MR. ELA: Go ahead, Jenny.

DR. TUCKER: Yeah, I've been following the conversation here. I think it's been a very fruitful and productive one. I think -- I've forgotten exactly who said it so well before. But always remembering this is a two-phase process where the Board does its consideration and sends
a recommendation to the program, and the program then does rulemaking.

And that rulemaking process follows APA, the Administrative Procedures Act, and a whole other host of rules related to rulemaking which also includes economic analysis, regulatory impact assessment. And so the criteria during rulemaking can be different than the criteria during NOSB's review. That makes it a two-phase process where different things are considered. The public has the opportunity to comment all the way.

And so I think that's been said here a couple of times of how important it is for the community to participate, not only in this process but also in rulemaking. The reverse also applies. Sometimes we'll get comments during rulemaking from folks who weren't even really aware that the NOSB meeting process was happening.

So both parts of the process are vitally important, equally important, and need to balance one another procedurally. But it could end up that rulemaking does result in a different outcome than the NOSB recommendation because rulemaking is a part of the process. That's why the Board has
certain authorities and why the Secretary has certain authorities. Both matter.

MR. ELA: Thanks, Jenny. I think that's a great point. Asa, I don't see any other comments. So back to you.

MR. BRADMAN: Thank you. So I think that actually wraps up our Handling Subcommittee issues for today. So I think we can turn it back over to you.

MR. ELA: Great. Thank you very much, Asa. Handling definitely has their work cut out for them on these various sunsets and discussion documents. I know there's another handful of proposals, petitions that are on our table as well. So thank you for keeping track of all that. You're doing a great job. With that, we will jump right into Livestock. Sue, turn it over to you?

MS. BAIRD: Thank you, Steve. Livestock Committee for this session considered one petition which we turned into a discussion document, and then we had eight sunset reviews. The first is a discussion on fenbendazole.

Fenbendazole is currently listed on 205.603(a)(23) as parasiticides. It's prohibited
in slaughter stock, allowed in emergency treatment for dairy breeder stock with an organic system plan. Approved preventative management does not prevent infestation. In breeder stock, treatment cannot occur during the last third of gestation.

If the progeny will be sold as organic, it must not be used during the lactation period for breeding stock. It's allowed for fiber bearing animals when used a minimum of 90 days prior to harvesting of fleece or wool that is to be sold, labeled, or represented as organic.

And then specific to fenbendazole, 205.603(a)(23)(i), for CAS No. 43210-67-9, milk or milk products from a treated animal cannot be labeled as provided for in Subpart D for this part for two days following treatment of the cattle, 36 days following treatment of goats, sheep, and other dairy species. The petition was received asking that annotation be amended to allow the use of fenbendazole for laying hens and replacement hens.

I'm going to go into a little bit on the technical summary. Fenbendazole was first approved in 1983 for use in cattle, including beef.
animals and dairy cows, as a treatment and control of several types of gastronomical worms, including lungworms, stomach worms, ground stomach worms, barber pole worms and small stomach worms and intestinal worms, hook worms, threat-necked intestinal worms, small intestinal worms, bankrupt worms, and nodular worms.

In October 2015, FDA gave formal approval for the use of fenbendazole for use of treatment and control of the A which is Ascaridia galli in broiler chickens and replacement chickens intended to become breeder chickens and for the treatment and control of the adult A. galli and H. gallinarum in breeding chickens.

And then on January 15, 2018, FDA gave the approval which extended the use of fenbendazole under the trade name of AquaSol for the treatment and control of the adult Ascaridia galli in broiler chickens and replacement chickens and for the treatment and control of adult A. galli and -- yeah, right -- H. gallinarum in breeding chickens and laying hens. And that application was sponsored by Intervet Inc. which operates in -- of Merck, and this petition was submitted by Merck.
I went into and did some research on this and found that a freedom of information summary supplemental to New Animal Drug Applications, the NADA, 141.449, and I've got the website, where they actually applied for the fenbendazole for the chickens, breeding chickens and laying hens. It states in here that FDA has established the acceptable daily intake, the ADI, which is defined as the maximum amount of chemical that can be ingested daily over a lifetime with no appreciable health risk.

The unit of ADI for the chemical substance is micrograms per kilograms of body weight per day. And the safe concentration in eggs is calculated by partitioning the acceptable daily intake, the ADI -- well, the safe concentrate of any product. Meat is 50 percent partitioning. Milk is 40 percent partitioning, and eggs is 10 percent partitioning.

And they determined the safe concentrations for the total residue of fenbendazole in the individual parts of the birds as such: 4 ppm for muscles, 12 ppm for livers, 24 ppm for skin with fat and natural proportions, and
2.4 ppm for eggs. I did not see how they determined that was safe in this particular petition, and I'm sorry I didn't research it any further to find out how they determined what was a safe level.

There were -- these were based on a study, and they quoted two different study dates, October 25, 2010 to February 1, 2011. They did studies of 15 birds that were fed a consecutive of five days, and they found residuals observed on day seven which would be the second day of withdrawal. And how they determined that was did some radioactive residues, and they found 6.38 percent of that total fenbendazole showed up as a residue.

The second study was done January 23, 2013 to May 13th, 2013. They selected Leghorn hens 39 weeks of age at treatment, and they dosed those hens at a 20 percent fenbendazole suspension orally at a dose of 1.5 micrograms of fenbendazole per kilogram for body weight for 12 days. And they found that at the end of that time, they found that -- at zero days withdrawal times -- in other words, on that day 12 of feeding, they found that that resulted in a tolerance of 1.8 parts per million
which was, they said, total residues of fenbendazole in eggs and treated chickens at zero day withdrawal was well below their safe concentrate of 2.4 ppm of residues in eggs. In other words, they found 1.8, and that was below 2.4.

So based on those studies, the substance was approved for use in conventional poultry production such that the amount of active ingredient was determined to be 200 micrograms per milliliter of fenbendazole for oral administration in drinking water. It must be administered orally to chickens via the drinking water at a dose at 1 microgram per kilogram body weight which would be 0.454 micrograms per pound of body weight for five days. Remember they tested it at 1.5 micrograms, but they determined that it's safe at the 1 microgram.

So conventional poultry producers typically administer fenbendazole to pullets age 17 weeks of age or before they're giving outdoor access to ensure that birds have no internal pesticides before they go outside and before they start their egg production. And when birds
receive access to outdoors, they come into contact with the soil which, in turn, of course, gives contact with the internal parasites. So many producers find a need to retreat their flocks after a second period of time after they've had access to soil and after they come in contact with the internal parasite.

So that's the technical background of how fenbendazole in laying hens came about in the first place. And for the organic summary, in May of 2012, fenbendazole was added to the National List of Organic Materials for use in organic livestock. And then in 2016, NOSB recommended that the annotation for fenbendazole would be amended to include -- and that's where I just read at the very beginning. They added fleece and wool fiber animals, and they changed 90 days -- originally, fenbendazole was 90 days withdrawal for dairy cows and they reduced it to two days, and they allocated a 36-day withdrawal for goats and sheep. And on January 28, 2019, NOP issued the final rule stating that.

In spring of 2018 -- oh, okay. So the final rule says that it has to -- cannot be labeled
as provided and has to have -- it's only for emergency use. In spring of 2018, NOSB recommended clarifying, quote, emergency use for synthetic parasites in organic livestock production. And as such, emergency treatment to allow synthetic parasiticide use in livestock.

A livestock emergency is an urgent, nonroutine situation in which organic system plans, preventative measures, and veterinarian biologics are proven by a laboratory analyses or visual inspections to be inadequate to prevent life-threatening illnesses or to alleviate pain and suffering. In such cases, a producer must administer the emergency treatment. Must administer emergency treatment. Organic certification will be retained providing that such treatments are allowed under 205.603 and the organic system plan is changed to prevent a similar livestock emergency in the individual animals or the whole herd flock in future years as required under 205.238(a).

And then 205.238(b) says, parenthesis 4, organic livestock is provided in 205.238(b)(1), (2), and (3), and only in the event of emergency
where management strategies have been proven insufficient to prevent or control parasites within the accepted threshold for this specific parasite, age, and species of the animal. These management strategies include but are not limited to grazing systems and living conditions that prevent infestation and reinfestation, forage height diversity, use of allowed nonsynthetic botanicals, biologics, and minerals to maintain parasite levels below treatment thresholds, and could include monitoring and documentation of parasites through use of methods such as fecal monitoring and the FAMACHA for sheep and goats.

This petition stated that many organic layers have meaningful direct access to the soil, and this is one area where birds that are truly out grazing the land are at a disadvantage than birds on concrete porches. With the shifting demand for eggs from hens with humane certifications for free range or pasture raised production models require up to 108.9 square foot per bird of outdoor access. Many laying hen flocks are seeing large internal parasite infestations. When birds are out grazing, they're scratching
and digging in the dirt for worms. And in return, they're picking up intestinal parasites.

The petition further stated that the studies on sustainable worm control strategies in commercial laying hen flocks are scarce. They quoted one study that was conducted in Denmark in 2010 which compared a randomly selected group of organic chicken flocks with conventional confinement flocks in deep litter.

And the study was conducted from 1999 to 2007, and the results were as such. Cage layers had 4 percent, up to 5.9 percent of infestation -- mortality from infestation. Confined deep litter production had 9 to 12.1. Free range production had 6.6 to 11.4. But they found that organic egg production has 9 to 18.4 percent mortality due to infestation of parasites.

The question was asked on, are alternative cultural methods sufficient to control the parasites? The most common alternate cultural material that is being used is diatomaceous earth.

The petition quoted several egg layer producers that stated that its effectiveness as an internal control has not been reputedly documented.
Diatomaceous earth has no effect on lungworms and is additionally not appetizing to the poultry and could be a lung irritant. In fact, CROPP in their public written comment stated diatomaceous earth has associated health risks to both farmers and the birds, potentially causing respiratory damage when used.

Some producers stated that they had tried feed grade oregano which they find not very effective. They did say that high doses of liquid oregano were shown to improve the lack of infestation. But they said it was not a remedy for the worm issues. Natural product -- this is a quote. Natural products are not only effective, but I've seen decreases in feed consumption and egg production that directly follow some of their uses.

I'm not going to dwell too much on the toxicity of fenbendazole. That was all covered -- that has been covered in the TR that was for -- that was conducted in 2015 for the mammal -- mammalian and livestock. But they did state there's no detectable impacts on dung beetles. It's been shown to be of low acute toxicity with
oral LD50 values, it was greater than 10,000 micrograms per kilogram, so very low toxicity.

The petition made the comment that they're concerned that the organic consumer is losing confidence in the organic egg production. The inability to treat parasite outbreaks poses a risk to food quality that can undermine consumer confidence in the organic field. Roundworms become effaced along the edges of the yokes and makes their way into sellable egg cartons. While the presence of accidental avian roundworm in cooked eggs is not a public issue as worms are species-specific, it certainly upsets the customers and sullies the confidence of organic labels.

I researched the international acceptance of fenbendazole for laying hens. In Canada, they state poultry flocks could be treated, but laying hens with more than one treatment per 12 months lose organic status. EU didn't specifically list fenbendazole, but it falls within the any synthetic applications, and they say twice the labeled withdrawal time which is zero. So I guess two times zero is zero. Japan
has a withdrawal time of two days prior to slaughter for food, milk, or egg collections or twice the period of drug withdrawal.

This topic received a lot of public comments, and some of them I've summarized into basically three -- four topics. There were -- I think there's two major concerns. One is the human health concerns with a residue of below 2.4 ppm in the eggs and zero withdrawal time. The comment was made, and I think rightfully so, consumers expect there's not going to be any chemical residues in organic foods. We find that there are chemical residues in a lot of organic foods, and we've already talked about that.

Some of the concerns in the health issues is that would there be -- would we start seeing a parasite resistance to fenbendazole in humans as we have seen now over time with antibiotics that used to be given routinely to poultry? There's some research going on now using fenbendazole for cancer treatments, although I did question Merck on that and they said that they didn't see an issue with that because cancer treatments are done with SPC eggs. So they didn't
think that would make a difference. But anyway, these are the concerns.

And the other thing is that fenbendazole is used for human treatment for internal parasites. So we know that it is a treatment that is being used for internal parasites, especially in third world countries.

There were several studies on that. So would we -- if we allowed fenbendazole to be given, would there be a parasite resistance to that?

Center for Food Safety made this, and I'm going to quote them. And I don't normally use people's names that present it, but it is public record. And I think some of these quotes are pretty important, these comments.

They said, to be clear, the FDA does not require a withdrawal time for the eggs. But to be clear, they also do not require withdrawal time on the label for milk from dairy cattle either.

But within the organic program, we follow a precautionary principle that guides our decision making, not what the conventional market requires.

And the organic rules often does not reflect the FDA rule.
Beyond Pesticides gave a very in depth and very informative public comment, and they stated that there is other research that indicates that fenbendazole, after chronic exposure, may cause or contribute to immune system effects, livers, tumors, and birth defects. And they also found a European study that said that oxfendazole sulfone -- I probably am not saying that correctly, but that is a metabolite of fenbendazole. Residues were detected in eggs from the first day after treatment up to eight days after the last treatment.

To get a zero residue, it takes eight days after the last treatment of fenbendazole. The highest residue was determined one to two days after the last treatment. No residues above the limit of quantification was detected at nine days. And they said their -- this suggests that fenbendazole is permitted for use in organic poultry eggs should be discarded for 14 days after application, five days after treatment plus nine days of withdrawal time.

So number two, I heard this from a lot of the certifiers, from OTA. The definition for
emergency has not been adopted by NOP. So therefore, there's no way to really regulate the usage of that parasiticide.

Cornucopia stated that they were not really opposed to using fenbendazole. They understood that this has become almost a life and death situation for our poultry operations that are giving the recommended amount of outdoor access and pasture. But they said that they were afraid without the emergency definition being adopted that there'll be a lot of fraud in using that parasiticide.

ASPCA which I just love this one. They express that they love outdoor access for hens. They agreed with NOSB that a system approach is needed for this research as evidenced by how closely this issue relates to fenbendazole position discussion comment. So I thought that was an interesting thing.

Number three is that many of them said that we needed a separate TR for inclusion for the laying replacement hens. We heard that concern in the fall of 2019, and we have requested a limited TR. We heard in public comments that it has been
completed, but the Livestock Subcommittee has not seen those results. We eagerly await to see what that has to say.

There was a comment by Center for Food Safety that was afraid that these birds could end up as slaughter hens, and it kind of caught me by surprise. I wasn't sure how to respond to that.

I was not -- I should have read my listing better. But it is prohibited in slaughter stock. That prohibition is for all parasiticides. So even if this annotation -- the amended annotation would be voted on and approved, then it would never end up in slaughter stock because that's there.

There were a lot of the producers, and I've given you all the negatives, and there were a whole lot of them. CROPP supported it. They said roundworms are a reality, and outdoor access production systems, especially in wetter years which is becoming the new normal. OTA said the producers needed it to be added to their toolbox.

PCO supported it, and MOSA stated that it would be a useful tool in their toolbox.

It appears that we are having a huge concern from our producers that they're picking
up a lot of worms. Merck showed the slides during our public comment time that showed what the guts are looking like in these poultry. So that's my presentation. I'll open it up for questions and discussion.

MR. ELA: Thank you. So are there comments from the Board or questions? Dan has one, and then I see Nate and then a few others after that. So go ahead, Dan. And I want to do a time check on things we don't have a lot of time. But I do want to have discussion on this.

DR. SEITZ: Sure. Just a few comments rather than a question. So I'm not close to considering this, but I would be very reluctant to vote on it for a number of reasons and would need to be better persuaded. First of all, once we vote something on, it's very difficult to delist. It takes a two-thirds vote. And as we were just discussing a few minutes ago, even if it were to be delisted, it might be -- that might be derailed in rulemaking.

I'm concerned that this would be used wholesale on flocks instead of targeted, and there's no way that you can use this targeted for
chickens obviously. But it's very different from the meat producing situation. We did receive a number of comments from producers and associations that said it was unnecessary, that the operations they were certifying, for example, were not saying that this was a need.

Also, a number of commenters said that there were good cultural methods, not only in terms of natural medicine, so to speak, but just in terms of good pasture practice. And then I'm concerned about adding a substance that would have a residue in eggs. There was a lot of discussion around, well, if you cook the eggs, maybe that won't be there. But I have to say I use raw eggs for mayonnaise and hollandaise sauce, I mean, many people use that.

And I also felt there was a certain amount of sensationalism in presenting this with the worms in eggs. I mean, all of us would, of course, find that a disgusting image to -- where if it was on our -- if we cracked open an egg. But certainly in my experience of decades of eating local eggs, organic eggs, that's not something I've seen. So I just want to say that this is a very
-- from my standpoint, I need to be persuaded, further persuaded before I would vote for this.

MR. ELA: Okay. Nate and then Jerry. So, Nate, go ahead.

MR. POWELL-PALM: Thank you. Just a question for Sue. Sue, do you have -- did you find in your research any information about whether or not there's a correlation between a given number of square feet of outdoor access per bird and the respective worm parasite load? If there is a minimum amount that reduces that load or relieves that load?

MS. BAIRD: Nate, I did not see that correlation. I'm sorry.

MR. POWELL-PALM: All good. I just wanted to make sure I didn't miss it.

MS. BAIRD: No, I didn't see any correlation.

MR. POWELL-PALM: Thank you.

MR. ELA: Next up, we have Jerry and after that Dave. And then it looks like Dan has another question. Go ahead, Jerry.

MR. D'AMORE: Steve, my question has already been asked. But I'd like to make a
statement that I would not dare make if I were a longstanding member of this Board because I'd have to be smarter than this question. But just listening, my question would be is it possible at all to have an organic egg? That's it.

MS. BAIRD: I'm not sure I'm following that. Absolutely, we have organic eggs. But is it possible to have organic eggs without worms? I would say yes, but it does -- from what the petition is saying that it's becoming a lot bigger problem than -- as we give them more access to outdoors, they're becoming -- it's becoming more of a problem to have the worms picked up by the birds as they scratch and peck and eat. And so therefore, we're seeing this problem now that we didn't see in the past.

MR. D'AMORE: Yeah, and I'm sorry. I guess the most astounding thing to me in listening to you was the tolerance that's built up of the substance and what that means down the road. That's the one that just -- again, to these brand-new ears, was the biggest red flag I heard.

MS. BAIRD: Right. Agreed.

MR. ELA: Dave? Go ahead.
MR. MORTENSEN: Thank you for that very comprehensive review, Sue. It was helpful to hear all the things that you went through to look at this. At the last -- when we had the panel discussion with the presenters, I was really bothered by this notion that was pretty much through the talks that this is basically IPM -- this is organic IPM for chickens.

Based on the things that the folks presented to us, they were basically arguing that this was needed to be some sort of a routine kind of cleansing of the birds which in my view raises questions about foundational management system, the cultural management system upon which the birds are being raised. I thought that the NOC comments were very, very helpful in thinking through how it is that we go about defining emergency and how it is that, when an emergency arose, we would have a deliberate process by which we would go back and look at the management practices that gave rise to the emergency so as not to have an emergency every time a new thing is in the chicken house.

That IPM argument, I heard the same argument 20 years ago in conventional ag on ways
that we were going to reduce herbicide use in grain crops. And the fact was if you use this threshold-based thinking and don't change the system, it's a justification for routine use of pesticides. And I'm afraid that that's what we're looking at here if there isn't a way that there's a feedback to the foundational cultural practices that underpin poultry production in the first place.

MS. BAIRD: Yeah, thank you, Dave. I agree. And that was probably one of the most heard comments is that we don't have -- we have not -- NOP has not accepted any definition for emergency.

So what are emergencies? And I agree with you that NOC did a great job of delineating some of the methods that we might use to determine what a true emergency is.

I thought it was interesting that Canada said, well, you can give it one time in their life. That might be a way we might -- if we move at all on this, might be something that we would have to say. There's -- I'm really interested to see what this TR has to say. And I think that until we get that, we may be just guessing at stuff.
MR. ELA:  It looks like Asa has a question.  Okay.  And then A-dae, and then after those two questions, comments, we need to probably move on.  I see late on time here.  So Asa, go ahead.

MR. BRADMAN:  I have just a quick comment.  And the comment is I worked in California with the Healthy Schools Act in the state, Department of Pesticide Regulation.  And one issue in that setting was what defines an emergency.  And when dealing with IPM and childcare facilities, this issue came up repeatedly that the emergency option was being abused in a way and pesticides were being used that were inappropriate.  So I think just another example, this issue of defining what's a crisis is spot on.

Number two, I think in comments -- in response to comments earlier in this meeting, you kind of implied that a withdrawal period wouldn't be workable.  And you mentioned that there was an eight-day period to go down to zero and that in Japan they have a withdrawal period.  And I'm wondering if I understood that correctly.  And if the Board were to allow this, is there -- is a
withdrawal period feasible?

MS. BAIRD: I talked to several of the egg producers that are here in Missouri. I haven't talked to the others. They stated -- first of all, I said, well, what is the difference? We do a withdrawal. You sell it on the commercial market as free range eggs.

And they said -- they kind of laughed at me, in fact -- that's not the way that works. We contract for our eggs. They've already contracted for free range eggs. We can't move it into the free range market because that's already taken up. And because it's not like a large mammal, we can't just separate one -- ear tag one chicken and say, okay, you're out. It's the whole flock or none.

So from what I understand, the margin is so small on these eggs. Prices of eggs have gone -- in fact, at one point, one of the gentlemen told me they're getting 19 cents a dozen for their eggs. There's -- they can't just -- we're talking about a house that's got 8,000 birds in it, and they may have three or four houses. So you're talking about 8,000 times two or three, 24,000
dozens of eggs a day. Where are you going to dump them because there's no market for them? So from what I'm hearing, withdrawal time is not really where we should be looking.

MR. ELA: All right. Let's go to A-dae, and then we'll move on to the sunsets. A-dae?

MS. ROMERO-BRIONES: Yes. Okay. Yeah, so I just wanted -- this is, like, a really hard subject for me. One, because I feel like I don't have a good handle on both the livestock practices or the lasting effects of fenbendazole on any of our egg or meat. So I always err on the side of caution.

Like, if I don't understand it, how are other people in the organic consumer category going to understand it? And so I just wanted to make a plug that the need for livestock producers on the Board is really important, and it would be so helpful for us at this time in reviewing this type of ingredient. Thanks.

MS. BAIRD: Thank you, A-dae.

MR. ELA: Thank you. I don't see any further questions, Sue. So why don't we move on
to the sunsets. And thank you for -- it's such a complex topic, and thank you for going through it for us.

MS. BAIRD: Well, thank you. As you know, I inherited this one from Ashley, and boo on Ashley for going off the Board at this time. So our first sunset substance is butorphanol. Scott?

MR. RICE: Thank you. Starting out here with butorphanol. It's a treatment for pain prior to surgery in animals. We received the majority of commenters supporting the relisting of this. Certifiers provided data, but it doesn't show a large number of operations using this, but also today it's important as a veterinary medicine tool in instances where it is needed.

Several dairy and dairy organizations advocated for its continued use or rather listing to ensure welfare of animals as well as the safety and welfare of the vets during the procedures to keep those animals sedated. One organization noted that information in the technical advisory panel about the impacts of this and its metabolites when excreted was not covered. More info would
be helpful, and that organization proposed that all metabolites be evaluated as well as any extra label use.

The alternatives are out there, including xylazine. But those were noted as not as not as effective. Similarly, herbal remedies are available, but again, not as effective to prevent acute pain. And that is that.

MR. ELA: Any questions for Scott? Scott, I am not seeing any. So Sue, back to you.

MS. BAIRD: The next substance is flunixin which is mine. It is used as a disinfectant sanitizer and medical treatment as applicable in accordance with approved labeling except for use under 7 CFR Part 205. NOP requires a withdrawal period of at least two times that required by FDA. It is a potent non-narcotic, nonsteroidal analgesic agent with anti-inflammatory activity and also lowers fevers.

So there were in public comments, we actually had 19 different organizations that commented on it with all of them saying yes. Several of the certifiers listed how many of their operations were actually using flunixin, and it
was pretty high numbers.

There was a comment by Beyond Pesticides that says it's more potent than aspirin, so why not just use aspirins? They said it was not clear for the effect of human health, and they did note that residual effects are prohibited in horses for slaughter. So that was all the comments that I got on flunixin. All of the producers said yes.

MR. ELA: Any questions, comments? Not seeing any, Sue. So back to you.

MS. BAIRD: Magnesium hydroxide, Jesse.

MR. BUIE: And Sue, can you come back to that, please?

MS. BAIRD: Yes, sir.

MR. BUIE: Thank you.

MS. BAIRD: Not to worry. Poloxalene, Dan.

DR. SEITZ: Hi, yes. So poloxalene is used to treat bloat, and we got about ten comments in favor of relisting. Half of them were explicit saying, yes, this should be relisted. The other half said that in our association, this is used
There were a couple comments questioning whether there mightn't be some natural approaches, nonsynthetic approaches to treating bloat. But by and large, the commenters made clear that even the best, most careful farming practices would be -- would not prevent -- would not always prevent bloat. So in that sense, it might be needed rarely but it was essential to producing.

MS. BAIRD: Very nice.

MR. ELA: Any questions for Dan on this? All right. I am not seeing any. So Sue, back to you.

MS. BAIRD: Let's go to formic acid for Nate.

MR. POWELL-PALM: All right. So used for -- formic acid is used as an external pesticide within honey bee hives as well as a local anaesthetic. And there are about a dozen comments. There were a few certifiers who said that they didn't have any operations who use formic acid. One certifier said that they had one. And overall, those who commented were in unison that it should be relisted.
We had some very--a very good in-depth comment from Harriet noting that if we're going to--though we don't have an apiary standard yet, we're going to encourage the continued production method of using organic practices by beekeepers and hope that one day we do have an apiary standard, that this is an important tool. And so it seemed fairly unanimous that folks were in favor of keeping it as allowable. Any questions?

MR. ELA: Are there any questions for Nate? I'm not seeing any questions. And you as the final person of the new five, congratulations on for your first presentation. Sue, back to you.

MS. BAIRD: Jesse, did we want to go to you? Did we want to go forward? Are you ready?

MR. BUIE: No, I've got a little crisis at the clinic. Just give me--just come back to me.

MS. BAIRD: Okay. EPA List 4, inerts of minimum concern, Scott?

MR. RICE: Okey doke. Thank you, Sue.

Well, we had a discussion on this yesterday with the Crops Subcommittee and very much appreciate Asa's comments and thoughts on this and his
excellent work. So I don't know that we need to
dive in too much here just because of that. We
are kind of looking at the same thing.

I would just reiterate there is
universal dissatisfaction, as Asa noted, with the
presence of List 4 still on the National List and
again had those repeated recommendations from the
Board over the years, 2010, 2012, 2015, the latter
of which went into quite a bit of depth on kind
of giving us a roadmap here to how to move forward.

Those recommendations and as well as
a lot of comments that we really appreciate from
the community again offered some really good
pathways forward and receiving positive signals
from the program that they're ready and willing
to take this on, whereas in the past, there was
not so much of that. And as noted yesterday, the
National List -- new National List Manager coming
on board with the program in the near future will
hopefully have the bandwidth for this and see it
as an excellent project for that individual to take
on and ensure that this can finally move forward.

And I guess to close, just reiterate
Jenny's cautionary note yesterday that while it
might be tempting to simply delist that -- delist this rather, and I can certainly see that sending a message that we are beyond ready for this to finally move forward, we do need to keep in mind that OFPA does not allow the addition of materials outside of the Board's actions and that any removal would require the addition of something to take its place to prevent disruption in the marketplace.

And again, would also just refer back to Asa's comments that maybe that is the impetus that this needs, but just to offer that. With that, I will turn it back to you, Sue.

MR. ELA: Are there questions for Scott? I'm not seeing any and agree. We had a lengthy discussion yesterday. So hopefully, our stakeholders were able to tune into that. These two are pretty parallel and really address the same -- kind of the same issues.

So for the fall, I think we'll -- we're certainly going to have a discussion with the program and how best to proceed. But we'll have -- we'll probably kind of -- in the fall as well, probably try to not combine these. But they will certainly go in parallel. Sue, back to you.
MS. BAIRD: The next material is excipients, and that's mine. Excipients are allowed only for use in the manufacture of drugs, used to treat organic livestock when the excipient is identified by FDA as generally recognized as safe, grass. Two, approved by FDA as a food additive. Or three, included in FDA review and approval of a new animal drug application or new drug application.

There are about 8,000 different excipients listed under the FDA list. But in 205.2 for the organic excipients, are defined as any ingredient that is intentionally added to livestock medications but do not exert therapeutic or diagnostic effects and the intended dosage, although they may act to improve product delivery, e.g. enhancing absorption or controlling releases of that drug substance.

They are used in the NADAs, the New Animal Drug Applications, approved by FDA, and they're also used in animal health care products that do not carry the NADA registration. They are used in new drug applications and drugs marketed for human consumption that may be also
administered to animals, such as aspirins. They're common in almost all therapeutic products, veterinarian use, and in some cases in that product is greater than the actual active substance in the dose.

They are derived from natural sources, or they could be synthetically manufactured by chemicals. They are derived from genetically modified organisms or they may be manufactured by other means. They range from simple whole food products to highly characterized organic and inorganic molecules or to complex materials that are really difficult to fully characterize chemically.

So there's such a gamut, range of materials and uses for these excipients that it's really hard to categorize. We've got a lot of public comments on this. I really -- both written and public. Most of those public comments are stating that NOSB really needs to further address this issue of certifiers are interpreting them differently and allowing their clients accordingly different leeways in the use of excipients.

NOC did an incredible job. And if you
have not read them, I would encourage you to read their summary of issues and inconsistencies among the certifiers and how to regulate the excipients. Some of those issues they identified were, what is the difference between direct and indirect, how are they used or why it's with the annotation because the annotation doesn't say whether it's direct food additives. It only says, approved by FDA as a food additive.

Accordingly, some certifying agents permit the use of indirect food additive in health care products that are intended for external application such as teat dips. Others don't permit them at all. Still others permit indirect food additives in all types of health care products, including oral and injectable formulas -- oral injectable formulas.

Injectable vitamins and minerals don't appear on the National List. But certifying agents appear to be consistently permitting their use with excipients as part of that formula. Further, there's confusion about whether excipients appear in FDA inactive database for NADAs and NDAs to be used in illegally marketed
drugs as well or if only those that are on that data list that contain excipients can be used.

Most of the certifiers say that they are using the best practices for common materials review issue document that the ACA has developed because of all of this confusion. And PCO made the statement, while perhaps not a large concern to the public, the discrepancy among certifiers on allowances of certain excipients, indirect food additives, grass, NADA inventory materials, does a disservice to our operations and allowance of these materials or not should be clarified.

A lot of the certifiers sent in their numbers. PCO said they had 895 products approved that had excipients. QCS said they had 341 livestock materials. MOSA says they list 560 products with 4,839 uses of excipients. NOFA had 94. WSDA said they had 67 producers that list excipients. So this is kind of a problem we probably need to address.

MR. ELA: Are there questions for Sue? Sue, I'm not seeing any questions. I think you pretty well summarized the issue there. It's a tough one.
MS. BAIRD: Yeah, it is a tough one, and the certifiers, a lot of them gave a method perhaps to identify just the problem children and maybe address those as individual problem children and kind of at least take a bite on the elephant that way.

MR. ELA: Makes sense. All right. I'm not seeing any questions, so we'll move on. Back to you, Sue.

MS. BAIRD: The next one is strychnine. Nate?

MR. POWELL-PALM: All right. So across the written comments, very consistent support for relisting. There were a few nonresponses, a few folks who just said that they had no comments from their constituents. But a really great point that was brought up, I think, the ripple effect for organics is that IOIA noted that strychnine, of course, moves up the food chain and can begin to poison anything that would consume a rodent that was intentionally controlled with strychnine but that it radiates out into the environment. And so it seemed fairly unanimous across comments that the community is in unison.
on this.

MR. ELA: Are there any questions? I am not seeing any questions. So Sue, why don't we wrap back around to magnesium hydroxide. And if --

MR. BUIE: I'm ready.

MR. ELA: -- Jesse is still dealing with --

MR. BUIE: I'm ready.

MR. ELA: -- things in the clinic -- okay, great. Sue, back to you.

MS. BAIRD: Magnesium hydroxide, Jesse.

MR. BUIE: Okay. And I apologize for that. When you're available, they will come and get you. Magnesium hydroxide has been on the list for about over 15 years. Comments were overwhelmingly in favor of keeping it. The NOSB found magnesium hydroxide to be compliant with APA. And at that time, the past review, they did not recommend removing magnesium hydroxide from the list. Are there any questions?

MR. ELA: Are there any questions? I am not seeing any. So Sue, back to you.
MS. BAIRD: I think that's it. So Steve, back to you.

MR. ELA: Back and forth. All right.

That concludes all the Subcommittee presentations. Thank you to all. We're going to run just a little bit late here. I'm going to guess we're going to go about 20 minutes over our allotted time, but I think that's important given that we had some robust discussions on some of these more thorny topics.

And I certainly wanted to take this opportunity to have all the Board members and especially the new Board members but all of us have a chance to have those discussions. We've always had comments from the Board that it is so hard to get us all together in a transparent fashion and have discussions on some of these topics that are really thorny and that make us all use our expertise and our stakeholders' expertise to try and make the best decisions that we can, even though sometimes it makes us uncomfortable.

Michelle is going to put up our work agenda, and we're just going to go through that pretty quickly. And one of the things that I just
want to say, we appreciate our stakeholders so much. Before we go to the work agenda, Michelle just sent me a note that came in before we decided to go virtual, for Lynn Coody and noting that she had not missed a meeting since 1992, and she only missed that one because she was giving birth to her son, I believe, or her -- yeah, her son.

So pretty darn impressive. And Lynn, I know you're out there. I'm glad you didn't miss this meeting either. So Michelle, should we go on to the work agenda? And I've got to close a few windows here to be able to see it.

MS. ARSENAULT: It's projecting. So hopefully, you can see it.

MR. ELA: Yeah, I got all the chat and windows. So it's there. It's just a matter of seeing it. So why don't we go for stakeholders.

Looks like under the Crops Subcommittee -- well, first of all, under CACS, we've got the fraud issues, integrity to the supply chain. And hopefully, we would love to see by the next meeting SOE out there. And we know everybody has been asking for that.

So that's a little -- that's on the
to-do side depending on what goes on. And then crops, we've got the various petitions of paper pots, sodium carbonate lignin, chitosan, and biochar, that presumably, paper pots we already discussed and put it back to subcommittee, but that should go to a vote. The other three are newer petitions and we intend to go to a vote, but that could -- that will depend a little bit on TR requests coming in and further work by the subcommittee because those are fairly new petitions.

We also have liquid fish products, annotation on crops along with the biodegradable bio-based mulch. Those annotations I think at this point, it's our intent to come forward with recommendations. But of course, that can always change since those are fairly difficult topics.

And then we have all the sunsets that we went through at this meeting collecting information. And we will go to a vote on those, of course, in the fall.

Finally, coming down into Handling, Handling has a bunch of petitions that we just received. And so low acyl gellan gum will probably
go to a vote along with whey protein concentrate. And then the CPC, I won't pronounce that. But I guess we'll have to learn that by the next meeting. That is one that will probably be a discussion. We'll be waiting on, I think, a TR on that as well. Can we go to the next slide?

Phosphoric acid and zein, however you say it, probably a discussion with documents, again in part due to TRs coming in. And then we have a bunch of new -- well, several topics that we discussed today as well, L-malic acid and ion exchange filtration. And so we'll probably go to a vote on those, but we'll see for sure.

A bunch of Handling -- sunset substances in Handling that we've discussed, those will go to a vote. And then finally in Livestock, we have the fenbendazole petition which should likely go to a vote. I think the TR is almost in our hands. We haven't seen it yet. And then the sunset materials in Livestock as well that will go to a vote in the fall.

Finally, Materials, Emily has talked a little bit about marine materials in organic crops. So we're hoping to get a document out on
that. I believe Mindee is going to take over excluded methods. That could be a vote or a discussion. We'll schedule it as a vote right now, but we know how sometimes those things go to a discussion document rather than a vote.

And as I mentioned earlier, we're hoping to have an expert panel for assessing cleaning and sanitation materials across all the committees. That panel was supposed to be at this meeting, but we delayed it to the next meeting since we felt pretty strongly that these kind of panels are much better in-person than virtual. We really -- and bringing those three people for that panel, we really want to make the most use of them that we can.

And we know that our organic committee has been wrestling with the sanitizer issue of what to accept, what shall we reject, and how should we make sure that we meet all the food safety requirements that are quite critical to our community and also remember that these are often biocides and that we also want to stay with the ideals of OFPA as well.

And then finally, the Materials
Committee will bring forward the research priorities that we had a discussion document on at this meeting and finalize those with a vote. So that looks like what our work agenda will be coming up for the next year -- or next six months.

Excuse me. Some of the committees have their work cut out for them with a lot of things on the agenda. And as you can see, while we only had one vote at this meeting to send the paper pots to the subcommittee next fall, the antithesis of that with tons of tons of votes.

And are there any questions from the Board on the work agenda? All right. I am not seeing any. As we wind up this meeting, I know we had a few technical glitches today with people getting dropped and coming back on. To all those that that happened to, thank you for being very seamless and in going back and forth. Hopefully you did not miss much.

And to the new members of the Board, as I stated at the start, I know that this is a difficult way to start a meeting. You're all experienced hands at this point. You did an excellent job on your presentations, and I hope
the nervousness that you expected before -- that you experienced before this meeting, know that we all share that same nervousness now and we're all in the same boat together and that you are no longer on the newbie list but are experienced. Asa, you had your hand up. Do you want to make a comment?

MR. BRADMAN: I just wanted to mentioned that I think for CPC, we'll have a discussion document in the fall and a TR. And that wouldn't be a petition vote until spring of 2021.

MR. ELA: Great. Thank you for that, Asa. Appreciate it. We will get that corrected. In closing, I also just want to thank the program. They, as always, do a lot of work and it's great to see them adding staff members and being able to -- especially in terms of the fraud but in terms of figuring out these other issues that are so important to us. There are a tremendous number of resources going in to supporting our organic community.

And in particular, Devon and Michelle and Dave and Jenny and Angie, thank you for all the background work and the figuring out of what platform and how to hold these virtual meetings.
That is not an easy thing to do, and I know you all have been keeping things in the background going when sometimes there were some glitches that we never saw on the front. So just huge thanks for that, and I know you all have other things to do in your day jobs besides hold virtual meetings.

So thank you for that support.

With that, I would like to -- I know Jenny always likes to have a little bit of time here at the end. So I will turn that over to Jenny, and then we will finish up the meeting after that.

Jenny, do you want to make any comments?

DR. TUCKER: Thank you so much, Steve.

And I'll keep this very short. There's just two main things. First of all, I want all of us to take a moment to thank you. And so Board members, if you are able to activate your cameras and do the double wave to Steve to applaud him and thank him for his terrific, terrific work.

So Steve, you have been amazing through this time, and we're so grateful to have you as such a calm, cool, collected guy. You've just done amazing throughout this meeting. And so thank you. I just want to make sure we said that and
we all got a chance to applaud you.

And then finally, in closing, I did want to say -- I shared this with my own team last night -- that on a personal note, I live literally two blocks away from where we were supposed to meet in Crystal City. And I took a walk after the meeting last night, walked right by the hotel that we were supposed to meet in. And so I fully expected to walk to work for this particular event, and it did, in turn -- it turned out that I did, in fact, walk to work but under very different circumstances than I think any of us would have imagined.

I want to acknowledge everyone on the line today, Board members, audience members, staff, all of us are kind of living our own very, very unique stories in this particular moment in time. And yet we all still came together for this community ritual of collaborative engagement, and that just means the world to me. This has been a remarkable few days that I will not forget.

So thank you to all of you, in the audience, on the Board, Steve, my team. You are an amazing collective community, and I'm
incredibly grateful. So Steve, back to you.

MR. ELA: Thank you very much, Jenny.

And I can only say again that the background staff makes this all easy. To the Board, like I said at the start, I know that we all have distractions and you've handled that very well. And we'll keep our fingers strongly crossed for an in-person Board meeting this fall. I know things will continue to adapt and change as they still are very rapidly.

With that, I would like to read one poem, and now I can't remember I got it from Gary Snyder or Wendell Berry. I was looking at both. They're two of my favorite authors. I believe this is Wendell Berry, but I could be wrong. But I would like to read it, and then we will close the meeting.

It is, the rising hills, the slopes, of statistics lie before us. The steep climb of everything, going up, up, as we all go down. In the next century or the one beyond that, they say, are valleys, pastures, we can meet there in peace if we make it. To climb these coming crests one word to you, to you and your children: stay together, learn the flowers, go light.
And I think that applies very well to statistics and working for our children and grandchildren and trying to make the best decisions we know in terms of resiliency and climate change and viruses and moving forward. So with that, unless there's anything else from any of the Board members to add, I will declare this meeting adjourned and we will hope to see you in Cedar Rapids next fall.

(Whereupon, the above-entitled matter went off the record at 3:52 p.m.)