

UNITED STATES DEPARTMENT OF AGRICULTURE

+ + + + +

NATIONAL ORGANIC STANDARDS BOARD

+ + + + +

PUBLIC COMMENT WEBINAR

+ + + + +

TUESDAY
APRIL 20, 2021

+ + + + +

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

PRESENT

- STEVE ELA, Chair
- NATE POWELL-PALM, Vice Chair
- MINDEE JEFFERY, Secretary
- SUE BAIRD
- ASA BRADMAN
- AMY BRUCH
- BRIAN CALDWELL
- JERRY D'AMORE
- CAROLYN DIMITRI
- RICK GREENWOOD
- KIM HUSEMAN
- LOGAN PETREY
- KYLA SMITH
- WOOD TURNER

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

STAFF PRESENT

MICHELLE ARSENAULT, Advisory Committee
Specialist, Standards Division
JARED CLARK, National List Manager, Standards
Division
DAVID GLASGOW, Associate Deputy Administrator,
National Organic Program
ERIN HEALY, Acting Director, Standards Division
DEVON PATTILLO, Agricultural Marketing
Specialist, Standards Division
DR. JENNIFER TUCKER, Ph.D., Deputy
Administrator, National Organic Program;
Designated Federal Official

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

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

(12:02 p.m.)

MR. ELA: We'll just start. Hello, everybody. This is Steve Ela, I'm chair of the NOSB. And I'm going to let Michelle start off here with some of the details and we'll go on through, and then we'll dive into the public comments. So welcome, everybody.

MS. ARSENAULT: Thank you, sir.

MR. D'AMORE: Good morning, to you, sir.

MS. ARSENAULT: Thank you, Steve. All right. So thank you for joining us for the start of the National Organic Standards Board public comment webinars and the meeting next week. If you're online, you should see an instruction slide.

If you're on the phone only I can give a brief summary here. If you're online and having audio issues, you can call in on the phone. The numbers are listed on the screen, at the top of the screen.

And I've also chatted them in. There's several different numbers that you can choose from,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

depending on your location, for better quality.

We ask that you please stay on mute with your video off until it's your turn to provide public comments. When you're called on to speak or maybe a little bit before, everyone got the schedule, so you should be able to see where you're coming up in the list, you can then unmute yourself and turn on your camera. It's optional if you want to be on camera. The mic and camera are both located, for those of you who aren't Zoom experts a year-and-a-half in, they're in the lower-left corner of your Zoom window, you should see your microphone and your video camera. You should also be able to find them in the upper right-hand side of your video box.

While you're not speaking, we ask that you please give your cameras off, it helps with connectivity issues with our bandwidth. The chat feature, which you'll find in the bottom center of your Zoom screen is enabled. So please feel free to say hi to each other, chat, we haven't seen each other in a long time. But chat is not part

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of the public record and will not be part of the transcript. And the Board is not accepting questions or comments via the chat. Public commenters had to sign up in advance, so those are the folks that we'll be calling on.

Please make sure that your name is displayed in the participant panel, especially if you're a speaker, so we can find you. If you dialed in on the phone, Zoom won't recognize you, and it'll just display your phone number, so we ask that you please renamed yourself. And you can find that rename button in the upper right corner of your video camera. And also in the participant panel, if you hover over your name, you'll see a More button. And under More it should say Rename. Please don't click the Raise Hand button, which is now found under Reactions at the bottom of your Zoom screen. All commenters signed up in advance and Steve has the list and he's going to call on folks to speak.

If you're having any technical problems with Zoom, you can go to their website on zoom.us

and Help Center. They are very helpful. The Support button is in the upper right corner. And we are recording the webinars, and although the webinars, we're not going to post the video, but we'll have a transcript that's available after the conclusion of the board meeting, which is next week, the last day will be April 30th. So welcome.

I'm going to turn it over to Jenny now. One moment, I've lost my place already. Oh no.

MS. TUCKER: Hi, everyone.

MS. ARSENAULT: I hand the mic over to Jennifer Tucker, the deputy administrator of NOP. Hey, Jenny.

MS. TUCKER: Hi. Hello, everyone. Thank you so much, Michelle. Hi, everyone. I am Jennifer Tucker, deputy administrator of the National Organic Program. Welcome, first, to all our National Organic Standards Board members. This is our third online meeting, and I continue to be so impressed by how well you are coming together in this really, really unique environment. With our new Board appointees from

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

last year and this year, the majority of Board members have not actually met in person yet, and it's really amazing how well they have done together.

I would particularly like to acknowledge our five new Board members starting their very first meeting with us. And so I'm going to list their names, then we're going to do a Zoom applause. And so we have Amy Bruch, Logan Petrey, Dr. Carolyn Dimitri, Brian Caldwell, and Kyla Smith. And so just as a reminder for folks, this is how we clap in Zoom. So we're going to give a big round of applause to all of our Board members, including our new appointees. So welcome, and we are happy you are here.

I also want to thank all of our public commenters. Thank you for continuing to sustain this participatory process in this format for the third time. And, you know, we've been doing public comments online for several years, but devoting full days -- full segments to this has been something new for us, and I think that is going

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

really well. And so we thank you for signing up and sharing your comments. And I want to thank our audience. You are critical witnesses to this process and we're grateful that you're here.

And so this webinar opens a series of virtual webinars that will occur over multiple days. It'll be two days this week and three days next week. Meeting access information for all meeting segments is posted on the National Organic Standards Board meeting page on the USDA website.

And transcripts for all segments will be posted once completed. Meeting, like other meetings at the National Organic Standards Board will be run based on the federal Advisory Committee Act and the Board's policies and procedures manual. I will act as the Designated Federal Officer for all meeting segments.

To close, I would like to thank the National Organic Program team for their amazing work in getting us here today. In particular, I want to highlight really the incredible commitment and top-notch work by Michelle Arsenault, Jared

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Clark, Devon Pattillo, and one of our new folks, Andrea Holm. So let's give them a hand. It's really a terrific team here and I genuinely appreciate their work.

Finally, I want to thank Steve Ela, the chair of the Board. I continue to really, really value our collaborative partnership from afar. Steve, you are a joy to work with and I want to thank you personally. I am going to turn the mike over to Erin Healy, who is our new official Standards Division Director. So we're welcoming Erin to her first official meeting as our new Standards Division Director, and she is going to guide us through a roll call of National Organic Standards Board members. So I thank you very much.

MS. HEALY: Hi everyone. I just wanted to say hello. I'm new. This is my first meeting, NOSB meeting, so I'm really excited about this. And it's great to see how the process works, and I'm really excited to be part of the National Organic Program. So I will start the roll call. Steve Ela, and NOSB Chair.

MR. ELA: Here.

MS. HEALY: Nate Powell-Palm, NOSB,
Vice-Chair.

MR. POWELL-PALM: Here.

MS. HEALY: Mindee Jeffery NOSB,
Secretary.

MS. JEFFREY: Present, thank you.

MS. HEALY: Sue Baird.

MS. BAIRD: Here.

MS. HEALY: Asa Bradman. I think we
knew that Asa would be a little bit late so she
might be joining us later.

MS. HEALY: Amy, sorry, is this Bruch.

MS. BRUCH: It's actually Amy Bruch
here.

MS. HEALY: Sorry about that.

MS. BRUCH: No problem.

MS. HEALY: Brian Caldwell.

MR. CALDWELL: Here.

MS. HEALY: Jerry D'Amore.

MR. D'AMORE: Good morning, here.

MS. HEALY: Carolyn Dimitri.

MS. DIMITRI: Here.

MS. HEALY: And Rick Greenwood?

MR. GREENWOOD: Here.

MS. HEALY: Kim Huseman.

MS. HUSEMAN: Here.

MS. HEALY: Logan Petrey? I haven't found Logan yet. So Erin, I think she might not have joined us. Okay. Kyla Smith.

MS. SMITH: Here.

MR. TURNER: And Wood Turner.

MR. TURNER: Here. Good morning.

MS. HEALY: All right. Good morning, everyone. In addition to Jennifer Tucker, the NOP Deputy Administrator, we also have several other NOP staff on the call. She actually just mentioned several of them. So Jared Clark is our National List Manager, Devon Pattillo is Agricultural Marketing Specialist. And David Glasgow is the NOP Associate Deputy Administrator. So now I will hand the mic back to Steve, Chair of the National Organic Standards Board.

MR. ELA: Great. Thank you Erin and

Jenny. As always I just want to acknowledge the staff. There's a tremendous amount of background work that goes into both these virtual public comment webinars and also the virtual meeting. You guys have been great and we'll hope that continues. I don't want to jinx it, but thank you for all the work you guys do in the background and keeping this all running smoothly. I do want to welcome all the members. There are three of us that are in our final term, one that has got two years. Rick, good luck on that. And then we have five new members that cut their teeth last year, and five new members that are brand new this year. So we're old hands except for the five new members. I know you all will do quite well and you'll adapt very quickly to this process, so welcome.

I do you want to remind everybody that there is a policy in the policy and procedures manual about public comments. All speakers who will be recognized signed up during the registration period. We don't accept any late registrations. Proxy speakers are not allowed.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

If you signed up, you were the one that has to give the comments. And very importantly, individuals providing public comment shall refrain from making any personal attacks or remarks that might impugn the character of any individual. And I would extend that to any company. We'd like to keep this professional and we value your comments, but please do not bring up personal names or cause anybody to feel uncomfortable. If that happens, I will interrupt and ask me to reframe your question. If you do it again, we will move onto the next speaker, so please keep this very professional.

Speakers will be called upon in the order of the schedule. If a speaker is not present or has technical problems, we will skip over them, if it's an issue we will fit them in as soon as they get online, otherwise, if somebody's not present, we will return to them at the end of the call and give them a chance to speak. And if they're not there then you will lose your slot.

We will use a timer that will sound when your time

is up. Everybody is familiar with that. Michelle has it projected there and we're going to have that screen pinned so you'll know how much time you have.

When you hear the timer, please finish your sentence and end your comment.

We have a really full public comment webinar this time, so it's very important that we stick the time. I do not want to run over as we often do, but please respect everybody's chance to give their comments. Here's a preview of what it sounds like. Michelle, do you want to give that?

if you can't hear that, I don't know what to say. So you'll be able to see that timer in Michelle's window. And she said they have at pins for everybody. So as the process, I will announce the speaker coming up and I will also let the next two people know that they are on deck.

We're going to try a new thing this time. We're going to ask that each commenter to turn on their videos just so we can pin a face to a name. If that doesn't work for you, just go ahead and don't

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

worry about the video. But we've love to see your face, if that's possible. Otherwise, keep your videos off and please stay on mute.

Next thing is if you will state your name and affiliation when we start the timer. And also, if you would, if you're a consultant, you would -- we'd appreciate it if you say who you're affiliated with or who you're consulting for. That's just kind of know who's speaking for what entity. Once you are done with your three minutes, the Board members will indicate to me if they have any questions, they'll do the raised hand in the chat and I will call on them in order of how they raised their hand. And we'll get through as many questions and we can. However, if we start to run long I will cut off our discussion so we can move on to other speakers and give you all a chance.

Only NOSB members are allowed to ask questions. With that, we're going to get into the fun of it and gist of why we're here today. Our first speaker is, and I do want to say, I will try and butcher all names uniformly. If I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

mispronounce your name, please, I apologize for that. But I'll do my very best and I'll make sure I mispronounce a few Smiths and Jones just to be fair. So our first speaker is going to be Noah Lakritz. After Noah, we're going to have Phil LaRocca and then David Gould. So Noah, you are the first speaker, you have three minutes. Please start, and state your name and affiliation.

MR. LAKRITZ: Thanks, Steve. And thanks NOSB members. Can you all hear me?

MR. ELA: We can.

MR. LAKRITZ: Okay. Great. So yeah, good morning. My name is Noah Lakritz and I'm a Policy and Outreach Specialist with California Certified Organic Farmers, CCOF. We represent over 4,000 certified organic farms, processors, handlers, and certified organic businesses throughout North America. Today, I'd like to focus my comments on three substances that are up for sunset review. Copper sulfate for use in organic rice systems, peracetic acid, and tartaric acid.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CCOF encourages NOSB to carefully review organic rice growers' comments when reviewing copper sulfate, especially those from California. As mentioned in our written comments, rice production in California relies almost exclusively on flood or irrigation and water suiting for various reasons. We heard from one producer that they are experimenting with sprinkler irrigation instead of flood irrigation on a single field. Yet this producer still relies almost exclusively on flood irrigation and lists copper sulfate in their organic system plan for occasional use to control tadpole shrimp, which they told us can quickly decimate a field. CCOF supports continued efforts to find alternatives to this substance and understands the concern about its toxicity. However, we have not seen over-use or contamination from this substance and acknowledge that viable alternatives do not currently exist, especially in California systems.

Moving on to peracetic acid, CCOF has seen the use of peracetic acid amongst CCOF members

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

nearly double since the NOSB last reviewed the material. And we've found that this increase is associated with used to comply with food safety requirements particularly related to irrigation.

CCOF supports the relisting of peracetic acid under the currently reviewed sections.

Lastly, 55 CCOF members list tartaric acid on their organic system plan, particularly to produce wine -- in the wine production process.

The meeting materials asked whether there were organic or natural alternatives to tartaric acid and mentioned malic acid and citric acid in the discussion. We want to emphasize that malic acid and citric acid are not replacements for tartaric acid. Malic acid can add a sharp taste to wine and is often fermented into lactic acid during the wine-making process to reduce the acidic taste of wine, and citric acid lends a distinctive citrus flavor that makes it unsuitable at high levels, and many wines. So CCOF is in favor of relisting tartaric acid. I want to thank NOSB members for doing the difficult work of continually improving

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the organic system. Thank you.

MR. ELA: Thank you, Noah. We appreciate your comments. Are there comments or questions, excuse me, from the Board members?

MR. D'AMORE: Question from Jerry D'Amore. I can't raise my hand so I'll do it this way if it's okay. The support you issued, Noah, referenced the tadpole shrimp control, and in terms of a rice algicide, would you make the same comment?

MR. LAKRITZ: Yeah. And to be clear, like, we are not taking a position in support of relisting. We're just trying to provide as much context based on our experience with our members.

And we have heard from our members that it is still essential for algicide control, especially in those flooded systems. And so I'm happy to follow up with more information, and my understanding is that there are several CCOF members, rice producers in California that submitted public comments that you'll be able to review as well.

MR. D'AMORE: Thank you.

MR. ELA: And just for Board members,

if you go to the Reactions button at the bottom of your screen, bottom right-side, under that should be your Raise Hand feature. Otherwise it should be in the participant's section, so just as an FYI. But as always feel free to make note if I do not see your hand raised. Any other questions for Noah? All right. Thank you, Noah.

We do appreciate your comments. We are going to move on to Phil LaRocca, and on deck we'll have David Gould, and then Eugenio Giraldo. Okay. Phil, please go ahead. State your name and affiliation.

MR. LAROCCA: Can you hear me?

MR. ELA: We can.

MR. LAROCCA: Okay. I'm trying to get the video to start, but anyway, my name is Phil LaRocca and I am the owner and the winemaker of LaRocca Vineyards. And I'm proud to say that this is my 45th year as a certified organic farmer. I also am chairman of the Board for CCOF and I've always prided myself in being able to grow just about anything, however the computer actually has

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

me baffled and I stress out tremendously, so I certainly appreciate this opportunity to do this, but I personally look forward to in-person meeting when the actually organic community can share our knowledge and learn more from other organic members.

On my comments, I would like to encourage this Board and the NOP to solve some of the problems we've had in the past. This Board has passed a lot of things that are just floating out there and I'm referring to access to pasture and origin --

MR. ELA: I think I've --

MR. LAROCCA: -- of livestock. I would like to see that. Somehow we can move on, and settle these things. I think it's pretty obvious what the organic community wants. I also want to mention peracetic acid. We use peracetic acid in the winery as a sanitizer. Before that we used to use iodine and then we had the rinse the iodine off which kind of defeats the purpose of using a sanitizer. I did a lot of research into

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

this myself as being an organic winery, using something as a precursor to vinegar did not really sound like it was going to be a positive thing.

But while the research I've done, it actually fits quite well into a organic wine-making program, which cleanliness is extremely important aspect.

Tartaric acid. We do use tartaric acid quite a bit. Not always. We use it to adjust our pH, to lower the pH, gives us a protection, and not having to use the preservative sulfur dioxide, which we do not use in any instance. I've had several organic groups call me about the use of organic tartaric acid, and we would absolutely use organic tartaric acid if there was one out there.

This would be an area of research where to get a company that would be willing to take the chance to put in time to make an organic tartaric acid.

And certainly, as a winery, we would be willing to put wine out there to make the tartaric acid.

Prior to the fires in 2018, we were the largest producer of organic wine as an ingredient. I want to thank you for this time and again, I look forward

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to in-person meetings in the future. Thank you.

MS. HEALY: Steve, you on here?

MR. ELA: I couldn't see -- yes. I couldn't seem to find my Mute button, it was not showing up. A little bit of panic there. Are questions for Phil? All right. Phil, I'm not seeing any. Thank you for testifying over the many years, we do appreciate it, and I'm impressed by your 45 years of certification. That's awesome.

MS. LAROCCA: Thank you.

MR. ELA: We're going to move on to David Gould, and then to Eugenio Giraldo. And then Hamsa Shada -- I'm sorry, Hamsa. Shadaksharappa. I just butchered that, I apologize. So let's go ahead and start with David. Go ahead, David.

MR. GOULD: Hi, can you hear me?

MR. ELA: We can hear you. And state your --

MR. GOULD: Very good.

MR. ELA: -- name and affiliation.

MR. GOULD: Yes. Thanks. And I'm sorry. I apologize that my camera does not work,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

so I'm just going to have to go just a voice only here. So thanks for this opportunity. I'm here to address the NOSB's questions on excluded methods determinations. My name is David Gould. I'm currently the Global Head of Sustainability for FoodChain ID. We're the parent company of the accredited and certifying agent Bioagricert. We certify over a thousand operations of the NOP and about 14,000 organic operations worldwide.

FoodChain ID is the global leader in detection of GMOs and assurance of non-GMO supply chains. And I've working in the organic movement on this issue for over 25 years and never encountered a topic more complicated. So my three minutes, I'll respectfully offer some quick recommendations to address the Board's very thoughtful questions. In my previous position at IFOAM -- Organics International, I was the lead and producing their position paper on the Compatibility of Breeding Techniques in Organic Systems, you know, I'll put a link in the Chat.

I know it's not part of the public record, but

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that has a wealth of information. I think they can greatly inform the Board's deliberations.

Next, I would recommend to not retroactively exclude variety's already being used by organic producers. The process of discovery can take a lot of time and it's often inconclusive.

Given the non-threat that these varieties have proven themselves to be, it would be far better to make efforts to control the potentially huge and disruptive risks posed by new varieties, especially through newer technologies. But whether it's an older or newer method, if it's deemed excluded, then new variety's produced so it should be prohibited in organic.

I would respectfully challenge, also a basic assumption in the Board's questions, namely that it has to be a given that there's a lack of transparency about the development and release and new genomes, because this should not be a given.

Companies who develop and distribute new genomes should be required to divulge the specific genomic changes they've made, the methods used, and the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

channels through which their products have been released, and they should make available the referencing materials to enable further development of detection protocols. Pollution of the genetics used by organic producers by these new excluded method is a growing and existential threat to the organic sector.

AMS and USDA should be instituting the diligence and interagency coordination needed to protect the integrity of organic systems. And that oversight and protection should extend to crops authorized for importation from other countries.

As to whether or not excluded methods may be quote, hiding in organic systems, I would again say to focus on the new releases. They're only hiding if we tolerate their being hidden. We do already largely have the inspection and testing capabilities, and enforcement protocols and tools to keep prohibited materials out of the organic marketplace as long as those purveying these products of excluded methods are held to some basic requirements of transparency and reporting.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Testing and detection protocols are also continuing to improve.

To repeat, this is a growing and existential threat to organic. We must control it. We can control if the rules of the game are fair. If we're unable to know source, method, and distribution.

MR. ELA: All right. Thank you very much, David. Are there questions of David? Carolyn, you have a question.

MS. DIMITRI: David, could you please re-state the name of that IFOAM paper you mentioned?

MR. GOULD: Yes. It's called the Compatibility of Breeding Techniques in Organic Systems. And I didn't realize the chat wouldn't necessarily be part of the public record, but I put the link in there and I can forward it to Michelle as well if she want.

MS. DIMITRI: Thank you.

MR. ELA: All right. Carolyn, right now I can't seem to lower your hand, so if you would

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

do that for me that would be greatly appreciated.

Are there any other questions? All right.

David, thank you very much. We're going to move on to Eugenio Giraldo. Up on deck is Hamsa Shadaksharappa. And then Jason Ellsworth will be after Hamsa. So Eugenio, please continue, and state your name and affiliation.

MR. GIRALDO: Thank you. Do you hear me?

MR. ELA: We can hear you.

MR. GIRALDO: Okay. So my name is Eugenio Giraldo. I'm an environmental engineer that dedicated my life to environmental protection. I thank you the opportunity to share my analysis of the information provided in the technical evaluation report for ammonia extracts.

Next, please. I provided written response to six main comments to the TER, and I'll focus today in four of them. Next, please. The TER focuses on pure synthetic ammonia substances, anhydrous ammonia, aqua ammonia, and ammonia sulfate, for example. However, if you look at the definition

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of ammonia extracts it includes a large variety of already MRO approved products, fish emulsions, beef extracts, soy hydrolysates. All of these are liquid fertilizers. They are derived from plant and animal matter with low carbon to nitrogen ratio. With enhanced mineralization through either thermal hydrolysis or enzyme hydrolysis in order to provide plant-available nitrogen within season and their use is varied. Next one, please.

The TER focuses on uses of synthetic ammonia in conventional agriculture, but not within the OFPA framework where you have an organic plan that is required from our producer. The organic plan requires soil fertility management, with crop rotation, covered crops and application of plant and animal materials. The majority of carbon provided to the soil comes from this practice does not by low carbon to nitrogen fertilizers that are used as sparingly. The organic plan also requires a fertility plan to avoid contamination by nitrates, heavy metals, pathogens, or residues of prohibited substances.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Next, please.

The TER fails to address the benefits of low carbon to nitrogen liquid fertilizers. We recall ammonia as a last resource. With this fertilizers, we'd use the input of materials like fish hydrolysates. Avoid the release of ammonia to the environment, reducing health and environmental impacts. Having a high nitrogen and very little phosphorus enables the precise application of both nitrogen and phosphorus, minimizing contamination to soil and water. And finally, it avoids contamination of pathogens.

Next one, please. The TER fails to address the potential beneficial effects of low carbon to nitrogen fertilizers to soil organic carbon and soil microbiome. When nitrogen matches the crop needs as is seen in this graph, which is also present in my written comments, both soil organic carbon and soil microbiome are enhanced. When nitrogen supply beyond crop needs, both soil organic carbon, soil microbiome are impacted and environmental impacts are magnified.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Overapplication is the real problem.

Next one, please. Within the framework of OFPA, low carbon to nitrogen fertilizers are to be used as sparingly providing season nitrogen needs as not a toxic but an enhancer. OFPA already provides a regulatory framework to use low carbon connect-chain fertilizers for environmental protection, soil fertility enhancement and farmer benefit. Thank you.

MR. ELA: Well, then Eugenio, I always keep track of speakers within a second or two of their time, so you're on that list. Are there questions for Eugenio? I have one question, Eugenio. As you noted the dose makes the poison.

How if you were to not prohibit these ammonia extracts, how would we prevent the over-use of them? You note that sometimes they're useful, but would you be in favor of annotating those materials for a certain percentage of total nitrogen needs or how would we prevent that from becoming a poison?

MR. GIRALDO: I am in favor of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

annotating them. As a percentage of the total nitrogen there is also a precedent with Chilean nitrate that is being used in the past, and I think that will be the way of addressing this, yes.

MR. ELA: Okay. Amy.

MS. BRUCH: Thank you, Steve, and thanks Dr. Giraldo for your dedication to environmental science and for your public and written comments especially on this topic. I just had a question from your point of view. When you look at the soil in a non-synthetic ammonia product is applied versus a synthetic ammonia product applied, can you see any difference to the soil microbiology, or is there any way that tests that a synthetic was applied versus a non-synthetic?

MR. GIRALDO: Yes. There is a way of testing and there is a written comment by CDFA on their efforts to use some of these testings. We also within organics have been promoting a test using infrared spectrometry. All these liquid fertilizers are derived from waste materials, either in plant or animal. And in the process of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

making them, you always have a remaining footprint of carbon molecules that are totally different from just a plain synthetic one which you will have none.

And there is a widely used method into food industry to verify authenticity of food components. Can we borrow from there and apply it in this case, where you would have a fingerprint of the carbon background that is left over from the original material, the ammonia was derived or nitrate was derived from, and that would enable you to distinguish when you painted with synthetic ammonia or nitrogen compounds.

MS. BRUCH: Okay. Thank you. Is there a duration that this would be visible or if it's as you mentioned, a footprint, is that something that would be visible for six-plus months?

MR. GIRALDO: I can't answer that question right now. We don't have that information at disposal. What we do know is the material that it leftover, it is very recalcitrant. It would qualify as humic or fulvic mostly.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

However, we do not have right now or fulvic test that one can use to verify this assumption, and that's why. But there is enough evidence on that matrix that is remained behind that is significantly recalcitrant. Whether it's six months or one I cannot answer at this point.

MS. BRUCH: Okay. Thank you, I appreciate that.

MR. GIRALDO: Thank you.

MR. ELA: Are there any other questions? Perfect. Thank you so much.

MR. GIRALDO: Thank you.

MR. ELA: We are going to move onto Hamsa and then Jason Ellsworth and then Alison Watkins. Hamsa, you're up and please state your name and affiliation, and educate me of how to pronounce your last name. Again, I apologize for stumbling over it.

MR. SHADAKSHARAPPA: Okay. Thank you, Steve. It's Hamsa Shadaksharappa, and I'm co-owner of a company called RenewTrient, and we are in the business of recovering nutrients from

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

poultry manure and making organic fertilizers.
We make dry fertilizers and liquid fertilizers.

So I appreciate the opportunity to comment.

MR. SHADAKSHARAPPA: Next slide,
please. I have six points regarding the ammonia
extract petition as they specifically relate to
manure derived products. First, responsible
organic farmers and sustainable agricultural
proponents have practical experience with animal
derived products and understand the effects of
these products on soil health over many years.
Secondly, dozens of such letters of support have
been submitted to the Board from across the country
in support of naturally source biologically
produced liquid manure products. We hope the
Board has a chance to review all of these letters
and consider them in your rulemaking. There is
a lot of interest in these products.

Third, there are excellent liquid
manure products listed by OMRI that have been
developed strictly in compliance with NOSB stated
principles. Recovering nutrients from natural

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

manures fits exactly with biological cycling, ecological harmony, and reusing farm inputs. These are NOSB's own principles and we've worked hardest to make products within these guidelines.

Next slide, please. Fourth, the technical report is a step, albeit a preliminary step, it misses some key items, some of which described by the previous speaker. From my perspective, the TER does state that manures are a good alternative, in fact, but the technical report notes the lack of transportability. The TER doesn't mention or fails to mention that there are liquid manure products like ours that are OMRI listed and they're may be transportable. These type of products allow farmers in soil nutrient deficient areas to have access to manure derived liquid nutrients.

And fifth, we do understand application rate limits can be prudent as part of an overall organic framework. I think the key is to have application limits and set them prudently, we support that. And finally, outright banning

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

excellent and legitimate products is completely unfair and anticompetitive. The petition to ban all competing products is a bit self-serving. Rather, reputable, committed suppliers like us and the petitioners who work together with NOSB for technology solutions to address potential fraud.

Last slide, please. In closing, one way to stay within the NOSB guiding principles encourage carbon and soil health and still meet the needs of organic growers is to clarify the definition of what products can be allowed. We believe products that meet the following requirements should remain part of the National Organic Program. Products that recover ammonia from animal manures that would otherwise be lost to the environment via natural processes. Such products should retain some level of carbon and organic material, and any liquid product that has a nitrogen effect greater than 12 percent and a C/N ratio of less than seven could have application rate restrictions. Thank you.

MR. ELA: Okay. Thank you very much,

Hamsa. Are there questions from the Board? I'm sorry, I have a question. As the previous speaker as well, so it sounds like you will be in favor of an annotation limiting the amount of ammonia extracts that could be used in terms of total nitrogen use on a farm?

MR. SHADAKSHARAPPA: Yes. I think there's a lot of scientific debate, you know, somewhere between if products, you know, have a nitrogen concentration of higher than ten, you know, between ten and 15 percent, it probably is prudent to have some application rate restrictions on those products.

MR. ELA: Would you be willing to throw out a number? In terms of what --

(Simultaneous speaking.)

MR. SHADAKSHARAPPA: -- I might. Yes, I think, you know, again, I'm not a soil scientist, but I have, you know, read quite a bit about this.

I think a level of, you know, if it's greater than 12 percent nitrogen content, I would be in favor of considering application rate restrictions on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

such products.

MR. ELA: But do you have a specific, like, percentage of total nitrogen you'd restrict it to?

MR. TURNER: I don't have a comment on that.

MR. ELA: Thank you. I appreciate your honesty in that. So anybody else --

MR. CALDWELL: This is Brian.

MR. ELA: -- have questions?

MR. CALDWELL: This is Brian --

MR. ELA: Go ahead then.

MR. CALDWELL: -- Caldwell. I did have my hand raised there.

MR. ELA: Go ahead. Yes.

MR. CALDWELL: Hamsa, thank you for those comments. What are the typical or maybe the maximum percent nitrogen ranges of the products that you offer?

MR. SHADAKSHARAPPA: Currently we have an 8 percent product that is approved by OMRI. That same product has a 7 percent limit by CDFA.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

There is significant interest in products between 12 and 15 percent, and we have the capability to make that. So I think when you get into that 12 to 15 percent range, it makes sense to have application rate restrictions on those products.

But we can definitely make a product between 12 and 15 and that's very desired in the market.

MR. CALDWELL: Thank you.

MR. ELA: Any other questions? All right. Thank you very much. We appreciate your comments.

MR. SHADAKSHARAPPA: Thank you.

MR. ELA: We're going to move on to Jason Ellsworth, and then on deck we got Alison Watkins and Lynn Coody. Jason, please state your name and affiliation and you're welcome to start your comments.

MR. ELLSWORTH: Good afternoon to some of you. Good morning to the rest of you. I'm Dr. Jason Ellsworth with the Wilbur-Ellis Company. I believe that one of the guiding principle of organic agriculture is the consideration of all

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of our actions with respect to the whole system, our farms, our communities, and our world. In a word, sustainability. We can't look at a single product under a microscope and not consider its origination and value to the whole system.

Nutrients, and in particular ammonia from animal livestock operations are lost to the environment through handling, transportation and application, thereby contributing to the environmental challenges that are well-documented. Processes and systems to capture nutrients from waste for use as a fertilizer enables growers to sustainably manage the soil health and vitality of their crops and limit nutrient loss to the environment.

For organic agriculture to continue to be dependent on animals, and it should, then it must be as efficient as possible. Can animal based nutrients continued to be transported the great distances required. Consider that today manure is being shipped hundreds of miles across the country at great costs. And not just monetarily

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to satisfy plant needs for nitrogen, phosphorus, and other elements on an organic operation. Extracting nutrients such as ammonia from wastes ensures the valuable nutrients can get to a crop where they are needed more efficiently than manures and waste themselves.

Please note, these manure derived products do not replace but complement nutrients and organic materials from manures, wastes, composts, green manure, and rotational and cover crops needed to build a healthy and productive soil. As I said in my written comments, these ammonia type products enabled the use of many other high carbon organic materials in an organic operation. To be sure, ammonia is required by many soil microorganisms to complete their life-cycle.

Building a sustainable and healthy soil is key to successful long-term production.

Now, while considering the petition for ammonia extracts I suggest that the definition, and it appears from the previous speakers as well, that the definition for ammonia extracts is too

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

broad and includes many fertilizers and products commonly used today. Before any action can be taken I believe that the Board needs to ensure that the definition is correct and revised as necessary and open for public comment. We simply can't place any source of ammonia just on a prohibitive list just for the sake.

Finally, I want to address the concerns of fraud. Fraud is valid and unfortunately much to prevalent in organic. One of our business partners started his own company because of fraud he witnessed as a young employee. However single products cannot be prohibited simply for the potential of being fraudulent. I believe the organic certification system of today works as designed. The combination of honest growers, astute product manufacturers, diligent listing agencies, and qualified certifiers ensure the integrity of the products used and applied based on the principles of NOP. Thank you.

MR. ELA: Great. Thank you, Jason.
Are there questions from the Board? I have a

question since the other Board members don't seem to. Noted that other products contain ammonia, you know, we all know that. But the ammonia extracts seem to be pure ammonia. Would you favor just lifting something like a percentage of ammonia in a product to help discern the differences between these various products?

MR. ELLSWORTH: Well, the percentage ammonia depends on the source and where it is. I'm not so much in favor of the percent ammonia within the product as I would be just limiting the use of these in an application system, and that would vary by crop input of course, so. Some crops require more nitrogen than others. This would be a percentage of that. And I believe that the certifiers are well able to elucidate what that is based on that growers organic system plan and what they're doing to improve their soil health.

MR. ELA: So would you be willing to throw out a percentage of how much ammonia extract could be used in a cropping system and the rest would have to be some of these other low ammonia

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

products?

MR. ELLSWORTH: I'm hesitant just because we don't have enough data to show that, but, you know, it depends on crops, and if a grower, you know, if you look at my written comments where a grower uses it as part of their pre-plant, you know, before the soil is warm enough for mineralization and nitrification, and then has an issue later in the season for corn, for example, where they would need a rescue, I believe that the balance needs to be a combination of the grower with their certifier. I believe that the certifiers are the final say and have the knowledge to ensure that the tenets of soil health and sustainability are met and not overdone with these types of ammonia extra products.

MR. ELA: Just one quick last question. We've heard that it's difficult for certifiers sometimes to get notice of non-compliance in terms of soil health and such listed and often because the standards are somewhat nebulous and a grower could say, well, I am building soil health

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and the certifier might have a hard time contesting that. So let's say a grower using 50 percent of these ammonia extracts but still putting some manure on, you know, to me personally, that would not be a proper use of the extracts, but the certifiers might have a very hard time justifying that in a non-compliance. How would you suggest that, you know, certifiers could respond to that kind of argument?

MR. ELLSWORTH: That is a good question and it's especially difficult. I'm from the west Washington State and with the arid low organic matter soils. Yeah, that's a very difficult question. That's a tough. I agree, 50 percent would be too much. You know, in the range of 20 to 30 percent, and that still gives enough carbon that would be added through these other materials.

The advantage of products like this is now I can use sawdust and wood chips and things like that that we haven't been able to use because of the carbon to nitrogen ratio. So there's some value in other avenues of other waste materials that can

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

be used.

MR. ELA: Okay. Any other questions from the Board? Thank you very much, Jason.

MR. ELLSWORTH: Thank you.

MR. ELA: Appreciate your comments.

MR. ELLSWORTH: Yeah.

MR. ELA: We were going to move on to Alison Watkins, and on deck we have Lynn Coody and Adam Seitz. Let's start with Alison. Please state your name and affiliation.

MS. WATKINS: Thank you. My name is Alison Watkins and I'm a Scientific and Regulatory Affairs Manager for the International Food Additives Council. IFAC is a global association representing manufacturers and end users of food Ingredients, including a number of substances permitted in organic food production. IFAC strongly supports relisting of agar-agar, animal enzymes, carrageenan, cellulose, and silicon dioxide on the National List.

All these ingredients are safe, are used in accordance with organic principles and are

essential in organic food production. The Handling Subcommittee materials raised questions regarding carrageenan's role in the production of organic products. As noted in our written comments carrageenan offers organic formulators a unique and versatile ingredient. These functional properties cannot be replaced with an individual hydrochloric or other thickening agent. Additionally replacing carrageenan in many cases would involve using multiple additives to achieve the same function.

As an example, on its own carrageenan can suspend particles with low solubility like cocoa, pea protein, almond, and rice protein in vegan and vegetarian beverage systems creating a stable homogeneous beverage. There are no single alternative ingredients that can achieve the same product. Carrageenan contributes to the innovation of plant based meat alternatives, coffee and neutral protein beverages.

For example, plant based deli meats rely on gellan structure, a function of carrageenan

for firm sliceable texture that maintains synergesis control. Carrageenan is also critical in the production of organic vegan and vegetarian products, like plant based dairy and meat alternatives, as well as the production of kosher dairy products. Delisting carrageenan will limit the opportunities to produce organic, vegan, vegetarian, and/or kosher food products. And would result in formulators needing to use more ingredients to achieve the same technological function as carrageenan.

Regarding the cellulose, reiterate that while the production of non-synthetic cellulose is technically possible, no commercial sources of non-synthetic cellulose are currently known. IFAC is also not aware of any organic cellulose currently available. Therefore, cellulose remains essential to organic production and we support relisting. IFAC also supports the relisting of agar-agar. Although other hydrochlorides have similar functionality agar-agar is less temperature sensitive than

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

alternatives, making it particularly useful for gels that need to remain firm at room temperature or temperatures below 50 degrees Celsius.

These important and unique features compared in many other hydrochlorides contributes to its increasing popularity in innovative new food products. Furthermore, agar-agar provides organic community with gel source suitable for foods for vegan, vegetarian, and other cultural and religious dietary restrictions. Finally, silicon dioxide is essential and an irreplaceable ingredient and functions as a defoamer in a variety of applications. They're essential in the production and processing of foods, including organic products.

IFAC is unaware of any suitable organic alternatives to silicone dioxide that can replace this importance substance in all food and beverage applications, therefore we support relisting. Thank you for the opportunity to comment on these important organic handling materials.

MR. ELA: Very well done, Alison, five

seconds to go. Good timing. Are there questions of Alison from the Board? I'm not seeing any. Thank you very much Alison for your testimony. We do appreciate it.

MS. WATKINS: Great. Thank you so much.

MR. ELA: We are going to move on to Lynn Coody, followed by Adam Seitz, and then Jennifer Berkebile. So Lynn, please go ahead and state your name and affiliation.

MS. COODY: Hi, my name is Lynn Coody and I'm presenting comments for the Organic Produce Wholesalers Coalition, seven businesses that distribute fresh organic produce across the United States and internationally. In our comments to the NOSB, we express our own ideas and also provided conduit for the voices of the many certified growers who supplier businesses.

Supporting the work of the NOSB. OPWC agrees with the idea of the NOSB receiving technical assistance. Our members are grateful for the time and effort that each and every NOSB

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

member has contributed over the years. We think that assistance with tasks like research and technical writings would not only reduce the burden on the NOSB members, but also save time and effort for all organic stakeholders by eliminating the need for documents to cycle back to subcommittee simply to polish language or to make technical corrections. We note that our comments on the next two topics are examples of issues in which technical assistance may have helped proposals move through the NOSB process more smoothly.

Paper-based crop planting aids. We had supported adding this to the National List each time this topic has come before the Board, as there are many produce growers who need these products.

Although we concur with the direction of the proposal from the Crops Subcommittee, our written comments detailed three specific concerns about the Subcommittees proposed regulatory language and provide suggestions for its revision. Because we do strongly support adding these products to the National List to clarify their use, we urge that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

technical corrections be made expediency and that the NOSB complete a recommendation supporting paper-based crop planting aids at this meeting.

Biodegradable, biobased mulch film.

OPWC supports the elements of the Subcommittees proposal that allow 80 percent biobased products while fostering incremental improvement by signaling that there is market interest for films continue increasingly higher percentages of biobased content. However, as we interpret the final sentence of the subcommittees proposed annotation, it creates a loophole in the continued improvement clause during the time in which films of 81 to 99 percent biobased content are commercially available. Again, OPWC's written comments suggests a friendly amendment of the final sentence of the annotation as a way forward.

Ammonia extract. We support the petition for adding ammonia extract to the National List as a proposed non-synthetic material. We assert that organic stakeholders have consistently maintained that the use of highly soluble ammonia

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

based fertilizer is not in line with organic principles. Our review of the TER found many scientific points supporting this position. We believe it is critically important for growers, certifiers, input manufacturers and materials review organizations to have a clear ruling on this material. Thank you for the opportunity to comment.

MR. ELA: Thank you very much, Lynn.

We appreciate your comments every year. And I want to apologize to Amy. I think you had raised your hand and I didn't see it. So since the Raised Hand function shows up on your screen and not my participant list for the Board members, please jump in if I miss you, I apologize for that. Are there questions for Lynn? I don't hear anything. Thank you, Lynn. We --

MS. COODY: Thank you.

MR. ELA: -- appreciate your comments as always.

MS. COODY: Bye-bye. Thanks.

MR. ELA: Next, we're going to move

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Adam Seitz, followed by Jennifer Berkebile and Patty Lovera. Adam, please go ahead.

MR. SEITZ: Good afternoon, my name is Adam Seitz, and I serve as a Senior Reviewer and Policy Specialist for the organic certifier Quality Assurance International or QAI. QAI is supportive of the Board seeking and obtaining additional paid resources to help conduct its work and agrees with several other commenters that such resources are used. Individual NOSB members must maintain their independence regarding decision-making duties and interpretation of public comments. Please see our written comments detailing the use of sunset materials by QAI certified operations along with other sunset specifics. Additionally, for agar-agar please include a discussion of whether this material is appropriately classified based on NOP classification of materials guidance during its sunset review.

MR. SEITZ: Same for carrageenan. It appears both may currently be misclassified. Ion

exchange filtration. We agreed with the NOSB's previous proposal on this topic, which was supported during the last NOSB meeting by a nine to six vote. We support the current proposals requirement that recharge materials must be on the National List. Though the current proposal does not provide a determination on whether resins require National List inclusion, QAI recognizes the challenges the NOSB faces in navigating the intra and interagency regulatory dissonance regarding food contact substances and secondary direct food additives.

What types of substances require National List inclusion and which do not? What does a processing aid versus a food contact substance, or even food processing equipment and so on and so on. Despite some sentiments that the question at hand is not a valid question at all and as such so easily resolved, it's not, it's merited. The question and debate about what substances are permitted for use by organic handlers and which require inclusion on the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

National List or outside the scope of OFPA and USDA organic regulations, it's an old one.

Consider sanitizers are neither ingredients nor processing aids. Should we consider their National List inclusion redundant and permit any no-rinse equipment sanitizer? The answer is no, but just an example of a discrepancy in the reg. Any subsequent policy from the NOP or recommendations from the NOSB on this topic should address the broader question of if or what specific type of food contact substances require inclusion on the National List in order to be used by organic handlers.

QAI would also like to rebuke any assertion that food or ingredients filtered via ion exchange filtration as synthetic. We also reiterate that organic products containing water, non-organic agricultural ingredients and non-organic, non-synthetic ingredients all purify via ion exchange filtration are all currently permitted under the NOP.

Finally, to prepare my comments

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

yesterday, I revisited the FDA's food ingredient and packaging terms website. I noticed for the first time a prominently featured, feed your mind, better understand genetically engineered foods graphic. It linked to a FDA resource intended to quote, help consumers better understand genetically engineered foods complete with a cute little GMO potato YouTube character trying to tell me why genetic engineering is great.

Moral of the story, congress authorized 7.5 million on this joint FDA/USDA advertising effort, which includes development of middle school classroom curriculum to help educate consumers on what they qualify as the safety and overall benefits of GMOs. Think how far a \$7.5 million appropriation by congress would go to perhaps establish an organic inspector training or provide outreach to university or even middle school campuses on the possibility of a career in the organic industry, or even to provide funding for the hiring of NOSB support staff. Thank you, NOSB and NOP for your efforts and the opportunity

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

to comment.

MR. ELA: Thank you very much, Adam.

Are there questions from the Board? Adam, I just have one question. Just to be clear, at the last Board meeting the Board on nine to six voted not to -- voted down to proposal to an item of change to not list the actual resins. They supported the recharge materials. Are you saying in your comments that we should or shouldn't have the resins on the National List?

MR. SEITZ: I'm saying that the resins likely should not require inclusion on the National List. And I believe the vote was voted down but I thought it was nine/six in favor of the resins not being on the National List.

MR. ELA: Yeah. Actually, it was the reverse and I can't remember the exact vote, but regardless, thank you for clarifying that for me.

And any other questions for Adam? I do not see any. Thank you very much for your testimony, Adam.

Greatly appreciate it. We are going to move onto Jennifer Berkebile. And then on deck we have Patty

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Lovera and then Priscilla Iskandar. Jennifer,
Please state your name and affiliation.

MS. BERKEBILE: Hi, everyone. My name is Jen Berkebile and I'm the Materials Program Manager at PCO. PCO is a USDA accredited organic certification agency that certifies more than 1,600 crop, livestock, and handling operations in the US. Today I will be commenting briefly on the need for support for the NOSB, paper pots, and biodegradable biobased mulch film.

MS. BERKEBILE: The CACS have put forth a discussion document on supporting the work of the NOSB. PCO agrees that the workload for NOSB members is heavy. As such PCO supports the Board having helped to conduct and provide literature reviews, write drafts, and otherwise support the work of the NOSB members. In particular, we strongly encourage the Board to have legal support to ensure that proposals are within the authority of NOSB as granted by OEFFA, and to clarify authority when multiple government agencies are involved.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Although this is a sensitive topic as independence of the NOSB is crucial, we still support the hiring of help for the NOSB because it is ultimately the NOSB members who vote on any proposals. Thank you for your continued work on the proposal for paper as a crop production aid.

I appreciate that you took the time to get it right and you did. PCO supports the proposal with some notes for the NOP when they write the proposed rule.

We encourage the NOSB to pass it as written.

Finally, biodegradable, biobased mulch film is the material that comes up often with organic and conventional farmers alike. Overwhelmingly, we hear support for the allowance of biodegradable, biobased mulch products currently in the marketplace. Many stakeholders do comment on the over-use of plastic in organic agriculture due to the fact that biodegradable, biobased mulches cannot be used, and support a path forward that leads to the use of less plastic.

The Crops Subcommittee has proposed a revision to the definition of biodegradable,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

biobased mulch film at 205.2. This proposed revision requires at least 80 percent biobased content. PCO supports this proposed requirement if it can be confirmed that products can and will be developed to meet this standard. We do suggest that you clarify the proposed language at 205.601(b)(2)(iii), prior to passing this proposal.

The addition of a requirement to use BBMF with 100 percent biobased content when available is confusing. Does the Subcommittee meeting commercially available? A term defined at 205.2, with commonly adopted verification practices? If so the listing should be edited to include the word, commercially. If not, we request that the Subcommittee clarify that use of the term, available, and offer guidance or reconsider its usage. Thank you all for your work and for the opportunity to comment.

MR. ELA: Thank you very much, Jen. Are there questions for her? I do not see any. Thank you very much for your time, Jen. We

appreciate you giving us input. Next up, we have Patty Lovera, and then on deck, Priscilla Iskandar, and then after her or Aimee Simpson. Please go ahead, Patty.

MS. LOVERA: Great. Hi everybody.

My name's Patty Lovera, I'm a Policy Director for the Organic Farmers Association, which is a group that's led by domestic certified organic farmers and certified organic farmers determine our policies. So I'm going to talk about a couple of specific topics on your agenda today and on Thursday our Director Kate Mendenhall is going to cover some more.

So first for paper-based crop planting aids. This issue's bid on the agenda because it's a tool that's really critical to so many small farms that depend on it. We've heard about this meeting after meeting. So we appreciate all of the Board's work to clarify the status of paper on the National List and we support the proposal and the definition change that you're going to vote on.

On ammonia extract, we included a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

pretty broad question on ammonia extract on our 2021 policy priorities survey of certified farmers. The majority of those who answered said he would not use ammonia extract if it were available, and we got some written comments that were very much in the vein of what's in your document about feeding the soil versus feeding the plants. But it wasn't unanimous. So we urge the Board to think about trying to gather more farmer input about their current practices and their needs looking forward because we also got some comments about never say never, that we have to kind of figure out what that means and have more conversations.

The context for this debate about this particular material is very important. Lots of our conversations as an organic community about specific materials are often about bigger dynamics, and this feels like one of those. We are hearing more from producers about price trends that really worried them, especially kind of in a row crop arena, continue to look for enforcement

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

on fraud because that's impacting the prices that people see in the marketplace. They believe land prices aren't going down, so that's not an option to increase revenues, so people are looking to increase yield as a way to deal with revenue. And that creates, that pressure to increase yields is making people think about what materials are there that I could use to increase that yield.

So that has to be part of this conversation, is how do we deal with those pressures as well as the specific conversation about materials. So we think we need to find a place to have that conversation as well as the important job you have to do about making a decision about this material. So we're open to having those conversations and we think that we really need to, as well as the specifics about the science of ammonia extract.

And then finally on the discussion on supporting the work of the NOSB, we agreed with the assessment in the document that it's a tough thing to be a volunteer on this Board. It's a very

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

heavy lift. All of you have very demanding day jobs, including being farmers. We listed a couple of things to think about as you explore the idea of providing research assistance. I'll just flag two here, just that it's going to be really important to figure out ahead of time before you start how to have some kind of conflict of interest process. Even with students, grad students live off of grants. What do those grants lead to at a land-grant school. Could it be a material that comes before the Board? And that any Board members should design what you need help on. Thank you.

MR. ELA: Thank you very much, Patty.

Questions for Patty? Quick question, Patty. I appreciate your discussion on ammonia extracts.

You said it's not unanimous, but overall people said they wouldn't use them. But you also then said yield needs are kind of what justified their use. You know, my understanding of organic principles is that, you know, just saying we need more yield would not necessarily be a reason to use some material and put it on the list or prohibit

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

it. Can you address that a little bit more?

MS. LOVERA: Right. Every time we have to talk about material, we have to check back to the principles, right? That's in your checklist and it's the conversation we'd be having.

We actually went to have more discussion about this with our folks. We didn't dive deep into sourcing of it, we just kind of asked about this category of ammonia extracts. And it was more folks said no. And then they cited kind of when they provided a written comment, they did say things like, feed the soil, not the plant, right?

Which gives it that kind of more checking against the principles.

But we were a little surprised that some folks were just saying, well, could we get there an organic way? Could sit in a way that gets us this kind of product? So we just think there's more there in kind of the economic conversation that feels like it has changed for a lot of our members in the last couple of years. It's not an excuse, you know, to approve an the material that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

doesn't make sense with organic principles. But we don't want to lose his context of pressure that people are feeling because we're only deciding yes or no on materials, right? We've had this -- I think we've all felt his need for a long time, to have a place to have kind of consolidation. What do our supply chains looked like? How are we going to get people the price that they need? And some of that's bleeding into these conversations about specific materials, and we need to talk about both.

MR. ELA: Are there other questions from the Board? I'm not seeing any. Thank you, Patty. Really appreciate your testimony, and food for thought here.

MS. LOVERA: Thank you.

MR. ELA: Next up is Priscilla Iskandar, followed by Aimee Simpson, and Amalie Lipstreu. Please go ahead, Priscilla.

MS. ARSENAULT: Steve, I don't think Priscilla --

MR. ELA: Michelle, I remember she is not here; is that correct?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. ARSENAULT: Right. I believe that's correct.

MR. ELA: I missed that. Okay. We'll circle back round on her. Okay, Aimee, we're up. And then Amalie Lipstreu, and then Mark Kastel. Please go ahead.

MS. SIMPSON: Good morning from Seattle, Washington. Good afternoon to those of you not in Seattle. My name is Aimee Simpson and I'm the Director of Advocacy and Product Sustainability for PCC Community Markets, the nation's largest independent consumer owned food market. PCC's vision is to inspire and advance the health and well-being of people, their communities, and the planet. We recognize the organic certification program to be a critical part of this vision. And this is why would she used to be a certified organic retailer and continue advocating on behalf of the issues we know that our members, shoppers and community care about.

So to touch on just a few of what are top on mind. Climate. For our community, climate

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

change remains a top priority and we continue to view soil based organic crop and pasture based livestock systems as a leading solution to addressing agriculture's impact on rising greenhouse gas emissions. If implemented with strict adherence to the standards setup NODPA. We would encourage the NOP to set climate change as both a programmatic and NOSB priority. This includes enforcing existing organic standards concerning pasturing, crop rotation, soil fertility, and organic systems based approaches. But also engaging the NOSB to review existing science on climate friendly agricultural practices, identify alignment with existing standards and identify categories for improvement to ensure better alignment with climate focus policy and frameworks.

Heavy metals and organic. While we believe organic to be a leader in climate friendly standards, we are concerned in its failure to address the rising issue of heavy metal contamination in certain crops and foods,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

particularly those marketed towards children. Preventing toxic contamination from heavy metals such as inorganic arsenic, lead, cadmium, and mercury is squarely within the scope of OFPA. And there are specific actions that organic and take to ensure better testing and manuring practices, and production methods that will provide the protection and assurances that organic consumers expect from the organic certification.

Kasugamycin. And speaking of things that consumers and producers do not want in organic, PCC would encourage you to review our full comments and the small survey of our local organic apple producers on whether there was an urgent need for antibiotic treatment for apples. While one producer did potentially see a need for emergency use in pear production as a last resort if an entire orchard is threatened, the majority of the producers identified multiple organic systems based approaches to preventing development and spread, and expressed more concern over the negative impact that allowing antibiotics into

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

organic would have on organic integrity and consumer confidence in organic.

We share in this concern and because of this, we would encourage the NOSB to reject the petition to add kasugamycin to the National List.

Last but certainly not least, we would like to commend the efforts of the NOSB to address the aquatic ecosystem impacts of fish oil production.

As you know this is not an easy topic. We do, however, have concerns about the proposed options and can encourage you to keep working with the experts at Seafood Watch and MST to identify the appropriate standard and language. Thank you.

MR. ELA: Thank you very much, Aimee. You get on the list for perfect timing as well. So gold star, thank you very much. Are there questions for Aimee? Amy. Amy has a question for Aimee.

MS. BRUCH: Thank you, Steve. And thank you Aimee, for your contributions to the organic community. And also with your written and your verbal comments here. I just had a question.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

It was actually in the written comments you submitted and it was about carrageenan --

MS. SIMPSON: Yes.

MS. BRUCH: -- and the connections with that and Irish moss. Would you say, in general, your stance would be that Irish moss would be a substitute ingredient, instead of using carrageenan?

MS. SIMPSON: You know, I think what we were encouraging was pointing out that in recently we had actually a customer reach out to us and say, hey, you know, this Irish moss, just whole Irish moss as an important ingredient in their kind of cultural heritage and cooking. And when we kind of were digging into it more, there is a difference between carrageenan and Irish moss as far as an entity. Where there seems to be a lot of questions is whether the health concerns that are surrounding carrageenan and the essentiality concerns of which is an extract, a highly processed extract, we don't know if those definitely transfer over to Irish moss.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And from what we could see, there was a little difference in that it did have nutritional benefits that maybe you weren't there with the extract. We weren't sure if some of the, you know, intestinal issues that you find with the carrageenan, which we are firmly against and we don't allow in our products, new products that we bring on. We just think there was a lot of questions there and that maybe in the way the NOSB was addressing it, they were kind of making a connection that hadn't been evaluated properly.

So just because we want to be very cautious with especially, you know, culturally important foods and things that have been there for people, that we don't just make leaps that we don't have support for. So I don't stay that we have a position on the whole ingredient yet, but we'd like to see them maybe dig in a little bit more just to make sure that they are one and the same, which, you know, initially our research showed that maybe they're not. So that was kind of our concern.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

MS. BRUCH: Okay. Thank you.

Appreciate it.

MR. ELA: Rick, do you have a question?

MR. GREENWOOD: Yeah, I do. Aimee, since you're an apple growing country --

MS. SIMPSON: Yes.

MR. GREENWOOD: -- and pear growing, it's been interesting, the public written comments were very clear that the consumers don't want antibiotics --

MS. SIMPSON: Yes.

MR. GREENWOOD: -- in and their food or used. And many of the growers of apples and pears say they're ways. Have you seen any pushback from the growers in Washington State in particular that you've had interactions with, saying they absolutely need it?

MS. SIMPSON: Well, I was very curious about that to because I can affirm your statement that consumers do not want this in organic. And so we actually did a small survey to reach out to our local apple producers, and just to pull them

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

as to whether they'd been struggling or needed this as an emergency treatment. And I did give a summary of all of those kind of responses that we received. And I was actually very surprised to see that. While there was one producer who said that they had lost a pear orchard to fire blight most said with apples, this was not something that they needed, that they felt that they could address it through organic systems management.

They felt this was a concern for larger scale producers because also with trellis growing systems, it's harder to combat that. And that most of them actually expressed that they felt like it was more of a threat to the organic label to kind of allow that and consumer perception of that, than to address it through the means that they'd really been able to, you know, by --

MR. GREENWOOD: Okay. That --

MS. SIMPSON: I was surprised too, but that's all summarized in our comments.

MR. GREENWOOD: Okay. Yeah. And it's just interesting since I went through all of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the written comments, literally hundreds of written comments saying, you know, keep antibiotics out of that. Interesting, thank you.

MS. SIMPSON: Yeah.

MR. ELA: Great. Thank you very much, Aimee. We do appreciate your time to give us comments.

MS. SIMPSON: Thank you.

MR. ELA: Next up we have Amalie Lipstreu, then Mark Kastel, and then Harold Austin after Mark. So Amalie, please go ahead.

MS. LIPSTREU: Good afternoon Board members. My name is Amalie Lipstreu and I'm the Policy Director for the Ohio Ecological Food and Farm Association, or OEFFA. We're approaching our 20th year as an accredited certifier and provide certification services in 12 Midwestern states.

Our organic farmers are making daily decisions about how to adapt to the more frequent extreme weather affecting their farms. They know what is happening and they know that they are part of the solution.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Organic agriculture is more resilient and must be part of a comprehensive climate mitigation and adaptation strategy. There is no other holistic system of agriculture even approaching the level of accountability and transparency that's present in the National Organic Program. And while we all know this system is not perfect, it is the best and most comprehensive system of agriculture that we have.

OEFFA is making a unique request of the Board. We have a window of opportunity that will only be open currently until April 29th. USDA released a request for comment on how they can create a climate strategy for agriculture, and the very first question asked in this docket is tailor-made for every organic farmer and advocate to answer. How can USDA leverage existing policies, existing programs to encourage voluntary adoption of agricultural practices that sequester carbon, reduce greenhouse gas emissions, and ensure resiliency to climate change.

USDA has a 20 year history of enforcing

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

rigorous regulations related to soil health, water quality, and biodiversity through organic management systems. As a FACA board put in place to advise the USDA secretary on aspects of the implementation of OFPA, you are unique position to lift organic agriculture within the department as a critical solution to the challenge of the climate crisis. There is no time for debate. The science is clear and silver bullet approaches and single practices will not work.

MS. LIPSTREU: Please submit comments to the USDA before next Thursday, key recommendations on how the department can highlight and promote this voluntary adoption of agricultural practices that sequester carbon, reduce greenhouse gas emissions and promote resilience to climate change. Thank you.

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

MS. BAIRD: Yes, hi. This has to do with your written comments as opposed to your

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

verbal now, and it's to doing with the CACS and the inspector pool, or lack of inspector pool. Was that you or was it someone else who wrote that?

Shall I ask you or should I wait?

MS. LIPSTREU: I think if you wait until Julia Barton will be speaking and just about 20 minutes, she probably answer that question more directly.

MS. BAIRD: Okay. No problem. Thank you.

MR. ELA: Carolyn, did you have your hand up?

MS. DIMITRI: No. That was just kind of like a hooray for the comment.

MR. ELA: Okay. Perfect. Just didn't want to skip over you. Any other questions from the Board? All right. I do not see any. Thank you very much. We do appreciate your comments as always. We are going to move onto Mark Kastel, followed by Harold Austin and then Julia Barton. And I am planning -- we'll see, we'll maybe go a little further and then take a break,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

but we'll play that by ear. And I also really wanted to thank the sign language interpreters.

I know there's a lot of jargon in this and you-all, I assume you're doing a great job. Thank you so much. Okay. Let's move on to Mark.

MR. KASTEL: Thank you, Mr. Chairman.

My name is Mark Kastel. I'm the director of OrganicEye, which operates as a project of Beyond Pesticides. Greetings from La Farge on the west coast of Wisconsin. For those of us who were involved in the discussion back in the 1980s that culminated in the passage of the Organic Foods Production Act and the Byzantine public/private certification scheme we operate under, it's been a grand experiment, and we are, to a certain extent, victims of our own success.

What started out with mostly low cost, non-profit, farmer lead certification has now morphed into multi-million dollar certifiers, certifying multi-billion dollar corporations. With agribusiness starting out hostile towards organic, they now own most of the organic brands.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And with a USDA that was equally hostile, we now have a firm revolving door in place and are experiencing regulatory capture. Nowhere is this more evident than the busywork that goes into annual inspections and certification.

The infrastructure facilitating this busywork now literally consumes tens of millions of dollars each year because it's just too easy to cheat. All the milk looks white, all the dent corn looks yellow. The cheating takes place on paper. What's been the return on investment for the hundreds of millions of dollars spent over the years on annual inspections. Almost every large-scale fraudulent activity has come from industry watchdogs like me, industry informants, and the media. After 30 years, I would suggest that a broad-based task-force be seated to investigate alternatives to the current model.

First, the threshold for exemption for small mom and pop producers has been frozen at \$5,000 since 1980. Based on inflation that would be over \$10,100 today. Secondly, the focus on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

inspections and audits should be risk based. The IRS doesn't audit each of our tasks returns every year. By spreading the resources thin we receive way too many reports of drive-by certifications by grossly unqualified inspectors. If we don't audit everyone every single year, we could have highly trained inspectors doing periodically rigorous audits and plenty of unannounced visits.

Combine that with modern technology, surveillance, machine learning, and we could really leverage the same investment. And that might actually catch the real fraudsters in real time, with way, way less burden on the most honest and ethical industry participants. Thank you very much.

MR. ELA: Two seconds. You don't quite hit the list for perfect timing, but you're right in there. Questions to Mark, please. Sue has one.

MS. BAIRD: Yes. I'm sorry. Sue Baird, hi. Mark, I really appreciated your remark on risk based inspections and it's something that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I find appealing as an inspector. How would you go about discerning which inspectors were more qualified and/or would you propose having some kind of a funding to help inspectors become more qualified to do those risk assessments?

MR. KASTEL: Well, Sue, I think it's just the obvious -- opposite. I'm going to reverse your question a little bit.

MS. BAIRD: Okay. That's fine.

MR. KASTEL: Yes. And first I want to qualify this. Our old friend Dave Engel who ran a certification shop here in Vernon County, Wisconsin, used --

MS. BAIRD: Sure.

MR. KASTEL: -- to say we had more organic farmers here than any county in the country. We probably have more inspectors here. I know and I know you know many eminently qualified inspectors.

MS. BAIRD: Right.

MR. KASTEL: The problem is too many certifiers, in essence, bid out their

certification inspections to the lowest cost and we're getting young people mostly without production agriculture experience, fresh on a college and they go to a certifier course and they're a certifier. So if we were going to read imagine how certification took place and do demonstrably fewer inspections every year we could enlist the veteran inspectors who exist today. And do they need additional training? That's beyond my pay grade, but there are some folks that are obviously highly qualified. When it was voluntary, my first inspector when I was certified long before the USDA, was a guy named Jim Riddle --

MS. BAIRD: Yes.

MR. KASTEL: -- it was self-learning and the farmers, it was learning process. So if we dialed it down, so we had less busywork and more important inspections, I'm just throwing ideas out here because it takes a community to discuss these. But instead of being inspected every year, if based on past performance, if my friend Jim

Gerritsen in Maine, who's been certified for, I think, 40 years, if he passes with flying colors year after year, maybe he can opt out for five years, although be subject to random inspections which would be ramped up anytime.

So it doesn't mean that you don't have to maintain your record keeping. And then when we go into a thorough audit and inspection, I have farmers telling me I maintain my records scrupulously and either they don't look at them at all, they just do a perfunctory examination or the people aren't qualified. So when I said, machine learning, some of this we're like in the dark ages here. We don't integrate the different certifiers. Who's selling what and who's buying what? Are we reconciling that in any automated form with what the production capacity of that particular farm is or that country is? We're not.

And so by ramping up our adoption of some of the technologies are being used in other industries that are scrutinizing supply chains, we could have less labor, higher quality, more

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

competent labor, and this year after year, tens of millions of dollars of expenditures by the NOP, by individual certifiers, by the farmers shelling out money by the cost share, what have we actually accomplished? Because we're really accomplishing a few letters of non-compliance every year. The big macro integrity problems are not coming to light through this process.

MR. ELA: Great. Thank you, Mark.

MS. BAIRD: Totally agree, Mark.

Thank you.

MR. ELA: All right.

MS. KASTEL: Thank you.

MR. ELA: Yes. I think we're going to move on just to kind of stay on schedule here. So appreciate your thoughts, Mark. We are going to move onto Harold Austin. We've got Julia Barton on deck and Michael Sligh. We'll do those two people and then we'll take a break after Michael. So Harold, former NOSB members, please go ahead.

MR. AUSTIN: Good morning. Can you hear me?

MR. ELA: You're a little faint.

MR. AUSTIN: Okay. How about now?

MR. ELA: Still a little faint, but we can hear you as long as we listened carefully.

MR. AUSTIN: Okay. All right. I'll try to speak up a little bit louder for you. Good morning, everybody. My name's Harold Austin, former NOSB member and current Chair of the Northwest Horticultural Council's organic advisory subcommittee. I'd like to start by thanking all of you for your time to serve on the Board on behalf of the organic stakeholders in the community. Thank you so much.

A couple of different areas to go over with you this morning. First, I'd like to take and give my support to the materials that are currently up for the sunset review for the Handling Subcommittee. I served in one of the handler positions when I was on the list as the Subcommittee Chair --

MR. ELA: Harold.

MR. AUSTIN: Yes.

MR. ELA: I'm going to interrupt.
Just we're still having a pretty hard time hearing.

MR. AUSTIN: Okay.

MR. ELA: We want to make sure we get
your comments.

MR. AUSTIN: Let me see here.

MR. ELA: Now we can't hear you at all.

MR. AUSTIN: How about now?

MR. ELA: It's still about the same.

MS. ARSENAULT: Harold, if you can get
to the chat, scroll to very top, I pasted the phone
numbers and if you want to try to dial in on the
phone. Thanks.

MR. AUSTIN: All right. Steve, why
don't you move on, and then I'll give a call-in
on the phone.

MR. ELA: Sounds great. We'll come
back to you here right before the break.

MR. AUSTIN: Okay. Thank you.

MR. ELA: Okay. We're going to move
on to Julia Barton with Michael Sligh on deck, and
then we'll come back around to Harold. Julia,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

please go ahead. Julia, we're not hearing you.

MS. ARSENAULT: Julia, I see you're just on the phone. If you hit Star 6, you should be able to unmute yourself.

MS. BARTON: Has that?

MR. ELA: Much better. Go ahead.

MS. BARTON: Okay. Thank you. Good afternoon. My name is Julia Barton with the Ohio Ecological Food and Farm Association. Thank you for your facilitation of this online meeting and for your service. Today, I'd like to share input on three topics. First, containers. Since 2017, the greenhouse and field container production work agenda item has been on hold. While the topic may be on hold for the NOSB agenda, it remains very much in play for the rest of us. Transitional and organic producers, certifiers and inspectors are working with container systems regularly. And organic consumers are paying premiums for food produced in container systems bearing the organic label.

Please work with the NOP to get

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

greenhouse and field container production back onto the active work agenda, so we can learn from the communities input and move towards clarity and transparency in organic container systems.

Secondly, the timing of meetings. OEFFA's Grain Growers Chapter have continually requested an alternative to the current meeting schedule.

They've heard the constraints of the Board and continue to request a solution which would allow greater engagement of this important organic constituency. They suggested moving the schedule back two weeks each meeting. This would mean the meeting would rotate throughout the year. Equally benefiting and inconveniencing various stakeholders over time.

We'd like to request an update on alternatives to the current meeting schedule to be more inclusive of producers. Finally, the discussion document on human capital supporting the work of the NOSB. We wanted to thank you for taking this suggestion and turning it into a discussion document. We think a creative solution

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

can be found which serves the Board and the stakeholders, ultimately also benefiting the program.

Our first general response is that this sort of exchange already taken place on an informal basis. NOSB members seek input from or are provided unsolicited input from stakeholders between formal comment periods and through informal channels. Stakeholders share research, on the ground experience, and conversations on an ongoing basis. These practices are generally fine and not new, and while they are not the same thing as having a research assistant, it demonstrates that informal input can be provided to NOSB members for their information and further evaluation without issue.

Conflict of interest agreements could be put into place to mitigate other risks. We're very comfortable with the Board receiving support to help conduct and provide literature reviews, write drafts, and otherwise support the work of NOSB members. The better informed the Board is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the better equipped that will be to do it job. We want you to have the tools you need to do your job to the best of your ability. Thank you for your service and for your time.

MR. ELA: Great. Thank you very much, Julia. Are there questions from the Board? Asa has one. I do want to recognize that Asa joined the meeting, I think two commenters ago. So Asa, I apologize for not making note of that. Go ahead with your question, Asa.

MR. BRADMAN: Thank you. And apologies. I just want to comment. I agree, we do need more conversation and work on container issue as a Board and as a community, and I hope that we can move that forward.

MS. BARTON: Yes, thank you. We would very much appreciate it.

MR. ELA: Anybody else from the Board with a question? All right. Thank you very much, Julia.

MS. BARTON: Thank you.

MR. ELA: We are going to move on to

Michael Sligh, and then come back to Harold Austin and then take a break after that. So Michael, please state your name and affiliation, and start your comments.

MR. SLIGH: Yes, I'm Michael Sligh, former NOSB member back in the beginning. I'm with the Alliance for Organic Integrity. Something's happening with the video. It won't show, but that's fine. Our focus is on strengthening our international organic guarantee system by promotion and harmonization of best practices in the building of tools and strategies for better consistency in fraud prevention.

Our experiences are dictating that now more than ever. Let's get back to the fundamentals. Hopefully as we have re-emerge back into physical oversight, we are strongly urging our entire system to focus on ensuring that our basic organic principles, practices, and regulations are being carried out in a consistent and highly competent manner through a risk based approach, prioritizing soil building, real crop

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

rotations, enhancement of biodiversity, ensuring that split operations are protecting against commingling, that approved organic fertilizer inputs match the yield potentials.

That mass balances are being conducted in a consistent manner that verify that acreages, yields, products and fields are all clearly confirmed as organic and matching. That livestock has real access to the outdoors, and that certifiers and accreditors are in constant communication, especially regarding common supply chains and product flows. Isolation is not in our best interests. These basic requirements not only protect our credibility, but they deliver on our promise to all organic operators that they agreed to meet these high standards if they would be placed on a level playing field.

But if everyone is not meeting the same high standards, this creates unfair competition, can drive good farmers out and accelerate concentration. So it is very important that we are actually delivering on these real soil

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

building, and carbon sequestration claims of being climate friendly farming practices if we are to remain strong and credible.

On a personal note, at the beginning of every administration there's an opportunity to reset and strengthen our norms between the NOSB and the NOP. I strongly urge you to use this opportunity to re-set these norms in good faith, to address the issues of common agendas, the need for technical assistance, clearing the backlogs, timelines, and setting priorities. We can do this best in a most equitable balancing of the needs of both USDA and our organic stakeholders. This will service all best. We appreciate and recognize your sacrifices you make, and thank you for your service.

MR. ELA: Thank you very much, Michael and I know you helped kind of create what we're dealing with, or the program we have now, so we appreciate that. Are there questions you Michael? I am not seen any. So thank you again, Michael. Harold Austin, we're going to try you again.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. ARSENAULT: Sorry, Asa had his hand up.

MR. ELA: I'm sorry, Asa. Go ahead. Michael, you're still there.

MR. BRADMAN: Michael, I can think of a couple of backlog issues and that you mentioned as something that should be addressed, and some of the ones that I can think of origin of livestock list for in the poultry production standards. Are there any others or that you're concerned about and it would be interested to hear those? And if my list agrees with yours and any other comments on that?

MR. ELA: We may have lost Michael, Asa. So I apologize for not seeing your hand up there.

MR. BRADMAN: Sure.

MR. ELA: All right. Harold, are you there?

MS. ARSENAULT: Harold, you may have to get Star 6 on your phone to unmute.

MR. AUSTIN: Okay. How about now?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Perfect and much better volume. Thank you, Harold. Thanks for being patient.

MR. AUSTIN: Well, thank you guys. Again, Harold Austin. I'm a former member of the NOSB. I currently am the Chair for the Northwest Horticultural Council's organic subcommittee. I want to start by thanking all of you for your time and energy, your willingness to serve on the NOSB.

It's an important process for our entire stakeholder and organic community, thank you very much. A couple of different areas to cover with you quickly this morning. First, I support the materials that are up for sunset review for the Handling Subcommittee. Having served in one of the handler positions when I was on the NOSB and serving as the Subcommittee Chair for a couple of different times, I've had the opportunity to review the majority of these materials and hear and listen to public testimony.

Organic handlers rely on these materials to assist them in their organic handling

operations. Unless something has come up that renders the material as no longer being needed by the stakeholder, I would review to relist these materials. I support the relisting of the materials under sunset review by the Crops Subcommittee. Of particular importance are the EPA List 3 inerts. I cannot stress enough how important to our insect control and monitoring this material listing is to organic tree, fruit, and berry growers. The materials are only allowed for use in passive pheromone dispensers. These dispensers are used in our mating disruption program and serve as our number one defense in the control of our codling moth, pandemis leafroller and oblique banded leafroller control on the Pacific Northwest and organic apple, cherry, and pear production, and are a vital component of our integrated pest management process as well.

I would urge you to relist and then move forward this fall with a resolution calling for the NOP to resolve this matter similarly to the one that was issued last fall for the EPA List 4

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

inerts. I urge you to please do not remove this listing until a solution is in place that can make for a seamless transition for our stakeholders so heavily reliant upon these two categories. Also under 602, a prohibited material is calcium chloride, but there is an exemption that allows it to be used to treat physiological disorders with calcium uptake.

With the newer types of organic apples and cherry's being raised along with the recent conversion to the industry to more semi-dwarfing and dwarfing rootstocks, the need for the applications of foliar calciums has never been more important to the organic tree fruit stakeholders.

A loss of this material listing would create a significant reduction in the availability of organic crops simply because we cannot raise these crops without the foliar calciums being applied.

The transition in the roots and overall tree size is driven by labor, not by the farmer.

Finally, on the chlorine materials for handling crops, livestock, as well as ozone and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

peracetic acid, see my written notes as well as those as the Northwest Horticultural Council. I support the reenlisting of all six of the sanitizer disinfectants. I question -- anyway, I'll stop there.

MR. ELA: All right. Thank you, Harold. Are there any questions for Harold? I am not seeing any. Thanks again, Harold for your patients and we appreciate your testimony, and your service on the NOSB.

MR. AUSTIN: Thank you.

MR. ELA: With this, we're going to take a ten-minute break, so if we could --

MR. TURNER: Steve, Amy's got her hand up.

MR. ELA: Thank you. Harold, are you still there? I'm really doing poor on the hands up. Amy, do you want to just state your question and at least it will be on the public record?

MS. BRUCH: Sure, Steve. And sorry for my slow hand-raise, I apologize on that. I was just looking and referencing Harold's comments

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and he had a comment in favor, I believe, of kasugamycin and I just wanted to ask him, you know, with the general state it seems like we've had many comments against using that substance because it is a antibiotic and I just wanted to hear more from his perspective on why that would be beneficial.

MR. ELA: Great. Well, at least have that on the record and I apologize again, Amy. So that would have been a great question.

MS. BRUCH: No problem.

MR. ELA: Okay. We're going to take a ten-minute break, so if we could come back at three minutes to the hour. We'll keep going. Thank you all.

(Whereupon, the above-entitled matter went off the record at 1:48 p.m. and resumed at 1:57 a.m.)

MR. ELA: All right. By my clock, it is three minutes to the hour, so we will get started again here. Michelle, are you ready?

MS. ARSENAULT: I'm ready.

MR. ELA: I neglected to announce who

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

was going to be next after the break, but we have Russell Taylor, and then Artaynia Westfall, and then Alan Lewis. And, Artaynia, we haven't seen you, so if you are there, could you let Michelle know. Otherwise, we will skip over you. So, Russell, you are up. Could you state your name and affiliation, please, and go ahead and start.

MR. TAYLOR: Yes. Russell Taylor here with Live Earth Products. I also represent the Humic Product Trade Association as President. The reason for presenting today is, because we believe that the ammonia extract is vague, the definition is too broad and could actually capture humic acid products, we would like to at least lodge that point here. So we're going to just express some concerns about ammonia extract and how it could impact humic acid extraction. Next slide, please.

So, as you know, by definition, humic acid is only alkaline soluble. We're using the ammonium hydroxide to extract. It's already well established that these synthetics can't be not added for fortification, and most extractions

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

result in low increase of cations. Less than 1 percent of the parent material would be ammonia before and after extraction process, so we're obviously not fortifying these products with ammonia. The use rates of humic acids are very low, making fortification pointless. You're using such a small amount of humic acid, you really would not make any huge contribution to the nitrogen content or ammonia. Next slide, please.

I'll steal Steve's comments earlier, that the dose makes the poison. And there are petition flaws that indicate that the ammonia, you know, could cause, you know, biochemical effects on the soil or toxic and microbial activity to the root zone. Because of the large amount of soil -- and you can see I just threw the number out there, 2 million pounds of soil in a furrow depth per acre -- typically it takes about 1.2 tons of lime to change the soil pH one point. So even though these products might be alkaline, the added amount of alkalinity is very minimal. You know, one acre

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of soil holding 1" of water is 30,000 gallons, so you're literally putting drops of humic acid into the soil profiles. So the concerns about fortification are very low. Obviously, you see humic acid applied at small rates would equate to about one mil, which is literally a drop per square foot. So, our concerns -- obviously, this ammonia extract is not directly geared towards humic or fulvic acids, but because the definition is so broad, we fear that it might capture these products. It's not mentioned in the 96 pages of the technical report, but we would like that clarification on this going forward, that humic acid extracts are not included under this rule.

And last, obviously, is, you know, the ammonia extract is so small, it's negligible. So, happy to answer any questions.

MR. ELA: Great. Thank you very much, Russell. Are there questions from the Board? I have a question. Russell. How would you define ammonia extract so it would include humic acid, but exclude the ammonium extracts talked about in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the petition?

MR. TAYLOR: That's a good question and I've thought about that. Obviously, you know, the ammonia is an added synthetic, so you would possibly exclude those extractants and just indicate that excluded synthetics would not be considered under this proposal. We're not creating -- we're not, you know, the intent here is not to add that nutrient. You know, we're not trying to add a bulk of nitrogen to the soil profile. We're trying to add organic acids that would benefit the crop.

MR. ELA: So you would say that the -- I mean, the ammonia is included with the humic acid just kind of naturally. It's not concentrated?

MR. TAYLOR: Right. It's intentionally added to extract only, and there is already language in the humic acid rules for fortification for synthetics. So I think that covers us. We just need to make sure that the ammonia extract proposal we have here kind of parses out those synthetics.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Great. Any other questions?

All right. Thank you very much Russell. I'm just going to note, if you look back in the chat, Harold Austin is addressing your question, Amy.

So I don't want to have that ignored. So appreciate that, Harold. Sorry for not getting on that question when it was answered and letting it go. Okay. We are going to move on to Artaynia. Michelle, are you still not finding her?

MS. ARSENAULT: I haven't found her on the participant list by phone or video.

MR. ELA: Okay.

MS. ARSENAULT: Thanks, Steve.

MR. ELA: Okay. Well, we'll move on.

Alan Lewis, you are up, followed by Kiki Hubbard, and then Michael Crotser. So, Alan, please take it away.

MR. LEWIS: Thank you, Mr. Chairman and NOSB members and staff. I'm Alan Lewis representing Natural Grocers. I have three topics to cover today. First, recertify all of our 165 stores as organic handlers to prevent comingling

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of organic, conventional, and GMO fresh goods in case we accidentally receive them, and to prevent contamination by agricultural residues, toxic pest control materials in the store, cleaning substances, and other things consumers expect from organic produce, in particular. We continue to see uncertified handlers, also known as conventional wholesalers and supermarkets, represent to the public that they are certified handlers by how -- by displaying the USDA seal prominently on, above, near, or around their conventional produce displays and sales materials.

They do not have proper controls and inspections in place. USDA NOP certification should be prerequisite for displaying the USDA seal. At the very least uncertified operations should make a disclaimer above or below the seal that they display, not a certified handler.

Second, as a leading organic retailer, we see a rise in skepticism among consumers. Shoppers used to ask if organic was really better than conventional and worth the cost. That issue

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

may be settled now, but the new questions are about soil-less hydroponics, for instance, and its potential for fertilizer fraud, as well as justice, equity, food access, synthetic biology, worker welfare, community sovereignty, animal welfare, and climate change. Alas, the OFPA focused almost exclusively on soil and inputs. It is silent on the important issues which form the context for the perceived value of regenerative organic systems. Movements like the Real Organic Project, Natureland, Organic 3.0, and Regenerative International are now broadening what consumers understand as organic integrity. Given this seed change, we encourage the NOP and its stakeholders to pay attention to social, economic, and political issues driving consumer sentiment, not just what's on the National List.

Third, keystones in the foundation of the National Organic Program are being removed one after another. Hydroponics, in particular, but also whispers of synthetic biology, unsunsetted synthetic materials, concentrated feeding, the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

ongoing dairy cow switcheroo process, and group certification provide an opportunity for critics to further marginalize the organic community. Every one-time win for a special interest threatens the program's overall value. We need to be skeptical when we are asked to allow just one more shortcut and just one more accommodation. That's not making a bigger tent. That's putting holes in the tents. That's giving license to our distractor to say I told you so and for consumers to look elsewhere for leadership. Let's not let that happen. Thank you, and I yield the remaining nine seconds.

MR. ELA: Thanks, Alan. We'll take that nine seconds. Are there questions for Alan?

MR. TURNER: Steve, I've got my hand up. I have a question for Alan.

MR. ELA: Go ahead Wood and --

MR. TURNER: Alan --

MR. ELA: -- thanks for letting me know. I am not seeing all the hands, so please, everybody, barge in. Go ahead, Wood.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. TURNER: Alan, should I hear you -- thanks for your comments. I'm curious. I want to name something here. I want to kind of get a little deeper on your comment. Should I assume that you're getting a lot of requests from consumers broadly for products that have the regenerative organic certification standard? I'm trying to make sense of your comment because I feel like there's --

MR. LEWIS: We are asked about all of the problematic little issues in organic because they're being talked about in social media, in particular. So occasionally we'll get people asking for real organic products, especially if there's a local producer. Would you bring in real organic product? I have more trust in them. And I think that's the key answer to your question.

They're losing trust in, well -- I don't like the term, but industrial organic -- and they're looking for more reassurance that the practices of the producers they're buying from actually align with their values, which are much broader, as I said,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

than soil and inputs.

MR. TURNER: Thank you.

MR. ELA: Great. Any other questions for Alan? Thank you. As always, Alan, we appreciate your thoughts.

MR. LEWIS: Thank you.

MR. ELA: We are going to move on to Kiki Hubbard, followed by Michael Crotser, and then David Epstein. So, Kiki, would you please go ahead and state your name and affiliation?

MS. ARSENAULT: Steve, Kiki couldn't be with us today.

MR. ELA: Fair enough. I think I knew that, so, okay, we'll move on to Michael Crotser, followed by David Epstein, and then Jill Smith. So, Michael, go ahead.

MR. CROTSEY: Okay. Good afternoon, everyone. I'm Michael Crotser, 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. Because of my limited time, I encourage

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the Board to read CROPP's written comments on crop, livestock, and processing. My comment today is about sanitizer compliance review and industry challenges. Verifying sanitizer wash tag compliance of inbound tankers is needed at loading facilities. These tankers can be loaded and shipped without verification that the last step, sanitizer, is compliant. CROPP has worked on improving compliance with limited success. I am asking for help.

The following changes must be addressed to avoid tanker rejections and tanker resanitations. Although water rinses are allowed to remove no-contact sanitizers, the intervening event is not noted on the wash tag, which breaks the chain of command. More importantly, water rinses introduced bacteria are prohibited by the Pasteurized Milk Ordinance, PMO, CFR Title 21 Part 178, and are against most label instructions. At times, certifiers disagree on whether a formulation is allowed. Industry needs a comprehensive list of allowed materials by trade

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

name. The purpose of this list is so operators can verify compliance in real time, not promote products.

There are limited locations for resanitation events. Costs for resanitation are \$2.00 per mile and \$200.00 per event. CROPP proposes a solution. Certifiers must expand the role in sanitizer review and verify wash tag compliance. To avoid rejections, handlers need tools to make real-time decisions. All wash tags must document the last step sanitizer. This information can be missing. Unless supported by the label, CFR, and PMO, water rinses must be eliminated. OSPs must clearly describe the protocol of reviewing outside sanitation events.

The accredited certifier association should develop best practices to align certifier policy and new active ingredients should be considered if they meet the requirements of OFPA and are referenced in the PMO or CFR. New chemistry would also benefit micro resistance management, as

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

voiced in the NOSB expert panel discussion on November 12, 2020. There are economic and environmental hardships due to these challenges.

These events increase costs, delay receiving and loading, and increase plant discharge. The goals of organic production are to bring healthy food to the market and protect environmental resources.

The NOP and the NOSB should encourage industry and certifiers to work towards resolution.

MR. ELA: Great. Thank you very much, Mike. Are there questions? Asa has a question.

MR. BRADMAN: Yes. Thank you for your comments about sanitizers. I'm curious, are there any specific chemistries in the pipeline that you think are important and may be, you know, appropriate for listing on the National List in organic? You mentioned the need for new chemistry, so I'm curious if you have any specific ideas about what's coming down the pipeline.

MR. CROTSEY: Yes. So the question is, what new chemistry should be considered as sanitizers allowed on the National List, for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

handlers primarily?

MR. BRADMAN: Yes.

MR. CROTSEY: Yes. We've been looking at these for about three years now. And of course, you guys know that chlorine materials and peracetic acid and peroxyacetic acid are really the only two chemistry groups that are allowed for organic handlers. What we see in the supply chain that are listed on the PMO and CFR includes chemistry like nitric, acetic, sulfuric, nonanoic, decanoic, octanoic, and citric acid are some of the common ones. So those are products currently on the market, and so this isn't not necessarily new chemistry and those should be considered by the organic industry to include. And this is primarily to relieve sanitation events if these chemistries meet OFPA requirements. They're commonly used in conventional industry, which overlaps greatly in the supply chain with the organic world.

MR. BRADMAN: Thank you and just to follow up, so are these kind of in the pipeline

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

for folks to petition for addition to the National List? Some of these I recognize and some I don't.

MR. CROTSEY: I'm not aware of any particular petitions for the new chemistry. You know, today, primarily from CROPP's perspective, we wanted to identify this challenge in the industry, and it is a big challenge. We spend a significant amount of time and money resanitizing tankers before we load organic milk. I think the new chemistry should be at least considered, but currently I'm not aware of any company petitioning the new chemistries.

MR. ELA: Sue, do you have a question?

MS. BAIRD: Yes. Hi, Mike. I'm going to change direction here. I really appreciated CROPP's comments on the CACS on inspector pools. Are you familiar with that comment or are you more in the sanitizing nook industry?

MR. CROTSEY: I'm aware of those comments that industry needs for inspectors -- improving inspectors into the world of organic certification. At 3:30 today, Mary Capehart,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

she's on the farm side within the CROPP Cooperative, and she's going to speak directly to those at that time.

MS. BAIRD: Okay. Then in preference for time giving, I'll just wait and ask these questions that I had highlighted on your public comments until that point and ask her. Thank you.

MR. CROTSEY: Yes. You're welcome.

MR. ELA: Amy, did you have a question?

MS. BRUCH: No. My question was already answered. Thank you. Rick has a question, it looks like, though.

MR. ELA: Yes. I've seen your hand up, so I'm trying to be very diligent now. But, Rick, go ahead.

MR. GREENWOOD: Yes. Thanks, Steve. Mike, a question for you. It sounds like part of the issue you're facing, if I understood your comments, is the tracking of tanks. Is your group looking into block chain, which is what many of the logistics people are using now for food safety and transport. Is that something that's on your

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

radar?

MR. CROTSER: It's not on our radar and I would have to get more familiar with that. Your question was about block chain.

MR. GREENWOOD: Yes.

MR. CROTSER: Primarily where we get this information which is readily achievable is sanitizers are written on wash tags, whether they're empty or full tankers. And that's typically how we get the information to review sanitizer compliance. So it's readily available on tankers.

MR. GREENWOOD: Okay. Available in the sense that it's transparent to everyone or do they actually have to see the tank itself?

MR. CROTSER: You have to see the tank itself, is one component of it, and then the second component is -- sanitizers are written by trade name. So you need a tool at receiving at the various organic plants to decipher a trade name into active ingredient and whether it's allowed or not. And we work with our current certifier

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to provide a list of all sanitizers we see in the industry and have a quick cheat sheet, so to speak, of whether that chemistry is allowed or prohibited as a last step material, last step no-rinse material. But within some type of computerized system, we do not have that readily available at this time.

MR. GREENWOOD: Okay. No. Thank you.

MR. ELA: Any other questions? Going once, going twice, going three times. Thank you very much, Michael. We appreciate your thoughts on that. We're going to move on to David Epstein, then Jill Smith, followed by Kathy Park Price. So, David, please go ahead and state your name and affiliation.

MR. EPSTEIN: Thanks, Steve. Can you hear me?

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

MR. EPSTEIN: Great. Good afternoon.
I'm David Epstein with the Northwest

Horticultural Council representing growers, packers, and shippers of apples, pears, and cherries in Idaho, Oregon, and Washington. Over 93 percent of organic apples sold in the US come from our growers. The Council is concerned that the proposed draft framework that polls stakeholders about the appropriateness of certain materials and organic production is an improper means of gathering input and is not in compliance with the sunset review process. The evaluation of sanitizers is best addressed as a research priority that focuses on relevant new information about a substance and that integrates input from experts in food safety, chemistry, microbiology, and other relevant fields. The National List must represent the best available science on the use of antimicrobials to protect the American public from exposure to pathogens that cause food-borne illness. The Council appreciates that the EPA no longer maintains its listing of List 3 inerts and that the system to review materials, the sunset review, needs to be addressed by the NOSB.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

As the use of passive pheromone dispensers is absolutely critical to the successful management of lepidopteran pests in organic tree fruit production, the Council strongly encourages the NOSB to reform its inerts working group to develop the path forward in evaluating inert ingredients that will allow for the continued use of these materials while a method of inert materials review is developed. Passive pheromone products used for mating disruption, pest monitoring, and mass trapping of pests are the cornerstone of a sound ecological approach to pest management. Without pheromone disruption, there will be far greater reliance on pesticides, which will be far less effective in managing key pests without disruption to reduce overruled population levels. Washington State University website on CM management -- that's coddling moth -- simply states control of coddling moth in organic orchards is impossible without the use of pheromones.

The Council also supports the petition

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to add kasugamycin to the National List. Organic palm fruit growers are experiencing high levels of damage from fire blight that costs growers tens of millions of dollars in lost trees and production, including the need for increased labor to prune blighted trees, sometimes several times a season. Should the petition be successful, the Council supports limiting the number of kasugamycin applications for managing the evolution of resistance. So, thank you for hearing my comments.

MR. ELA: Thank you very much, David.

Appreciate those thoughts. Amy, do you want to ask the question you were going to ask Carol?

MS. BRUCH: Sure, Steve. I actually will ask a version of it. Thank you for your time today. I appreciate that. And I guess I see in your written comments, you do mention that peracetic acid is used by some of your growers and has some effectiveness in controlling fire blight, and then you're also in favor of adding kasugamycin to the National List. So I was just going to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

question the effectiveness, in your opinion, of putting the two against each other? What are the pros and cons of each one of them in its effectiveness of controlling fire blight?

MR. EPSTEIN: Well, that's a good question, Amy. Thank you. When we put together our comments from the Council, what we do is we survey our growers, our organic growers, across, you know, the three states, and the statements we make represent their input. And what we hear is that certain varieties of apple, fire blight is much more challenging to control. And some of the products that are available right now are not as effective as they need to be. In pear production, it's a perennial problem, as well. So it's not a matter of one or the other or -- our growers would like to use all of these products. But if you've ever been in an apple or a pear orchard that has been decimated by blight, you don't recover. You have to end up replacing a lot of trees or doing a whole lot of pruning out of infected limbs. And, you know, they're using the predictive models, but

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

when you have a bad fire blight event predicted, a tool like kasugamycin could be very, very welcome in a management program. And once again, you know, it comes down to varietal differences where it would be used. I don't know that it would be used across the board, but as a tool that would be available when a, you know, bad weather system is causing concerns with a bad fire blight infection, I know the growers would welcome the use of kasugamycin. I hope that answers your question.

MS. BRUCH: Yes, I appreciate your comments. Thank you.

MR. ELA: Mindee has a question.

MS. JEFFERY: Thank you. David, do you have any reflections on what experience growers are having since, I think it's tetracycline and streptomycin went off the National List?

MR. EPSTEIN: Right. Well, so the comments that I made about having to get in and prune out, growers are reporting that they're having to do a lot more proactive getting in and pruning out limbs that have been affected, which

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

is, you know, a much higher cost of labor to maintain the trees. Once again, it's also going to depend on the planting system. I don't know if you're familiar with modern tree fruit orchards.

You've got a number of different planting systems that are being used. So it will differ between planting systems, as well the amount of work that's got to go into addressing fire blight management.

MS. JEFFERY: So --

MR. ELA: Any -- oh, go ahead, Mindee.

MS. JEFFERY: So the experience of growers has been since the loss of those tools on the National List, is that they spend a lot more labor working on pruning? And is this, then, sort of the replacement in that, like -- I guess what I'm trying to get at is how big is the impact since farmers don't have those two tools that they used to use and now we're looking at this one? And so I guess trying to --

MR. EPSTEIN: Well, also understand, Mindee, I'm speaking just for the Pacific Northwest. I used to work with the growers in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Michigan and New York and the Mid-Atlantic region, where this is even a far greater problem. It really depends on the year. I mean, back in Michigan in, I think it was 2000, we had a fire blight epidemic that took out a lot of trees. So you don't get events like that every single year.

You know, they're periodic and a tool like kasugamycin, you know, in a particularly bad year, can be a big product. The loss of tetracycline -- you know, growers are doing the best they can to work with the tools that they have at hand. But when we, you know, went out to them this year and asked, the kasugamycin petition is being considered, what do you think, I didn't hear anybody say no, in terms of, you know, the growers that we're working with. Some people said, you know, they're getting along fine. Here in the Pacific Northwest, we are in a drier system than they are back east of the Mississippi. It's perhaps a little bit less of a challenge here than in the East, but it's still a challenge, especially in pear production and certain varieties of apple.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. JEFFERY: Thank you, David.

MR. EPSTEIN: You're welcome.

MR. ELA: Any other questions from the Board? I am not seeing any.

MR. EPSTEIN: Thank you all.

MR. ELA: Thank you, David. We appreciate your thoughts. We're going to move on to Jill Smith. We have Kathy Park Price after Jill, but my understanding is Kathy is not here. So, Kathy, if you are here, please let Michelle know. So we'll have Jill, then Christie Badger, and then Abby Youngblood on deck. So Jill, please go ahead.

MS. SMITH: Hi everyone. I hope you can hear me.

MR. ELA: We can.

MS. SMITH: Okay. Well, good afternoon. I'm Jill Smith, the Executive Director of the Western Organic Dairy Producers Alliance, also known as WODPA, and I'm an organic dairy producers myself with Pure Eire Dairy here in Washington State. I thank you for the opportunity

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to comment today on behalf of the approximately 285 organic dairies WODPA represents throughout the West. We're appreciative of the NOSB's support of origin of livestock rulemaking and finalizing this regulation. WODPA, along with NODPA, the Northeast Organic Dairy Producers Association, collectively represent dairy producers across the country. We ask that the NOP move swiftly on the origin of livestock rule. Our producers unanimously seek a strong enforceable rule with immediate implementation. We all look forward to a solution that ensures dairy operations of all sizes are held to the same standard across the industry.

WODPA fully supports the discussion on human capital management. Dairies are multi-faceted, complex operations including at least two scopes of organic certification. And though we've had some very knowledgeable and experienced inspectors over the years, we've also faced inspectors unfamiliar with the workings of dairy operations and, ultimately, this leads to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

greater work and costs for both the dairy producer and the certifiers. We have concerns about losing sight of the true intention of organic farming practices overall, and if we don't work in partnership with our certifiers to achieve the continuous improvement that we seek in organic production. However, we face continually increasing certification costs at a time when organic cost share is being kept back. We continue to face greater recordkeeping expectations, taking the farmer away from their actual job of farming. It's in the best interest of organics for all to have the best of the best in certifying as we work to keep the organic marketplace growing while insuring our consumers that the true intentions and integrity of the organic seal are being upheld.

Written comments were submitted on the livestock substances considered for sunset review.

We largely support the relisting of these substances, as they are necessary resources for the highest animal welfare standards, especially as we face unique situations that are inherent to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

grass-based livestock systems. Nutritive supplements are especially necessary for maintaining strong immune systems or providing supplementation when deficiencies are found. Chlorine and other sanitation products are also essential to dairy operations in order to provide the best quality organic milk possible. Food safety is not defined by conventional or organic, making it necessary that sanitizing products on the National List are up-to-date and up to current standards and also readily available for reference. I thank you for the opportunity to provide comments today and extend a very big thank you to all of you Board members for your service to the organic community. And I'm happy to answer any questions you have on substances or anything else that I've talked about today.

MR. ELA: Good timing. Jill.

Questions from the Board for Jill? I am not seeing any, so -- oh, Asa has a question.

MR. BRADMAN: I just really appreciate your comment and this ongoing saga over the couple

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of years around the origin of livestock law and just -- you know, I think that's something that all of us need to keep working on and I really appreciate your concern that that be implemented as soon as possible.

MS. SMITH: Thank you and we appreciate that support and really do hope for something to happen soon.

MR. ELA: I think actually Jenny will talk a little bit about that in her opening comments at the meeting next week.

MS. SMITH: Great.

MR. ELA: Next step, we have -- oh, thank you, Jill. Much appreciated. Next up we have Kathy Park Price. Kathy, are you out there?

We are not seeing Kathy, so we're going to move on. Christie Badger is up, followed by Abby Youngblood, and then Jay Feldman. So, Christie, please kick it off with your name and affiliation.

MS. BADGER: Thanks, Steve. My name is Christie Badger and I'm a consultant with the National Organic Coalition. I've a lot say and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

only three minutes to say it, so I'll jump right in. Paper pots. We are requesting the Board acknowledges the listing has known deficiencies that need to be considered by future Boards. Specifically, a missing requirement for continuous improvement. There is a need for continued research. All the intermediate compounds that occur during decomposition may have an impact and we must continue to study soils where these products have been used over time, and there is a need for NOP guidance to ensure certifier consistency.

Biodegradable, biobased mulch film. GE technologies, microplastics, nanoplastics, effective secondary metabolites, effects on overall soil health, soil biology, soil nutrient balance, soil biological life, soil tilth, effects on livestock that graze these areas in subsequent years -- the list goes on. We maintain that this product is not ready for prime time.

EPA List 3 inerts. The solution for EPA List 3 inerts is specific and succinct. List

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

3 inerts should be delisted with each of the four individual materials covered by this listing and used in organic production petitioned and reviewed to be added to the National List. We encourage the NOSB to move forward boldly to address a listing that is an embarrassment to organic integrity by providing a timeline by which the currently used List 3 inerts must be petitioned and reviewed for addition to the National List.

Kasugamycin. Use of antibiotics in organic production -- haven't we been down this road before? Antibiotics and organic production are contrary to consumer expectations. Organic livestock producers are prohibited from using antibiotics. Antibiotic resistance poses serious threats to human health. Using antibiotics in agriculture contributes to that threat. Kasugamycin is not compatible with organic practices and the NOSB but must vote no.

And copper sulfate for the uses that it's being considered for this round. The Crops Subcommittee indicates that it appears there is

sufficient evidence to conclude that, one, the use of copper sulfate in rice fields is environmentally detrimental; two, alternatives seeding practices could eliminate the need for the chemical, as both algae and tadpole shrimp cease to be problematic once seedlings are established, and, three, international standards do not allow for spraying of copper sulfate for organic rice production. We suggest a fourth. There has always been an alternative to copper sulfate use in rice production. It's time to delist copper sulfate for this use. Thank you.

MR. ELA: Well done, Christie, you're on the gold star list.

MS. BADGER: Thanks.

MR. ELA: Are there questions for Christie from the Board? Christie, I have a quick one on the paper planting aids. In terms of the requirement for continuous improvement, what would you say that requirement should be?

MS. BADGER: This time, Steve, we included something in our comments with a lot of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

discussion about it. And we suggest something similar to the listing at 205.204 for seeds and planting stock practice standards, which allows for the use -- that standard allows for the use of non-organically produced on-treated seeds and planting stock, quote, when an equivalent organically fruit juice variety is not commercially available, end quote. Not only would a listing similar to this apply the commercial availability statement, but it could allow for variances based on functionality.

MR. ELA: Right. Asa has a question.

MR. BRADMAN: Yes. Just your comments on biodegradable mulch is an issue that a lot of people are really just torn over because of this -- I guess, this idea of also comparative risks to current use of polyethylene films. You know, I know, for me, organic plastic culture is an oxymoron and I looked at these fields of strawberries with polyethylene films that are organic. Many different types of growers, including, you know, historically pioneering

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

farmers in organic, and, as for me, it has an asterisk by it. And the use of the films has its own and substantial impact on the environment, heavy use of petroleum products, and yet everyone seems to want plastic in organic, and whether polyethylene or biodegradable. So how do we move forward with that? And, you know, we have kind of an analogy to the paper pots where we are permitting up to 20 percent non-biodegradable plastic, at least in the current wording, so, in a way, that's the link here. I'm curious about your comments and I also look forward to other commenters on this issue because it's really, I think, an important issue and plastic use in organic is extreme, in my mind.

MS. BADGER: Thanks, Asa. I appreciate that. One, let's be clear, we don't completely move away from petroleum-based products just because we go to a biodegradable, biobased mulch, because, frankly, you're talking about a product that's not 100 percent biodegradable, biobased. And we don't get away from the wording

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that you use, the plastic culture, in organic just by changing which plastics we're using. That's what we said in our comments. When you start to look at the container production that has ground-covering down for years on end of hundreds of acres. So, you don't get away from that by changing to the biodegradable, biobased mulch film.

The other problem when we're talking about paper pots versus the biodegradable film, mulch film, paper pots usage compared to the mulch film. Again, the mulch film, we're talking thousands of acres covered. And, finally, one thing I would point out and not try to take too long, but with the plastic mulch, we have a chance of removing it. The biodegradable mulch, we don't. And as I noted in our comments, or as we noted, we had a member of the Crops NOSB Committee visit the site in Tennessee and that individual just noted that there was absolutely plastic pieces all over, and he said along the tree line, it was horrible and gave a personal, you know, note of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

what it was like when he was there. With plastic mulch as we're using it now, we understand, at least, to a certain extent, what happens to the soil under that mulch. With biodegradable, biobased mulch film, we don't understand long-term what happens to the soil. There aren't enough studies. There aren't studies in the long-term.

MR. ELA: Thank you, Christie. We do appreciate those thoughts.

MR. BRADMAN: Yes. Thank you and there's obviously a lot to discuss here, but this isn't the right time.

MS. BADGER: Thank you.

SPEAKER 4: Only a few topics at this meeting that are thoroughly discussed, so, as always with all our meetings. Thanks so much, Christie. We were going to move on to Abby Youngblood, followed by Jay Feldman, and then Terry Shistar. So, Abby, please go ahead and state your name and affiliation.

MS. YOUNGBLOOD: Thank you, Steve. Good afternoon. I'm Abby Youngblood, Executive

Director at the National Organic Coalition, and I want to welcome the new NOSB members and I want to thank all of you for your hard work. The National Organic Coalition, or NOC, is an alliance of organizations and companies that works to advance organic and protect the integrity of the organic program, and we see an important opportunity at this moment in time to work with new leaders at USDA and in Congress to get organic back on track. Our top priorities with the new administration include reinstating the Organic Livestock and Poultry Practices rule, finalizing Origin of Livestock and strengthening Organic Enforcement proposed rule, fixing the funding shortfall with organic certification cost share, building a more equitable and diverse food and ag system, and demonstrating to Congress the role organic agriculture can play as a climate change solution.

We see an important goal for the NOSB on this last topic. NOC is requesting that the NOSB create a work agenda item focused on climate

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

change mitigation and adaptation and enforcement of soil health provisions in the organic regulation. We're asking the Board to say no to ammonia extract and to recommend a detailed restriction on the use of highly soluble sources of nitrogen. Over reliance on highly soluble sources of fertility can short-circuit soil building practices and violate the foundational feed-the-soil principle in organic.

On a different topic, an ongoing and egregious area of inconsistency in organic is how the three-year transition requirement is applied.

NOC conducted a survey in 2020 with the Accredited Certifiers Association and the Organic Farmers Association that demonstrated the high level of inconsistency on three-year transition requirements, but the NOP has not taken any action to address the problem. We're asking that the NOSB actively engage on this issue and urge the NOP to provide clarity so all certifiers and organic operations are held to the same standard.

On excluded methods, the organic

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

community and NOSB have been clear in our opposition to genetic engineering in organic. We need clarity on which methods are allowed and which are prohibited under the organic regulations. Failure to complete work on the TBD methods and to codify NOSB recommendations will negatively impact organic plant breeders and the organic feed industry, who need certainty to advance plant breeding efforts.

Finally, I have a comment on ion exchange filtration, that NOSB should use OFBA as a guide and review and recommend which non-agricultural substances used in the ion exchange process must be present on the National List. We urge the NOSB not to give the NOP the final decision, but to remain true to the authority granted in OFBA to make recommendations on National List materials. Thank you for considering my comments.

MR. ELA: Thank you so much, Abby. Are there questions for Abby? Abby, I have a question. Considering that the Board, at the last meeting,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

voted down just looking at the ion exchange, looking at the recharge materials, but not the resins, do you think we should review each resin separately by petition and, given that that would -- given that a lot of those resins are already used for organic materials and might be disruptive to the industry. What are your thoughts on that?

MS. YOUNGBLOOD: I am going to defer that question, Steve, to my colleague, Terry Shistar, who is speaking just two slots from now.

I think she's a better person to answer that question.

MR. ELA: Fair enough. Any other questions for Abby? Thank you so much, Abby. We appreciate it. We are going to move on to Jay Feldman, followed by Terry Shistar, followed by Alice Runde. So, Jay, please go ahead.

MR. FELDMAN: Good day. Greetings to the NOSB members, new and old. I'm Jay Feldman, Executive Director of Beyond Pesticides, a former NOSB member. There is always a balance in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

preparing oral comments to the NOSB between zeroing on National List decisions, which we do have written comments on, versus providing context for official or critical process concerns about your work plan, priorities, articulating minority opinions, greater transparency, and advice to the secretary. Central to all of this is the integrity of the organic label. Integrity is central to every decision and every process utilized by the Board. Every week, somebody says to me, organic standards have been watered down, you can't trust organic. This is painful for me because Beyond Pesticides' mission as an environmental and public health organization bridging consumer, farm, and science is built on eliminating toxic pesticides and fertilizers, especially petroleum-based materials, that are contributing to existential crises associated with chemical-induced diseases, climate, and the precipitous decline of biodiversity and our ecosystems.

Every NOSB decision is a link in the chain of organic. All of the businesses that are

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

tied to the chain are dependent on the strength of each link and, to the extent that we lose public trust in what we are doing here, we lose the market.

We must protect consumer and farmer investment in organic investment borne out of a constant stream of weak links in a chemical intensive agriculture that has helped to drive the organic market concerns about contamination of health and the environment. Organic consumers and farmers have invested in the notion that we care not only about land stewardship and what we feed our children and families, but stopping farm worker exposure to hazardous materials and ending the hazards to the fenceline communities where the toxic chemicals used in conventional agriculture are produced. The organic law, of course, requires the Board to consider this, the cradle-to-grave effects of materials, when protecting against adverse effects.

So another looming crisis is the crisis of confidence in organic. Now is the time to build on our foundation, not chip away or allow USDA to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

ignore NOSB recommendations that must go to rulemaking, even if USDA stands in opposition. Regarding the five-year sunset cycle, default to the removal of materials from the National List, with consideration given for any needed annotation to tighten uses. Copper sulfate serves as an example, given its hazard. Sodium carbonate peroxyhydrate was added to the National List, with the stipulation that it would reduce the use of copper sulfate as an algicide, has it proved to be effective? If so, can the listing of copper sulfate as an algicide be eliminated?

Changing previous Board decisions without new science or updated information on essentiality compatibility undermines integrity.

Weakening the biodegradable, biobased mulch film annotation will undermine the Board's previous attempt to keep plastics and toxic fragments out of soil and food. Thank you so much for your service and consideration of our comments.

MR. ELA: Thank you, Jay. You also get a gold star. Like Allen, you yielded a second to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

our timing. Appreciate it. Well done. Are there questions for Jay? Asa has a question for you.

MR. BRADMAN: Yes. I just want to follow up more on the biodegradable mulch. I know you have some thoughts on that. I think we all do. Just, again, I'd like to hear, you know, more thoughts on this and what your opinions are. I do feel like when we talk about containerized production, organic plastic culture strawberry production, in my mind, is a container process where essentially -- I look at fields in Monterey and along the coast and we're essentially creating a container out of the ground by wrapping it in plastic, and that's basically a petroleum-based herbicide that we're using on the physical barrier, but it's certainly leaving probably micro plastics and other stuff in the soil and it's also extending it out into landfills and waste. So, even if we got a biodegradable mulch that was 100 percent biobased, we probably still have all the same issues we might have with one that's 20 percent

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

or 10 percent, or currently 80 percent, which nobody's comfortable with. And many in the organic community that you talk about are demanding a biodegradable mulch. So, again, I don't have any particular opinion on this right now. We're trying to lay out the options and hear comments on that. So if you could comment more on that, that would be appreciated.

MR. FELDMAN: Yes. One of the standards I always used in these challenging questions -- I think you lay it out perfectly -- the contradictions, the challenges that we face as a community because of the ethics and the principles we bring to this topic. I think that what I used as a principle to guide myself is whether what we were doing was incentivizing moving toward the elimination, the concept that was embodied in the law of this idea that we can continually improve. And, you know, I think we -- with respect to the wrapping of plastic, I agree with you 100 percent. We have allowed that to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

happen, as in NOSB. Certainly it was acknowledged in the original statute. But we have allowed that to happen by virtue of our lack of attention to mulching systems and restrictions and tightening up and annotations. We haven't used all the power we have as NOSB members to move toward continuous improvement. My fear with the biodegradable mulch -- I think I'm echoing what Christie said, to some extent -- is that we're intentionally leaving material in the soil. We can't even remove it to recycle it, re-purpose it. I know it's ending up in landfills, but under this concept of continuous improvement, we can stipulate where it goes, what's done with it. We can incorporate our ethic into this. The bottom line for all these NOSB decisions, as far as I'm concerned, is are we incentivizing the market to move to where we want to be eventually. And if the answer is no, even though what we're doing right now is not perfect or is not what we'd prefer, if we're introducing something that slows down the incentivizing toward where we want to be, then I think we need to take

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

pause and hold back in allowing that. I think the limitation that the Board -- when I served on the Board, the limitation that was written was the right balance there because it said to the industry, we like what you're doing here. You're moving us in the right direction. But we need to see certain other advances before we can embrace it.

MR. BRADMAN: Thank you.

MR. FELDMAN: Thank you.

MS. ARSENAULT: You're muted, Steve.

MR. ELA: Thank you. Thank you very much, Jay. We're going to move next to Terry Shistar, and followed by Alice Runde, and then Jo Ann Baumgartner. Terry, please take it away.

MS. SHISTAR: Okay. My Zoom has cut out so I'm doing this blind. My name is Terry Shistar and I'm on the board of directors of Beyond Pesticides. This is a three-minute review of our comprehensive written comments. Organic can be a big part of preventing ecological collapse, but only if it doesn't stray from its core values and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

practices. Organic is not just an alternative for people seeking better food or a more profitable way of farming. We urgently need to prevent ecological disaster. We must not step on the antibiotic treadmill again.

The reasons for rejecting the kasugamycin petition are the same as the reasons for eliminating the antibiotics streptomycin and tetracycline. Now that we have learned what a pandemic looks like and feels like, we must take serious steps to avoid a pandemic resulting from antibiotic resistance. When streptomycin and tetracycline were presented for the final votes by the Crops Subcommittee, the committee was unanimous that the antibiotics needed to go. The question was how fast. Now that streptomycin and tetracycline are gone, we do not need another antibiotic. Only a change in regulations as recommended by the NOSB will protect native ecosystems and prevent losses of carbon from woody biomass.

Planting aids should not be made from

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

virgin paper from wood pulp, which results in much greater environmental impact than recycled paper.

Micro plastics cause harmful effects through physical impacts of entanglement and ingestion.

They also carry toxic chemicals on their surfaces.

Tighter restrictions are needed in both crops and packaging. Ammonia extracts and other highly soluble nutrients are harmful to soil biodiversity and should be prohibited.

Do not leave the final outcome on ion exchange to NOP. These substances must be reviewed by the NOSB. Ion exchange is chemical change, so food produced by ion exchange is synthetic. Only resins and recharge materials approved for this use should be allowed in organic food and only when listed on 605B. Chemicals added during the ion exchange process must be listed on the label.

Substantial levels of the heavy metals, arsenic, lead, cadmium, and mercury, are in infant foods. Consumers expected organic products to be free of harmful contaminants. Eliminating or

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

reducing this contamination will require making heavy metal contamination a priority for research, reinvigorating the work agenda item on contaminated inputs, and identifying possible actions to reduce contamination of organic foods.

Finally, and hopefully you got the slide here, don't forget these important issues. Thank you.

MR. ELA: Thank you, Terry. Flying blind, you did pretty well. There's 11 seconds left.

MS. SHISTAR: Oh, wow.

MR. ELA: Very good. Yes. Are there questions for Terry? I am not seeing any. Thank you so much, Terry. We do appreciate your thoughts each time. We are going to move on to Alice Runde, Jo Ann Baumgartner, and then Doug Currier. So Alice, you have the floor. Please go ahead.

MS. RUNDE: Thank you. Good afternoon. My name is Alice Runde. I'm the Coalition Manager for the National Organic Coalition. My comments today pertain to racial equity in the organic community, supporting the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

work of the NOSB, and adding a research priority on heavy metals in baby food.

One, racial equity. We know black, indigenous, and people of color, or BIPOC, are underrepresented in the organic community. We recognize that access to the organic movement and organic certification has not been equal across racial groups. Addressing racial equity in organic agriculture is an important priority for NOC. The NOSB can also play a role by considering the impact of the Board's decision on BIPOC farmers, and by understanding some of the specific barriers to organic certification for BIPOC farmers. NOC's written comments address this in more detail, but to summarize, NOC would like to see the NOSB prioritize, one, research into the barriers to participation in organic certification for farmers of color, two, research on technical assistance and outreach needs for underserved and underrepresented communities, and, three, work with the NOP to identify languages that the organic

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

materials should be translated into and then work to identify the appropriate means of acquiring and sharing those translated materials. Immediately following his inauguration, President Biden signed an Executive Order titled Modernizing Regulatory Review. This Executive Orders sets the stage for the adoption of agency policy across governments to seriously and urgently confront the climate crisis, biodiversity collapse, and disproportionate harm to people of color. NOC holds up this Executive Order in our work within the organic community.

Two, supporting the work of the NOSB.

NOP funding increases must translate into increases in NOSB support. The NOP has received significant boosts in funding the annual appropriations process. These spending increases have translated into significant and much needed boosts in hiring for the NOP. What we have failed to see is increased support for the NOSB members and NOSB activities. We have heard repeatedly that there is limited money for technical reviews

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and no capacity for additional task-force work.

As NOC continues to lobby for additional funding to support the NOP, our expectation is to see increased support for the NOSB. NOC supports measures to assist NOSB members to help conduct and provide literature reviews, write drafts, and otherwise support the work of NOSB members. This could help support some other research priorities into racial equity topics mentioned previously.

And finally, heavy metals in organic infant food as a research priority. I reiterate Terry's comments. NOC suggests a research priorities be added based on the recent congressional report that documented substantial levels of heavy metals in infant food, including organic infant foods. Organic standards are based on practices rather than purity, but consumers do expect that organic foods will be free of hazardous contaminants. Therefore, regardless of action that may be taken by Congress or the FDA affecting foods in general or baby foods in general, the NOSB and NOP should, to the extent possible, ensure that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

organic food, especially infant food, is free from heavy metal contamination. Thank you for considering my comments.

MR. ELA: Thank you very much. Alice. It looks like Wood has a question for you.

MR. TURNER: Thanks, Steve. I just wanted to acknowledge Alice's comments about diversity and inclusion in the Board and in the community as, as a whole, that we should absolutely fundamentally be doing everything in our power to create more leadership opportunities for people of color, black people, and people of color in this community, and we're just not doing a good enough job. And I just want to acknowledge that and I appreciate Alice raising those points. Thank you.

MS. RUNDE: Thank you.

MR. ELA: Any other questions for Alice? Thank you so much, Alice. We do appreciate your comments. We are going to move on to Jo Ann Baumgartner, followed by Doug Currier, and then Karen Howard. Jo Ann, please go ahead.

MS. BAUMGARTNER: Hi. Thanks, Steve.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Yes, I'm Jo Ann Baumgartner, Executive Director of the Wild Farm Alliance. In an effort to assist and educate the NOP about how to implement the NOSB's native ecosystem --

MS. ARSENAULT: Jo Ann?

MS. BAUMGARTNER: Oh, yes.

MS. ARSENAULT: I'm going to to interrupt you just for one moment because you have slides and they are not up on the screen yet.

MS. BAUMGARTNER: Okay.

MS. ARSENAULT: One second.

MR. ELA: Thanks for waiting, Jo Ann. There's always some little technicality.

MS. BAUMGARTNER: Yes.

MS. ARSENAULT: Okay. Here we go.

MS. BAUMGARTNER: In an effort to assist and educate the NOP about how to implement the NOSB's native ecosystem recommendation, part of which you see here, we submitted a draft Native Ecosystem Guidance. Just as we submitted the first draft of what the NOP officially published as the 5020 Natural Resources and Biodiversity

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Conservation Guidance, we are sharing this document to help jump-start the process. Next slide, please.

Protecting native ecosystems slows climate change, something the Biden administration and organic consumers care deeply about, but NOP regulations will continue to contribute to the problem until the NOP makes this regulatory change.

When destroyed, native ecosystems release huge amounts of carbon stored in their woody plants and in the soil. Next slide.

This required regulatory action is more than a national issue. It's international. In the last 50 years, animal populations worldwide have declined by almost 70 percent. Next slide.

The NOP is charged with insuring standards are consistent throughout, as Cornucopia detailed in their comments, but it is undermining consumer confidence in the organic label with its inaction. While on one hand, many businesses, as this one, and the NOP itself proudly proclaim organic preserves ecosystems, it's currently a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

sham. Next slide.

The draft Native Ecosystem Guidance we put forth explains how to uniformly determine if a native ecosystem is or was present, and ways these lands may be used in organic production and more.

Next slide.

We have also created a complimentary organic native ecosystem application and verification tools kit. It describes the best online tools to use, gives examples of how to use them in different types of operations around the country and the world, most with analog counterparts for those lacking internet access and includes priorities land use forms for certifiers to use and adapt as they see fit. Next slide.

We also provide links to short videos on how to use seven of the tools. Next slide.

The NOSB received approximately a thousand comments from organic farmers, certifiers, organizations, businesses, and consumers on these topics. There are few undistressed. We are horrified. I don't think

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it's fair or wise. It's a scandal story ready to happen. Next slide.

Now is the time for the NOP to take action to protect the integrity of the seal and help reverse the biodiversity crisis and reduce global warming. Will the NOP do what's right and take the step for consistency and integrity of the regulation? If so, we want to help. Thank you.

MR. ELA: Thank you very much, Jo Ann.

Are there questions? I am not seeing any. Thank you so much for your presentation and sorry that the slides took a little bit to start there. Next up we have Doug Currier, then Karen Howard, and then Michael Menes. So let's go ahead with Doug.

MR. CURRIER: Great. Hello everyone.

My name is Doug Currier, Technical Director at the Organic Materials Review Institute. I'm presenting comments today on ammonia extract and List 3 inerts. My comments day aim to highlight specific areas included in OMRI's written comments.

Ammonia extract -- liquid fertilizer

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

products that meet the proposed definition of ammonia extract from the petition do currently appear on the OMRI list. Liquid fertilizers are assigned a specific use restriction if they contain more than 3 percent ammoniacal nitrogen. This use restriction appears on the product certificate, and the OMRI products list, and on the OMRI website.

I refer members of the Board to the specific restriction language in our written comments. I'll read it again for the record and will say that the restriction language very much mirrors restriction language for sodium nitrate. The restriction language is, non-synthetic fertilizers that test above 3 percent ammoniacal nitrogen are considered at higher risk for violating the soil fertility and crop nutrient management practice standards at 205.203. This product contains highly soluble nitrogen and must be applied in a manner that does not contribute to the contamination of crops, soil, or water. Its use must be part of an organic system plan that maintains or improves the natural resources of the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

operation, including soil and water quality, and comply with crop nutrient and soil fertility requirements.

As a liquid fertilizer containing more than 3 percent nitrogen, ammonia extracts currently listed by OMRI are considered high-nitrogen liquid fertilizers or HNLFs. Two onsite inspections, one announced and one unannounced, are conducted each year at each HNFL facility, per NOP Guidance 5012. Mass balance exercises, those exercises that compare the amount of incoming material with production records, are used as a fraud mitigation strategy. Obtaining accurate results from these exercises can be difficult when nitrogen sources are varied and numerous. With that said, mass balance exercises, along with an expected nutrient calculation and on-site visits, are all methods that, when used together, can combat fraud. Those formulations which contain less than 3 percent ammoniacal nitrogen would not be subject to those same requirements, so the risk of adulteration remains.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

However, that risk already exists for all liquid fertilizer products that are not subject to inspection.

List 3 inerts -- as included in our written comments, 18 passive pheromone dispensers currently appear on the OMRI products list. Included in these products are a total of three distinct materials on the EPAs 2004 List 3, a list that includes close to 2,180 materials. OMRI is aware of one other 2004 List 3 material approved by another organic certifier. Given the apparent limited number of known List 3 inerts used in practice, the Board might consider moving towards listing these materials on the National List while considering the sunset review of 2004 List 3 inerts. Great. Thank you all for your time and important work on these difficult issues.

MR. ELA: Thank you, Doug. Are there questions from the Board? I have one. So given that some of these products that have greater than 3 percent ammonia content are already approved, are there alternatives to those products if we were

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to limit or accept the prohibitions proposed by the petition? Understand there are already products out there, but are there suitable alternatives to those products if we were to accept the petition?

MR. CURRIER: Suitable alternatives might include the sodium nitrate that is already prohibited on 602 with a restriction. There are, you know, products that are less than 3 percent nitrogen and not qualifying as HNFL. Then there's a whole suite of, you know, not lower soluble nitrogen sources that are derived from animal materials, in particular, as well as plant materials. So, yes, there are alternatives, but they vary in their solubility and form, I guess.

Yes. So to me, that's kind of what I'm thinking in response to that question.

MR. ELA: Just to follow up and then Amy has a question. So do you see those products that contain higher than 3 percent ammonia at this point -- I mean, my understanding and please correct me, is the ammonia extracts are all

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

relatively pure ammonia, whereas these other products, you know, when you say higher than 3 percent, I mean, 15 or 10 percent is a lot different than 100 percent. Would there be a limit to the amount of ammonia that a product could contain that would be acceptable, do you think, and still maybe prevent the use of straight ammonia products? I don't know if I'm asking every well, but...

MR. CURRIER: Yes. It depends on the -- I think to me that it depends on how it's used on-site and the organic system plan and, you know, the certifier making the call on whether or not the producer is, you know, meeting that 205.MR.203 standard. You know, I would say under OMRI's standards, there wouldn't be a threshold like that that would prevent a listing. So if it's a non-synthetic source and they're meeting all the standards, they're going to get restricted, but there's no upper threshold.

MR. ELA: Amy, why don't you go ahead.

MS. BRUCH: Sure, Steve. Thank you.

Thanks, Doug, for your contributions today and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

your work as the Technical Director for OMRI. I just wanted to know -- you kind of briefly commented on fraud prevention with some of these high-nitrogen liquid fertilizers out there and the amount of effort that goes into the dual inspections. You had mentioned in the written comments that mass balancing isn't always the easiest to determine 100 percent that things are kosher. Is there any way to determine that the production of these synthetic versions of ammonia extracts are non-synthetic or synthetic, then, at the end of the day?

MR. CURRIER: Yes. We've moved away from -- So, the isotope analysis is one that, you know, has been used in the past, and we've moved away from that. It is tricky whenever you have large amounts of nitrogen sources to, you know, complete that mass balance. I'm very interested in the infrared spectrometry that I heard earlier. I did take a note of that. But it is tricky because my understanding is that chemically these are going to be showing up as identical to synthetic

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

versus non-synthetic sources. And so at that point, it really gets into the auditing and the on-site inspections, and the testing is one that, you know, could come into play, you know, especially that infrared spectrometry. That was interesting. But, you know, it's just a lot of documenting, you know, on-site and doing some trace-back on sources.

MR. ELA: Brian has a question unless you have some else, Amy.

MS. BRUCH: No, I didn't. Thanks, Steve. Thank you, Doug.

MR. ELA: Okay, go ahead. Go ahead, Brian.

MR. CALDWELL: Yes, thanks, Doug. And I'm just wondering, the way it's currently written, if ammonium extracts were prohibited, would that also prohibit, like, fish emulsions and some other kinds of fertilizers that contain some ammonia.

MR. CURRIER: It depends on how it's written at 602. I think that there is a risk. I think someone had hinted to that earlier about

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the definition of ammonia extract being really broad and, you know, perhaps unintentionally prohibiting sources of less concern. You know, these concentrated ammonia products, I believe, are the area of concern according to the petition.

So these are elevated, highly soluble sources of ammonia and ammonium.

MR. CALDWELL: Great. Thank you.

MR. ELA: Any other questions? Thank you very much, Doug. I very much appreciate your presentation here.

MR. CURRIER: Thanks.

MR. ELA: Next up we have Karen Howard, followed by Michael Menes, and then Ramy Colfer. We'll do a few more here and then take a break. Maybe a couple after Ramy. But go ahead, Karen.

MS. HOWARD: Good afternoon. Thank you for the time. My name is Karen Howard. I'm the Chief Executive Officer and Executive Director for the Organic and Natural Health Association. We are a highly unique trade association in the dietary supplement space. Founded in 2015, we

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

represent the entirety of the supply train, from raw ingredient suppliers to manufacturers, distributors, dietary supplement brands, retailers, and consumers. Every decision made by our board of directors is rooted in the interest of consumers and we are very fortunate to have the American Grass Fed Association, Organic Consumers Association, SENPA, and Alliance of Independent Retailers, and individual progressive retailers like Lassen's Natural Grocers and Nature Time, among our members. We are also unique in that our members pledge to uphold principles of full transparency for consumers, accessibility to healthy products, and education to all individuals and communities, traceability of sourcing and processing, and continual quality improvement. This pledge includes regular surveillance testing of finished products for glyphosate residue and we are currently working to expand testing to a much wider array of pesticides.

We understand that the health of people is dependent on the health of our earth, not the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

other way around. To that end, our ongoing membership education efforts are focused on the relationship between human and environmental health. Topics that include microbiome, regenerative and biodynamic agriculture, and, of course, the organic standards. Degradation of the organic standard and its negative impact on our highly competitive dietary supplement market is a primary conversation. The growing prevalence of synthetic biology ingredients made in secret, sold without disclosure into our supply chain, is one of greatest concern. Our efforts to achieve our mission often refer to the guidelines established by the Organic Foods Production Act, but those guidelines alone are insufficient.

We also strongly support frameworks like Organic International from IFOAM and the Organic Consumers Association Regeneration International Forum. Our power rests in our ability to address the concerns of millions of Americans through our consumer education programs to date, focused on the importance of nutrition

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

supplementation. In just the past few months, more than 65 million people have learned from TV, radio, and print the importance of vitamin D for immune health. We look forward to creating a message that educates consumers on how purchasing organic food and supplements can support the planet's ecology, improve the health of our citizens, and improve treatment of farmers and farm workers across the globe. They deserve to know and understand that real public health requires us to be organic and regenerative in all our practices. You can visit www.organicandnatural.org for more information.

Thank you.

MR. ELA: Thank you very much, Karen.

Are there questions for Karen? I am not seeing any right off, so thank you very much, Karen. We appreciate your comments. We are going to move on to Michael Menes, followed by Ramy Colfer, and then Ehsan Toosi. Go ahead, Michael.

MR. MENES: All right, Steve, I want to make sure you can hear me.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Yes, we can hear you and it looks like we've got your slides up, as well. So go ahead.

MR. MENES: Great. My name is Mike Menes. I've worked at True Organic Products for the past 12 years. Thank you to the NOSB for doing what you do. True Organics is an organic fertilizer manufacturer built to support the organic industry and the principles surrounding the movement. Today I'm here to clarify the definition of ammonia extract. Also, you'll hear from others on the team that will address the questions posed in your discussion document and also present the different perspective of focusing on the economic impacts.

The introduction of AE presents us a fork in the road of the organic industry. There are two paths here before us. One path originates from the organic pioneers and got us to where we are today. Consider a \$50 billion industry that feeds the soil. The second path is one that exploits weaknesses in the system that were never

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

imagined during the development of the Organic Foods Production Act 30 years ago. Think about it, the use of ammonia fertilizers in organic crop production. AE manufacturing techniques may not be new or novel, but the application certainly is novel. I acknowledge the variety of non-synthetic processes to achieve ammonia products and humbly request that you focus on the finished form of nitrogen being applied to the soil.

The definition submitted in the petition took much thought and consideration. In the end, the scope is satisfactory in that the focus was on the nitrogen containing product that goes into the soil at the time of application. The recurrent question was always, what form is that nitrogen in? Was it ammonia or ammonium, or some other forms, like a protein or an amino acid? Does mother nature need to break it down even further? Regardless if it was stripped or concentrated, where did that minimization take place?

The definition of ammonia extract is critical. Part of the consideration should be if

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

ammonia is intentionally extracted or concentrated prior to the application in the field. This would exclude any currently accepted organic fertilizers, including compost teas and manure slurries. For example, manure slurry adds water to the manure for mobilization purposes. Nitrogen is predominantly in a non-volatile protein form and not ammonia or ammonium. Ammonia is not intentionally extracted. In closing, please consider your technical review that repeatedly states that AE is equivalent to a synthetic ammonia. Clearly the use of AE is not compatible with organic farming principles. The work you do for organic is critical on all fronts, at every meeting, for every decision. Your decision on AE is pivotal to the future of organic. I'm grateful for your dedication to this and look forward to your decision.

MR. ELA: Thank you very much, Michael.

Are there questions for Michael? I have a question, Michael. It's certainly been brought up before -- appreciate your definition that you

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

shared in the petition, but if we weren't to accept that we completely prohibit it, would there be a limit that you would place, like such as in an annotation? I know you're in favor of prohibition, but if that didn't happen, what percent would you say might be appropriate?

MR. MENES: You know, Steve, I don't think any of it should be allowed. I go back to the whole idea of is it compatible with the organic principles or not? Does it harm the soil and the environment Is it really necessary? So I don't think any part of it should be included in there. So I would be for a complete prohibition.

MR. ELA: Like with other highly soluble fertilizers, do you feel like those are adequate alternatives to ammonium extract? I mean, you know, we've heard from farmers, like in Vermont, if they have a hurricane blow through, they need some kicker, you know, just to kind of, you know, not rely on it but something immediate. I know in tree fruit, sometimes in cold Springs we need something. Do you think the other

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

materials available adequately address those needs?

MR. MENES: I do. I think there's a lot of other materials out there. There's still a lot of innovation that happens. They are water-soluble, but they also include the microbial degradation needed to be able to fit the organic principles. I think they are suitable to meet those needs addressed.

MR. ELA: Great. Thank you very much. Any other questions for Michael? Thank you for your comments, Michael. They are much appreciated.

MR. MENES: Thank you.

MR. ELA: We are going to move on to Ramy Colfer, then Ehsan Toosi, and then Zea Sonnabend. And after Zea, I think we will take a break. So, Ramy, please start your comments and state your name and affiliation.

MR. COLFER: Great. Thank you. Can you hear me?

MR. ELA: Yes, we can. Go ahead.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. COLFER: Okay. Yes. My name is Ramy Colfer. I've worked as a research agronomist for True Organic Products over the last three years. Before coming to True, I spent 18 years working at Earthbound Farm, where I was involved with farming of organic leafy vegetables in fertility management, pest management, and seed selection. Traditionally, organic farming has been based on an approach that requires slow building up of soil fertility using good crop rotation, cover crops, and the adding of carbon-rich natural organic amendments to the soil. These approaches require time to develop soil health and soil fertility, building up natural enemies of pests and developing healthy plants that have some tolerance to pests and diseases. These processes require biological systems and natural food webs that allow organic farm systems to function successfully. The widespread use of ammonia extract products in organic farming would dramatically change how organic farms function. Mineral-based ammonia would not be required in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the biological systems to provide nitrogen to the crops. There's a growing awareness in soil management practices. Increasing soil carbon levels is critical for combating global climate change, exemplified by documentaries like Kiss the Ground.

Organic farming practices have been decades ahead of the regenerative agriculture movement and it would be tragic if ammonia extract products became widespread in organic agriculture, pushing organic farming in the direction away from regenerative agriculture. The founders of the organic farming movement, then later the USDA, NOP, and the NOSB have developed lists of strict standards that define organic farming and differentiate it from conventional agriculture.

A line in the sand was drawn and the label Certified Organic has great meaning because of these strict rules. There has always been great efforts to push this line towards conventional agriculture and I'm afraid ammonia extract products would dramatically push this line towards

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

conventional agriculture. It is imperative the NOSB stand up and do the right thing for organic farming and prohibit the use of ammonia extract products.

Proponents of AE products in organic farming have argued against the negative impacts of these products in organic farming systems. To be clear, these arguments are not new. These arguments were used to justify ammonia extract and are the same arguments used in the past to say there's no difference between organic farming and conventional farmer. This is a rehashing of arguments that conventional fertility management is not bad and not different from organic fertility management. And I ask, you know, do you believe that? Thank you to the NOSB for your hard work.

MR. ELA: Thank you very much for your comments. Are there questions? I have a question, just following up. So if your thoughts are that any fertilizer applied would have to go through some other microbial breakdown, like soybean hydrolysates have to go through that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

breakdown, but they may have similar problems or other highly soluble fertilizers, how do you differentiate some of these other highly soluble fertilizers from the ammonium extracts?

MR. COLFER: I would say that they're different in the sense that they are not in a mineral form and they require the soil microbiology to break them down into a mineral form. So you're excluding the biological loop, which is, you know, the premises of organic farming, right, the definition of requiring the biological system for organic farming.

MR. ELA: Any other questions from the Board?

MS. PETREY: I have a question, Steve. Can you hear me?

MR. ELA: Yes. Go ahead, Logan.

MS. PETREY: Yes. Okay. I have a question. Do you believe that sodium nitrate usage should also be prohibited?

MR. COLFER: Yes, I do. I mean, I know my time at Earthbound Farm, you know, we grew

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

thousands of acres of organic leafy vegetables which require a lot of nitrogen and we never used sodium nitrate. And I think it can be done with current available nutrients that are allowed for organic farming currently and I don't think it's consistent with organic farming principles either. It's kind of a crutch that was grandfathered in.

MR. ELA: Any other questions? Great. Thank you so much for your comments.

MR. COLFER: Thank you.

MR. ELA: They are very much appreciated. We are going to move onto Ehsan Toosi, and -- let's see, what did I say -- followed by Zea Sonnabend, and then a break. So, Ehsan, please go ahead and I probably have mispronounced your name. My apologies.

DR. TOOSI: Sure. Can you hear me?

MR. ELA: Yes, we can.

DR. TOOSI: Good afternoon, everyone.

My name is Ehsan Toosi. I am a member of the R&D team at True Organic Products. Over the past ten years since completion of my PhD, I have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

contributed to the field of sustainable soil management by publishing, teaching, and working in the ag industry. I do appreciate the Board for giving me the opportunity to share my view on the use of AE based products.

One of the fundamental differences in nutrient management between organic and conventional farming is involvement of soil biology in nutrient cycling in organic systems. A key aspect common to both organic and natural ecosystems is that nutrients are delivered in complex forms and are then gradually released in plant available forms. A wide range of microbes and fauna utilize the added materials as a source of energy and nutrients during decomposition of complex inputs.

In conventional systems in contrast, nutrients, including nitrogen, are added episodically via mostly synthetic fertilizers in forms that are immediately available for the plant.

The practice does not depend on soil biological processes at all and, thus, it is opposite to the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

concept of soil health. Numerous reports have shown enhanced biological activity and diversity of soil microbes and fauna, over time, as a result of conversion of conventional to organic farming, primarily due to switching from synthetic fertilizers to abundant supply of carbon-rich complex inputs.

It is important to note that ammonium and nitrate that are the available nitrogen forms for the plant are indeed the microbial by-products of breakdown of complex nitrogen forms. They are gradually released to the soil during decomposition. In conventional systems, supply of nitrogen via synthetic fertilizers has resulted in bypassing the soil food web. This is in contrast to one of the fundamentals of organic farming, which is promoting soil health. Direct addition of ammonium to soil does not occur in nature. When ammonium is added to soil it minimally cycles within the soil food web and rather is rapidly taken up by the plant, as well as some of microbes, as is or after its fast

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

conversion to nitrate.

Together, allowing application of ammonium to soil, even if it is technically non-synthetic or is used to supply on a fraction of a crop's nitrogen demand, or if it's blended with carbon, will still be a step away from the notion of feed-the-soil back to the feed-the-crop concept that has been practiced for decades in conventional farming. Thank you again.

MR. ELA: All right. Thank you very much for your comments. They are appreciated. We are going to have one more person before the break. That'll be Zea Sonnabend. After break, we're going to have Angela Wartes-Kahl, and then Jake Evans, just so you are aware. So, Zea, please take the floor and go ahead.

MS. SONNABEND: Thank you. You can hear me?

MR. ELA: We can.

MS. SONNABEND: I am Zea Sonnabend from Fruitilicious Farm, a certified organic fruit grower, and a former member of the NOSB from 2012

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to 2017 in the scientist seat. I was involved in many of the issues that you're now considering.

I'd like to welcome the new members in particular who are embarking on five years of interesting and challenging issues. In the interest of transparency, I have consulted on the ammonia extract petition and I'm the lead author of the petition on kasugamycin on behalf of the California Apple Commission. I also serve on the OMRI Review Panel and Advisory Council. My comments today are solely my own. I do not represent the other entities. Although I have a lot to say about everything, my written comments sum up much of it.

I want to talk mostly about inerts.

Inerts issue one. The List 3 inerts, as several commenters have already made clear, it would be ideal to put them on the National List individually because there are very few of them.

Unlike what some people said, that they should be petitioned, some of them already have been petitioned. I think three out of the four, there are old petitions for. These companies went to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

all the effort to disclose what was in the products and write petitions, and yet the NOP at the time did not have money for TRs and decided to list them this other way. You could just dust off the old petitions, solicit a new one, and put them on the list for their limited use, but do not remove the existing listing until a replacement is in place.

Inerts issue number two. You already have a TR and a discussion document on the NPEs, nonylphenol ethoxylates. There's no reason why you can't advance this issue to a proposal and remove these from the National List while the long process of dealing with an alternative inerts proposal happens at the Department.

Inerts issue number three. Even though your resolution at the last meeting, which I thank you for because the NOP has been glacial in response to this, but it gives them all the power. You need to keep the pressure on and so, if you have not done so already, someone on the NOSB, especially who's early in their term, should be designated to be a point person on inerts policy

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to help the Department and to interface with the public.

I want to say, in closing, I support the ammonia extracts petition and, as the author of the petition on kasugamycin, I can answer any technical questions. But I want to point out that streptomycin is where a lot of the contradictory research comes from that (audio interference) not appropriate. Thank you.

MR. ELA: Questions? I am not -- oh, Mindee.

MS. JEFFERY: Can you just finish your thought there on the streptomycin correlation?

MS. SONNABEND: Yes. The TR gives a lot of accurate information about which research is specific to kasugamycin, of which there's relatively little of it having any environmental or health effects because it's not used in human and animal medicine. So I refer to the TR. What's coming in from public comment, though, is a lot of hypothetical -- I don't want to say it's stereo, but a lot of speculation about resistance transfer.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

But all of the information about resistance transfer has to do with streptomycin and maybe a little bit about tetracycline, which are widely used in animal agriculture and are widely exposed to the environment. Kasugamycin is a quite different compound from streptomycin and you cannot just automatically assume that research for streptomycin applies to kasugamycin.

MS. JEFFERY: Thank you.

MR. ELA: Other questions from the Board? I have a quick one, Zea. Speaking of kasugamycin, in the TR it noted that it was not a good idea to apply it within -- I can't remember off the top of my head -- within two months or some set of time after animal products were applied.

Do you remember that from the TR and do you have a comment on that?

MS. SONNABEND: After animal products were applied?

MR. ELA: Yes. Rick might be able to help me out here, but basically --

MR. GREENWOOD: Yes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. SONNABEND: In actuality, it is only used during the bloom period and so if -- there's nothing on the label that says you have to separate its application from animal products.

But that would be very easy to do because the bloom period for most of the country is only a few weeks.

In California -- and this is one of the reasons that we turned in the petition -- we have extensive rat tail bloom, what's known as rat tail bloom, because of the very warm winters and extended springs that don't allow bloom to all happen at once. And so our bloom period might last for six weeks instead of two or three weeks. And this is one of the reasons why the other alternative practices don't work very well. The blossom protect doesn't work very well because it just doesn't get through the end of the blooming period.

And so our crops are very susceptible to fire blight infection. This is especially on pears, but on certain varieties of apples, as well.

MR. GREENWOOD: Steve?

MR. ELA: Go ahead, Rick.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. GREENWOOD: Yes. I think what you were referring to was the potential for animal grazing in orchards where kasugamycin had been used. So the fact that most of it runs off of the trees and onto the ground, can get into the animal population. The other thing, Zea, I think you may have seen that there has been a change in soil microflora after kasugamycin has been used. So it does have an impact on the flora of soil, so we don't really know what the long-term effects of that are. And it is another aminoglycoside, so it is fairly similar to streptomycin.

MS. SONNABEND: Yes. But there aren't enough long-term studies to know how long the change in microflora takes place, you know, or how long it lasts for, and whether other organic practices, such as cover cropping and applying compost, mitigate that change. So, you know, definitely there's always the need for more research on different substances. But this one appears to me to be as benign as many of the other biological organisms that we use that might also

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

change the composition of flora.

MR. GREENWOOD: I guess the question is, do you want to use it and then find out three years later than it might be a mistake rather than having the research first? I think that's what I would say in the comments.

MS. SONNABEND: Okay. I don't think there's any indication that it lasts for anywhere close to three years.

MR. GREENWOOD: No. No. What I mean is --

MS. SONNABEND: It's up to you to evaluate that from the TR.

MR. GREENWOOD: No. You misinterpreted. What I meant to say was that maybe we need to do more research rather than letting it be used now and find out three years later that there's an effect. That's my final comment.

MS. SONNABEND: That's up for you to evaluate, but yes.

MR. ELA: All right. Any other questions? Thank you, Zea. Much appreciated.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. SONNABEND: Sure.

MR. ELA: Okay. We are going to take a ten minute break and after break we'll have Angela Wartes-Kahl, and then Jake Evans, and then Kirk Sparks. So we will see you all at 52 -- well 18 minutes before the hour or 52 minutes after the hour. However you want to figure that. So we'll see you all in ten minutes.

(Whereupon, the above-entitled matter went off the record at 3:42 p.m. and resumed at 3:52 p.m.)

MR. ELA: All right. I think we are ready to start again.

MS. ARSENAULT: Ready, here.

MR. ELA: Okay. Off we go. Next up we have Angela Wartes-Kahl, then Jake Evans and Kirk Sparks. I said it at the start of the meeting, but just remind everybody just about our professional ethics, that we want to make sure not to call anybody out personally or a company out specifically since they don't have a chance to respond. So I just always like to state that.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So if that happens, I will break in and avoid that problem. So I have to say everybody has been great about that so far. So Angela, please go ahead and I'll just say like Jake and Kirk are coming up. So please introduce yourself and your affiliation.

MS. WARTES-KAHL: Thank you very much. Can you hear me? Can you hear me?

MR. ELA: We can. I'm sorry. I had to get myself off mute. Go ahead, Angela.

MS. WARTES-KAHL: No, it's fine. Good afternoon, Board members. My name is Angela Wartes-Kahl and I'm a consultant with Independent Organic Services, Inc. and an organic inspector.

Thank you for the opportunity to give public comment on the human capital proposal. I'll be focusing on the apprenticeship aspect of training new inspectors.

The apprenticeship is the bridge between graduating from the core crop livestock and processing trainings and paid inspection work with the certifiers. The Apprenticeship.gov

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Program hosted by the US Department of Labor outlines five key components of an apprenticeship program. Pay to work while apprenticing, classroom learning, mentorship, work-based learning, and credentials.

IOIA and partners are best suited to codify, strengthen, and scale an organic apprenticeship program. The IOIA and Mentorship Committee has been meeting twice a month since last September with the express purpose of developing solutions to the human capital issue in our profession. We intend to launch the IOIA Organic Inspector Apprenticeship pilot program later this year with the first intensive training being in livestock inspections.

Our committee members are some of the most senior organic inspectors in the industry.

We feel confident IOIA is well positioned to respond to this opportunity and increase the inspector pool through collaboration with other non-profit organizations. We feel apprenticeship are a strong foundation that develop highly skilled

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

organic inspectors.

I also want to highlight, IOIA's reach is international. Since 1994, IOIA has trained new inspectors in South Korea, Hong Kong, Mexico, Japan, Canada, Australia, Nepal, India, Central America to name a few. And in the US, we intend to develop partnerships with more agricultural programs in the HBCU system.

For example, universities with strong ag schools like Florida A&M, Kentucky State, or NC State University, where they have established organic programs that we can work with to build out curriculum for future inspectors. This is a long-term goal and may take a few years to see fruition.

By including organic inspection coursework in existing Ag and Food Science programs, we highlight the importance of this career path from the beginning. Complementary courses like Technical Writing, Computer Science, Mathematics, along with Animal Science, will increase the quality of our recruits.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

We need to work together to develop best practices for fundamental issues like pay scale and continuing education and recruitment. Funding sources for such a broad program could come from government grants, certifiers, and a scholarship fund sponsored by organic brands. Inspectors have been a stakeholder in the organic industry from the beginning, and now we need support to strengthen our career path.

Thank you so much for your time today.

MR. ELA: Great. Thank you for your comments. Are there any questions? Oh, Sue, go ahead.

MS. BAIRD: Yes. Hi. Thanks for your comments. We appreciate that as we try to develop some, at least, discussion on this topic. You had mentioned that you thought that the apprenticeship mentors could be funded with government grants and perhaps industry. Did I hear that correct?

MS. WARTES-KAHL: Yes, that is correct.

MS. BAIRD: So how would you -- how do

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you think that we could use industry funding without a semblance of conflict of interest perhaps?

MS. WARTES-KAHL: No. That's a very good question. And IOIA actually consulted with their counsel too, and asked for a white paper on the subject of conflict of interest and whether or not brands paying for a scholarship fund for inspectors would then somehow influence how their future inspections would -- the results of those future inspections.

And that attorney decided it's not going to be a problem because the brands would be contributing to a scholarship fund held within IOIA, and IOIA would then be paying the mentors to work in that capacity in the Apprenticeship Program. And so there's several levels of separation between the brands and the actual or possible inspection by that inspector that worked as an apprentice. So it's pretty far removed in that case. Yes.

MS. BAIRD: Yes. That's great.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Thank you.

MR. ELA: Amy.

MS. BRUCH: Thank you, Steve. Thank you, Angela. I appreciate your comments and your time today. I just had a question for clarification real quick and then probably a follow-up. Did I catch that you mentioned that you're training inspectors in different countries?

MS. WARTES-KAHL: That is correct. IOIA trains inspectors, yes, all over the world.

MS. BRUCH: Okay. Can you comment, just so I can understand a little bit better how it works to train inspectors in countries that have different standards than maybe what their own country standards offer?

So for example, you know, you had mentioned Nepal, I think, but some of the countries I think you mentioned have either substantially different standards than the NOP for their own current countries or even, even no standards. So can you just walk me through that process?

MS. WARTES-KAHL: So the international

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

trainings are all based on NOP. So it's basically for inspectors that would be working in countries that would be exporting into the US. And so their farms or processors or livestock operations would all be certified to the National Organic Program under their certificate.

And it might also include the EU and Canada and any number of other certifications that could be involved in that same operation. But the premise is NOP certification, and so the inspectors are trained in NOP criteria that's used onsite for whatever country they're in.

And many of their members are from all over the world. Because maybe just the country that they actually are based in doesn't export into the US, but they travel, you know, extensively all over Asia to inspect other operations that might actually be important to the US.

MS. BRUCH: And just to follow up with that, I understand that they're being trained on the National Organic Program Standards, but when they're from countries that currently don't have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

equivalent standards, do you see as knowledge gap there in the training? And what do you do to overcome some of that if they don't have any background going into things?

MS. WARTES-KAHL: The actual recruitment side of the basic trainings for everybody including US, Canada, and internationally always has a component in the application that addresses expertise and background experience. They can't become inspectors unless they have something.

So a person straight off the street with no information or expertise in Ag or Food Science or nothing, isn't qualified for a crop or a basic livestock course in the first place because the application process is kind of a gatekeeper to even entry into that level.

MS. BRUCH: Okay. Thank you. I appreciate that.

MS. WARTES-KAHL: I don't know if I answered your question specifically. I apologize. But I -- yes. It's much more nuanced,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I think, than people assume. Just because you pay for a basic crop course with IOIA does not mean you're accepted into it. So it's not like that.

It's not a pay to play system. There's an extensive application process that goes into it.

MS. BRUCH: Okay. Thank you for that additional insight. I appreciate it.

MS. WARTES-KAHL: Thanks, Amy.

MR. ELA: All right. I don't see any other questions, so thank you so much for your comments. They are very much appreciated.

MS. WARTES-KAHL: Thank you.

MR. ELA: We are going to move onto Jake Evans. And then my understanding -- I'm just going to go down the list here -- Kirk Sparks, Otto Kramm, and Israel Morales. We don't see you on our list.

So if you are, would you please let Michelle know you're there. But right now, we don't see you.

So we're going to do Jake Evans now, and in case those next three aren't there, we'll have Jessica Shade and then Megan DeBates after Jessica. So Jake, please go ahead.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. EVANS: Good afternoon. Thank you for your service on the Board, your dedication to serving our organic industry, and the opportunity to comment on ammonia extract and to present you with the decision on which road organic will travel.

If we continue to travel down the path will we deliver the most nutritious, tasteful food utilizing the most innovative organic farming practices to improve the soil and the Earth, or do we mimic the conventional marketplace where profit drives decision-making.

You'll receive a lot of comments on AE.

I ask you to consider the motivation for these comments. Is it to preserve our organic principles or to profit? It is clear there's a strong benefit to having plant-available nitrogen.

Plant-available nitrogen will increase yields, drive profit.

Organic growers already have a source of plant-available nitrogen, sodium nitrate, which is far cheaper than AE. One main problem with

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

sodium nitrate is that if you apply to much, you'll kill your soil. Soil health must still driving decision making. This is not the case for AE. Poured on and boost yields at the expense of long-term soil building practices utilizing carbon based inputs, cover crops, and diverse crops systems.

I absolutely agree that to digest there's environmental benefits. Digester technology is a sustainable solution to the big waste problems created by conventional practices.

But look at the cost of AE at 30 multiple over conventional ammonia. There is no market for AE in conventional ag. They need organic margins to cover that cost.

I do not believe the organic industry should pay for CAFOs' waste problems. CAFOs need to figure out how supplement their synthetic ammonia with AE. AE's 30 multiple over conventional ammonia opens a door to fraud that's hard to ignore. This is equivalent to a clamshell of strawberries going for \$5 conventionally and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a 150 organically, or a box of broccoli going for 20 conventionally and 600 organically. Can you imagine the temptation?

Synthetic ammonia will bleed into our industry on all levels, the manufacturer, distributor, and farm level, without the possibility of detection. We have an incredible organic industry. Over the past 30 years, we've had huge beneficial impacts on food, soil, the Earth, and people's lives doing it our way, the organic way. We're not perfect, but we're doing a lot of great things.

Next slide, please. Please look at this slide. Just because the word organic is in front of ammonia nitrate, does that change anything? Does that make it okay? As the TR states, it's identical to synthetic ammonia. Does this look like organic farming to you? Can we honestly say AE is going to improve our industry or be one of the worst mistakes we've ever made? I urge you to please take this vote in the fall. Thank you.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Okay. And Jake, I just want to note, I didn't interrupt there, but we'd prefer if you didn't use brand names such as that for somebody that doesn't have a chance to respond.

MR. EVANS: Oh, sorry.

MR. ELA: Okay. Questions from the Board?

MS. PETREY: I have a question or comment.

MR. ELA: Go ahead, Logan.

MS. PETREY: Sorry. Okay. And so with a huge concern or a big topic of yours being profit or preserve organic standards, are you speaking not in support of the product strictly because you want to preserve organic standards and not because you think this is going to hurt your own profits because of True being, you know, a natural organic fertilizer industry?

MR. EVANS: No, thank you, Logan. I appreciate it. You know, we've had the ability to buy or sell AE for 10 years, and I've chose not to. And in fact, I think it's hurting our business

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

worse by not selling AE right now. But I knew if I brought AE to the masses, it would all be over.

And my, you know, my business is built on integrity. And that's what I stand for in organics. That's why we do what we got to do with organics.

And I really hope the Board doesn't force me to get involved in AE. I mean, as we've seen, the applications for AE are floating into the OMRIs and CDFAs, believe me. They're calling me first, so if I have to, I can find some. It's not going to be a problem. Just call up China and watch it flood in like you wouldn't believe. But I'm really hoping the Board doesn't have to make me get involved in that business.

MS. PETREY: Got it. Thanks, Jake.

MR. EVANS: Thank you.

MR. ELA: Any other questions? I'm not seeing any. Thank you so much, Jake. Very much appreciate --

MR. EVANS: Thank you.

MR. ELA: -- your comments.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. EVANS: Appreciate it. Thank you.

MR. ELA: Okay. Sure. So do we have Kirk Sparks, Otto Kramm, or Israel Morales? Or either three of you three on the call? All right.

MS. ARSENAULT: I haven't seen any of them, Steve.

MR. ELA: Okay. We will move on then. So next up is Jessica Shade, followed by Megan DeBates and then Laura Batcha. So go ahead, Jessica.

MS. SHADE: All right. Hi everyone. My name is Jessica Shade. I'm the director of Science Programs for the Organic Center. We're a non-profit organization that communicates research on organic, and we also collaborate with academic and governmental institutions to fill gaps in our knowledge.

So first of all, I want to say thank you to the Materials Subcommittee for its recommendation on research priorities. We're especially happy to see the inclusion of evaluation of bio-based mulch film whole-farm ecosystem

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

service assessment to determine the economic, social, and environmental impact of farming systems choices, organic no-till practices, plant disease management strategies, relationships between biodiversity and pathogen precedence, practices that reduced greenhouse gas emissions, the examination of factors influencing organic food access, and production and yield barriers.

We're actively involved in conducting and communicating research on those issues. And NOSB prioritization is really helpful for us for things like securing funding. So I'm going to go ahead and move onto 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 additional topics be added to the 2021 research priorities, including benefits and risks of livestock integration into crop rotations; nutritional value of organic animal products such as dairy, meat, eggs; protection of organic farmers from chemical contamination; and comparisons of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

pesticides, antibiotic, and synthetic growth hormone residues in organic and conventional products.

We'd also like to see the focus on alternatives to conventional celery powder for curing organic meat that was included in the 2019 research priorities be included in this year's priorities, because while we're currently working on this issue in collaboration with the University of Wisconsin-Madison and a few other academic institutions, we still don't know what findings we're going to have.

And then we also submitted comments on ammonia extract. So I'm happy to take questions on either topic. Thank you so much.

MR. ELA: Thank you, Jessica, are there questions from the Board? Okay, Jessica. I'll bite on ammonia extracts. Being that you're from a research organization, give me, you know, some succinct comments, please.

MS. SHADE: So the main point of our comments on ammonia extract is that we can't know

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

how the extracts are going to interact with the soil until research is conducted on each specific product. We can make some broad generalizations about how they might impact soil health based on research focusing on synthetic ammonia products.

But even within synthetic ammonia products, there's a lot of variability on soil impacts depending on the type and the production method.

In general, the application of synthetic nitrogen fertilizers alters soil properties like pH, organic matter content, soil microbial communities, often with negative consequences. And also nitrogen will be mineralized at different rates ranging from days to years when derived from different types of amendments and applied to soils with, you know, varying amounts of soil organic carbon. And the rate of mineralization will affect leeching or accumulation potential, ammonia and salinity concentrations, and microbial activity.

So when nitrogen mineralizes quickly, as is usually the case with synthetic fertilizers

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and even organics, water, or liquid products, the potential for leeching increases and long-term fertility efficiency can decrease while nitrogen from amendments, like, you know, yard clippings and plant based composts mineralize more slowly, which increases the potential for accumulation in the soil. And then also, carbon to nitrogen ratios in the soil and in amendments will influence nitrogen mineralization with more carbon slowing the process and increasing the potential for long-term fertility while reducing the potential for leeching.

But there are also studies that show that if nitrogen fertilizers are applied at or below optimum rates and balanced with the application of additional nutrients from various forms like organic manures, than the negative effects of long-term fertilization are reduced or even eliminated. So there just hasn't been much, if any, research looking at the impacts of ammonia extract directly. So we can't know.

And once more, studies need to be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

conducted in an organic setting when they do get conducted. Because what happens in conventional systems might not be the same as you'd see in organic systems. But one thing that we can say is that for the most part, the extraction process is removing some of the raw organic matter that would otherwise be going into the soil, which does add a component to the carbon sequestration process.

We just released a study in collaboration with the University of Maryland that looked at specific soil health practices within organic to quantify their carbon sequestration impacts and evaluate how long it takes to see those benefits. And organic soil amendments had the biggest impact on carbon sequestration.

And those benefits could be seen immediately, in part due to the immediate boost of carbon to the soil from adding complex carbon structures in the form of compost, manure, et cetera. So that part of the process could be impacted and the timeline for seeing carbon sequestration benefits from soil amendments could

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

be delayed. But I'm just speculating --

MR. ELA: Jessica, I'm going to --

(Simultaneous speaking.)

MR. ELA: Yes. I'm going to interrupt just in the sake of time, so -- but thank you so much.

MS. SHADE: No problem.

MR. ELA: I appreciate that explanation. So if you want to send me those comments, I'm certainly happy to look at them as well. So all right. We are going to move on to Megan DeBates, then Laura Batcha, and then Dragan Macura. So thank you very much, Jessica. And we'll put Megan on the floor here. So go ahead, Megan.

MS. DEBATES: Hi. Thank you. I'm Megan DeBates, vice president of Government Affairs for the Organic Trade Association. The Organic Trade Association is the leading voice for the organic trade in the United States with a mission to protect and promote organic. We represent over 9,500 organic businesses across all

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

50 states, including every step of the value chain from farm to marketplace.

This is the first NOSB meeting since Secretary Vilsack has taken the helm at USDA once again. Secretary Vilsack has laid out an ambitious new agenda for the Department drawing on the priorities of President Biden to Build Back Better. Hearing small and mid-size family farms can thrive in transitioning to a more sustainable system of agriculture to mitigate and adapt to climate change are key points in this new vision.

Advancing organic agriculture must be central to achieving these goals, given the opportunities that organic farming provides for family farmers to remain competitive and profitable, and the science back climate mitigation benefits of organic. However, organic cannot thrive without the support of a strong national organic program that can meet the increasing consumer and environmental demands on our food system.

Very purpose of the organic Foods

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Production Act is to, quote, establish national standards, and, quote, assure consumers that organically products need a consistent standard.

The work of the NOSB is critical to this. Most of the recommendations that have been made by this board in the last decade have been to address inconsistencies in the standards.

NOP has benefited from new resources and an increased budget from Congress with 70 staff now supporting the program. There continues to be a lack of focus on standards development with only the origin of livestock and the strengthening organic enforcement roles listed as priorities, which by the way, both of which have a statutory deadline set by Congress for completion.

So it was not Congress' intent in the OFPA to have any update to the standards built with Congress. Instead the NOSB was established to address standards questions and the direction was provided from Congress for USDA to consult and rely on the NOSB for these changes. NOSB recommendations on standards should be taken

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

seriously and implemented.

We urge you to hold NOP and USDA accountable in advancing the organic standards.

Having clear, consistent standards is fundamental to the success of organic. Without that, any other measures to support Organic at USDA will not be impactful. It is central to your service on the Board to develop these recommendations of both consumer trust and maintain a level playing field for all those that choose to participate in the organic supply chain. Thank you.

MR. ELA: Thank you very much, Megan.

Are there questions? I am not seeing any. Thank you so much for your comments.

And I want to be clear, I ask that Jessica and the rest submit any extra comments to me. And actually I want to just be clear that that's not just for her. If there are follow-up comments when the Board for, we try and do that.

So I just want to make sure I'm not giving preferential treatment to anybody.

And so we're going to move on to Laura

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Batcha followed by Dragan Macura and then Mary Capehart. So go ahead, Laura.

MS. BATCHA: Thank you, Steve.

MR. ELA: No, Megan, I'm sorry. No. Wait. I'm all screwed up. Okay. Laura, go ahead.

MS. BATCHA: Can you hear me okay, Steve?

MR. ELA: We can. Go ahead.

MS. BATCHA: Okay. Great. Good afternoon, everyone. I'm Laura Batcha. I'm the CEO of the Organic Trade Association. And thank you for the opportunity to provide comment today.

I'll follow the comments by my colleague Megan by providing the Board with an update on the organic Livestock and Poultry Practices Rule that was finalized by Secretary Vilsack in his prior tour of duty at the Department of Agriculture in 2017, and then subsequently withdrawn by Secretary Perdue in 2018. While the withdrawal's been the subject of litigation for four years today, I would like to speak with you

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

not about the litigation, but about the underlying policy choices that may be made by the Department of Agriculture going forward.

For a brief history and a reminder when that first organic standards were finalized back in 2002, it was acknowledged that additional work on livestock and poultry standards would need to happen. And the discussion of standards development related to animal care, outdoor access, and space requirements began with the National Organic Standards Board as early as 2002.

In 2009 and '10, the Board really dug in in earnest and worked on a recommendation that ultimately passed unanimously in 2011 and was turned over to the Department of Agriculture. Eventually, USDA issued a final standard known as the Organic Livestock and Poultry Practices Rule in January 2017. Despite a resolution from NOSB in the spring of 2017 calling on USDA to allow the Vilsack rule to become effective, under Secretary Perdue's helm, it was first delayed, and then withdrawn entirely in May of 2018.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

All the while there's been broad support within the organic community for the policy recommendations that the NOSB brought forward and we're codified in that final rule, including specificity around outdoor access and space requirements as well as the restrictions on physical alterations for livestock and poultry.

Last week, Secretary Vilsack testified before the House Subcommittee on agriculture appropriations.

Fortunately, it appeared from his comments that the Department does not intend to defend or stay committed to the withdrawal of the rule. However, it was concerning to hear Secretary Vilsack say he believed the Department needed to start from scratch on the rule itself.

These policies, including the outdoor access and space requirements, have been thoroughly vetted for over a decade.

Starting from scratch dismisses all the work done by prior NOSB, reiterated in 2017 by NOSB again, and the work on the part of the Department of Agriculture under Secretary Vilsack's prior

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

tenure. I urge the Board to continue as you have before and push for a final standard that reflects your initial recommendations and the final rule issued in 2017. Thank you for the opportunity to provide comments, and I'm happy to address any questions you might have on the topic.

MR. ELA: Than you, Laura. You get a gold star as well for timing. But questions for Laura? I am not seeing any. So thank you very much for your comments.

MS. BATCHA: Have a good rest of your meeting, and thank you.

MR. ELA: We're going to move on down the list. It looks like -- is Dragan Macura present? Michelle has looked for them, and we don't see them. All right. We're going to skip over then and go to Mary Capehart, followed by Tom Buman, and then Diana Kobus. Mary, please go ahead.

MS. CAPEHART: Good afternoon. My name is Mary Capehart. And I am the certification specialist at CROPP Organic Valley. We currently

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

represent roughly around 1,900 certified organic farms in 34 states. And I'm commenting today on the discussion document, Human Capital Management.

CROPP is in a unique position to observe the current critical shortage of qualified organic inspectors.

Our farmer members is served by 30 different certifiers and we receive extensive feedback on the performance of inspectors and certification services. Organic inspectors play a vital role in their organic certification framework, and are largely responsible for verifying the integrity to the organic standards.

There are many training resources and continuing education opportunities for organic inspectors.

And general agreement amongst certifiers on minimum qualifications. However, USDA organic regulations do not include mandatory requirements for inspector qualifications or training. In 2018, the Accredited Certifiers Association developed a best practices document for organic inspector qualifications, which is the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

basis of the International Organic Inspectors Association Training Program.

Farmers and handlers often express their frustration with inspectors who have no actual agricultural experience. However, a farming background by itself does not automatically make for a good inspector. Personal attributes such as professionalism, curiosity, and ethics, as well as time management and communication skills, can make a successful inspector.

A concerning trend is some inspectors feel increasingly subject to legal liability for performing onsite audits. High profile fraud cases in recent years have made being an organic inspector less attractive . And this has reduced the pool of individuals that are able to carry out effective organic inspections. Recruitment of qualified inspectors is not matching the growth of the sector, and experienced inspectors are exiting at an increasing rate. Many new applicants underestimate the challenge of the job

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and lack support to gain knowledge and confidence in doing onsite audits.

Current critical needs, training that focuses on complex trace-back to match balance audits, investigation, and interview practices, communication, report writing skills, and independent inspectors cooperative to provide experience and mentorship, specialized training for inspectors and specific scopes, especially livestock. The current organic industry needs to be more inclusive of inspectors' resources to make the above happen.

MR. ELA: Thank you very much, Mary.

Another gold star. Boy, we got two gold stars in a row. This is a new trend. Are there questions for Mary? I am not seeing any. Thanks so much for your comments, Mary --

MS. BAIRD: No. My hand was up. I'm sorry.

MR. ELA: Say that again.

MS. BAIRD: My hand was up. You didn't see me.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Oh, sorry. Mary, would you hang on.

MS. CAPEHART: Okay.

MR. ELA: Go ahead.

MS. BAIRD: Hi, Mary. Thanks. I really, really enjoyed your comments, specifically because you're the inspectee instead of inspectors or certifiers or whoever. So your perspective was a big help. I noticed in --

MS. CAPEHART: Well, thank you.

MS. BAIRD: -- in your comments you said, a funded mentoring program will link well-qualified, experienced inspectors with new entry inspectors, and I totally agree with that. I have become, you know, over 70-ish and don't really want to do all the travel I used to do even five years ago. I would love, love, love, to share my experience with new people, but I don't want to do it for free.

And I don't know if you were listening to IOIA's comments that they would look to solicit industry and grant monies to perhaps provide some

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of that mentoring apprenticeship program. How would you feel about that?

MS. CAPEHART: We're actually in the process of talking with them about that. So we at Organic Valley really want to be part of the solution in this. And part of the solution is really to help how we can provide the most competent inspectors out there in the organic industry.

And by raising that bar, it obviously maintains the USDA Organic seal. And with that, we all win. Organic Valley Farms, Organic Valley as a brand, and anyone else. So it's a win-win for everyone. So we are actually looking at how we at Organic Valley can help do that.

MS. BAIRD: Very good. Thank you.

MR. ELA: Any other questions? Anybody else's raised hand I can almost ignore? Great. Thank you again for your comments. Thanks for staying on.

MS. CAPEHART: Thank you for your time, and take care.

MR. ELA: All right. It looks like --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

we had just skipped over Dragan Macura, but it looks like they are on the line. And so we're going to go back to Dragan. And then after that, we'll have Tom Buman, and then Diana Kobus. Dragan, if you're there, please go ahead.

MR. MACURA: Hello. Can you hear me?

MR. ELA: Maybe, maybe not. There we go.

MR. MACURA: Can you hear me?

MR. ELA: Yes, we can. Go ahead.

MR. MACURA: Okay. Good. Yes.

Thank you. All right. So my name is Dragan Macura, and I am the founder and owner of AgroThrive, Inc., the manufacturer of liquid and dry organic bio-fertilizers in Gonzales, California since 2008. I would like to address the fraud issue as it relates to the petitioned material, ammonium extract.

The petitioner wants the normal material to be placed on the 205-602 list as the prohibited non-synthetic input. The proponents of the new nitrogen stores want to have it allowed

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

for use in certified organic agriculture since it is of natural and organic origin. Both have strong arguments for their positions and both list credible scientific evidence in support of their arguments, reminding me of a nightmare of the corn steep liquor that I was stressed in the middle of about 10 plus years ago.

It also reminds me of the rampant fraud that was prevalent more than 10 years ago. And this issue is bringing back the flashback from those years. Since the beginning of NOP rule and the legislation, nitrogen has been the most sought after nutrient by certified organic farmers. Nitrogen was the center of the attention during the flood of the fraudulent activities 10 plus years ago.

The fraudsters just added aqua ammonia, urea, or nitrates from Haber-Bosch process and labeled it organic. OMRI and WSDA bought it all, hook, line, and sinker as all these products were listed by both agencies. The CDFA was nonexistent at the time. The fraudsters, however, paid for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it by doing jail and paying monetary fines that were in hundreds of thousands and millions.

Ammonium extract from natural sources is not a problem. In fact, most of us in the industry welcome the technology as it looks like it can provide a much needed nutrient and perhaps solve an environmental problem that is inherent in raising animals for food. However, the ammonium extract from natural sources is indistinguishable from the Haber-Bosch source of ammonia in us (audio interference) segue for the rampant use of chemical ammonia in the certified organic operations by just adding to already existing fertilizers, perhaps even to mine. Was that buzzer for me?

MR. ELA: That was the buzzer.

MR. MACURA: Oh, my goodness. Can I just read the conclusion?

MR. ELA: If it is in two sentences.

MR. MACURA: Yes. It's just one sentence. I hereby appeal to the NOSB to add the ammonium extract to the 205-602 list to prohibit

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the non-synthetics, or at a minimum, put a hold to it until there is testing methods and inspector training before this product are developed.

MR. ELA: Great. Questions for Dragan? I am not seen any, Dragan. Thank you so much for your comments. I do appreciate it.

MR. MACURA: Oh, okay. Didn't get through half of it. Thank you.

MR. ELA: Well, you and many other people, so you're in good company. We're going to move onto Tom Buman, then Diana Kobus, and Linley Dixon after that. So Tom, please go ahead.

MR. BUMAN: Can you hear me okay?

MR. ELA: We can.

MR. BUMAN: Okay. Thank you for the opportunity to provide oral comments. My name is Tom Buman. I'm the CEO Precision Conservation in Iowa. My comments today concern the petition to eliminate the so-called ammonium extract. Today, I want to focus on three issues surrounding the petition. The definition of ammonium extracts, the concern for fraud, and the agronomic need.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

First, I'm concerned about the definition. I do not find any definitions of the term of ammonium extracts in academic journals or as a definition derived by academic researchers.

The definition provided in the petition is uncertain and may eliminate existing viable products depending on the interpretation.

Before NOSB ruling, I would strongly encourage to clearly define what it is you allow and what you don't allow, and then look at the products that fall inside and outside of this decision. Without careful considerations, changes based on any definition could upset the organic supply chain.

The second issue is fraud. The argument of fraud as a reason to eliminate any products should be approached cautiously. Almost every organic product I know of has potential for fraud. Imagine how easy it would be for companies to eliminate competition by claiming any new product is subject to fraud.

Let's face it, it is the companies that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

are producing these high-quality nitrogen products derived from animal manures, now termed ammonium extracts, that actually have the most to lose from counterfeit products. They have invested significant resources and want to keep this space free from controversy. Instead of purging products due to claims of fraud, I encourage all parties to work together to identify best practices to control fraud for organic farming.

As an example, blockchain would be a viable alternative for tracking and tracing. Blockchain is a system for recording information in a way that makes it difficult or impossible to change, hack, or cheat the system. This is just one example.

The third issue I want to address the agronomic need for new organic nitrogen products.

Manure and cover crops will always play an essential part of building soil fertility and soil health for Iowa organic farmers. With novel products, organic farmers can achieve a more consistent blend of nutrients and continue to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

maximize environmental sustainability.

I do not know of any organic certifiers or organic farmers that would allow these products as a sole source for their nitrogen program. Instead, these products that are derived from animal manure are merely a way to balance nutrient needs while protecting water quality from the over-application of nutrients.

Consider these three issues, I strongly encourage NOSB to do more in-depth research before reaching a decision of so-called ammonium extracts.

MR. ELA: Thank you very much, Tom. Appreciate your comments. Are there questions from the Board? I have a question, Tom. If we don't prohibit them and it's required to these other soil health measures, would you be in favor of annotating the listing rather than prohibiting to a certain percent of nitrogen use in a cropping system?

MR. BUMAN: Yes. I think that is certainly a consideration. I mean, it's going be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

important that we continue to use soil health practices, and if that's what it required, then I think that is a consideration.

MR. ELA: Would you be willing to put a number on what sort of annotation?

MR. BUMAN: You know, I have to go back to one of the previous speakers that said there's probably not been enough research on this. So I don't want to waffle on it, but I do think more information needs to be gathered on that.

MR. ELA: Fair enough. That's something certainly the Board will have to consider sooner than later if we decided to go that route. So that's why I keep asking people for a number. Any other questions from the Board? Thank you very much, Tom. We do appreciate your time and comments.

MR. BUMAN: Thank you very much.

MR. ELA: We are going to move on to Diana Kobus then Linley Dixon and Jennie -- I'm going to butcher this again -- Chotirawi. Sorry, I'm terrible with phonetics. So Diana, please go

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

ahead.

MS. KOBUS: Great, thank you. It actually says it's unable to start my video because the host has stopped it.

MR. ELA: Just --

MS. KOBUS: Got it. Thank you.

MR. ELA: Oh, there you are.

MS. KOBUS: Thanks so much. I'm Diana Kobus, executive director of PCO. Along with five years of retail organic experience and academic study of the NOP while obtaining my Master's in Environmental Science, I served for 12 years as executive director of a non-profit that certifies environmental professionals.

During that 12-year period, I also volunteered with the accrediting agency, the Council of Engineering and Scientific Specialty Boards serving in various capacities, including co-chair of the Accreditation Committee and as president. I have a unique perspective on the issue of human capital currently before the NOSB and CACS.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Qualified Inspectors for the USDA Organic Standards and Program are the keystones in upholding organic integrity, and we need sufficient members of them to maintain it. If we do not address this issue urgently, we are continuing to grow the sector without the proper foundation to support that growth while maintaining the integrity the public expects and demands from a USDA Program.

PCO agrees with the ACA's comments. However, we do not believe that the NOSB's proposal describes pan approach that is directed enough or centralized enough in its efforts to address the urgency of this situation. While many stakeholders may come together to address pieces of this proposal, an initiative of this scale and scope must be unified and centralized in its program creation, implementation, and enforcement in order to be effective and meet the urgent needs of the growing industry.

This specialized work deserves such a standard or a certification as defined in ISO 17024

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

for all of the reasons outlined in the ACA's comments and in the proposal ideally designed and monitored by the NOP or in conjunction with other qualified stakeholder groups. Though the general public's connotations of the farming professions may be that they are unskilled labor, we in the organic industry and at the ACA's in particular, understand the high degree of knowledge, expertise, and experience needed to be successful in this business of organic farming.

It is past time for inspectors and technical specialists to become recognized skilled professions earning the respect, wages, and support deserving of the environmental, scientific and experiential knowledge they bring to their work. As certifiers, our work is intended to ensure that the industry achieves recognized standards represented by the USDA Organic seal.

We need similarly recognized standards for the human beings, the human capital performing that work and serving as the unbiased keystone pieces in ensuring organic integrity. If we allow

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

for interpretations of rules from the variety of certification agencies and do not require standard training of inspectors and technical staff, how can we expect uniform decisions supporting organic integrity to be made in support of the NOP.

If as an ACA, PCO is charged with effectively enforcing a standard of organic integrity with transparency and the trust of the public, then we must have appropriate standards for the human capital performing that work.

My biggest concern as an ACA executive director is ensuring that we bring resources to this issue in a way that is unified in purpose, substance, and urgency. Thank you.

MR. ELA: Thank you, Diana.

Appreciate your comments. Any questions? Kyla has one.

MS. SMITH: Diana, just clear, I just want to make sure I underpin this correctly from your written comments and what you stated here today, is it correct that your recommending based on your knowledge and experience from previous work

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that the unification and centralized part of this program, the responsible party should be the National Organic Program?

MS. KOBUS: I think they should set the standards and enforcement. Yes. I think there are a lot of different ways it can be accomplished, you know, utilizing the different stakeholder groups like the IOIA and others for different pieces of it. But the formation of the program itself and the enforcement really needs to be centralized, in my opinion, from the NOP.

MS. SMITH: Thanks.

MR. ELA: Any other questions from the Board? I don't see any. Thank you so much, Diana. Appreciate it.

MS. KOBUS: Thank you.

MR. ELA: We are going to move onto Linley Dixon. And Jennie Chotirawi. Jennie, we're not seeing you on the list, so if you are there, could you contact Michelle? And then we'll go to Patrick Kerrigan. After Linley and Patrick, I'm going to circle back around to the people that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

weren't here earlier and give them a chance in case they joined.

And then we will move onto a few people on the waitlist. I don't know how far we'll get on that, but we want to give everybody as much of an opportunity to speak as they can. So, Linley, you're on.

MS. ARSENAULT: Linley, I see you on the phone only, so you may have to hit star six to unmute yourself.

MS. DIXON: Hi, sorry, I was muted. Can you hear me now?

MR. ELA: We can. Go ahead, Linley.

MS. DIXON: Okay. I'm Linley Dixon, the co-director of the Real Organic Project. The Real Organic Project is a collection of now 850 farms, and we're growing quickly. These farmers have come together behind the fundamental organic principle of soil health. I run a certified organic vegetable farm in Southwest Colorado, and we specialize in soil-grown tomatoes, greens, peppers, cucumbers, and herbs.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

All products that are increasingly hydroponic and organic. This comment is going to seem really rudimentary but sadly, we're here. Our farm, like many others, pride ourselves in composting. We cycle local veg scraps and landscaping waste into compost that is then added to our soil. No liquid feeding, no mining for added inputs. Please keep this in mind when making decisions.

Organic farming was founded on the basic principle cycling farm generated organic matter and local organic waste back into the soil.

Many certifiers do enforce the soil health standards in OFPA. Many do not. Remember that the lowest standard allowed becomes the standard.

When poultry porches were allowed as outdoor access, now over 90 percent of the organic eggs are produced in buildings with porches.

When the standards are weak, other labels rise. Pastured non-GMO eggs are everywhere outside of USDA Organic. Let's keep organic strong. Remember that a big tent means the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

cheapest system wins. I directly compete with certified organic growers that simply fertigate with unsustainable off farm inputs at every watering.

Many use hydrolyzed soy originating from conventional GMO soy, soybeans that are synthetically fertilized, with multiple herbicide passes, and then synthetic acids are used to hydrolyze them. These conventional soybeans are grown just for the organic hydroponic market. We could save a lot of energy just by certifying the conventional GMO grains.

Real organic farming requires that you add enough locally generated organic matter to the soil to retain water and bleach nutrients slowly overtime. This is how we save water. This is how we can serve water. There's minimal nutrient leeching. This is how we filter and replenish water in our local aquifers, how we sequester carbon in our farming.

If organic continues to allow hydroponic and confinement livestock production,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

organic will become irrelevant when it comes to mitigating climate change. The regenerative roundup farmers will get the carbon credit. While CAFOs and hydroponic producers shop to the right certifier to approve them, many of us shop to the ACA with integrity.

Please use your esteemed position as a National Organic Standards Board member. To stand on the right side, real organic. Publicly fight for real organic and remind the world why organic is always the best choice. Let's work to incentivize the market to move towards our shared principles. Thank you for volunteering your time.

MR. ELA: Thank you very much. And you're right in the group of balancing time pretty well, so congratulations. Are there -- I see Nate has a question for you.

MR. POWELL-PALM: Just a quick question. Thank you for your comment, Linley. Would you be able to cite for us -- I think you mentioned 90 percent of all organic eggs come from chickens raised with porches as outdoor access.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Could you cite where that information came from?

MS. DIXON: Yes. It actually came from a conversation with Miles McEvoy. So it's not in print anywhere.

MR. POWELL-PALM: Okay. Well, that is it. All right. Thank you.

MR. ELA: Has a question.

MR. BRADMAN: Yes. It's a question and also, I guess kind of a comment, you know, I think there's some really important issues here, and I think we do need new standards for container systems. You know, there's got to be a way to grow organic food, for example, on old parking lots or roofs of buildings and things like that. And, you know, we had some of that discussion a few years ago, but it stopped.

Nitrogen, also, I think is an issue that the community has discussed as well. We're having a lot of talk about ammonium extract, you know, most of the organic systems I know are importing manures that are from conventional agriculture, whether chicken manure or steer manure. And in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

many systems I'm sure the majority of nitrogen is essentially recycled conventional nitrogen that's gone through an animal as grain. And you know, that's true for many farmers.

I have deep respect for them. I've been in this field for decades. And so when we think about these things and you know, nitrogen cycling and climate change, there's a lot of challenges, and, you know, hopefully we can kind of shorten those loops and take out the conventional sources.

MS. DIXON: Are you arguing that -- it just makes sense to me that we might as well use synthetic nitrogen if we're just going to use the soybean that was fertilized with a synthetic nitrogen.

MR. BRADMAN: No. I'm not making any argument in favor of a specific source, but I think what you're pointing to also -- and just beyond just the hydrolyzed soybeans is that there's a larger issue of nitrogen sources are many different systems, including almost all soil-based systems

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that I know of are using essentially --

MS. DIXON: Yes. I'd agree with you, Asa. I see what you're saying, like, we've got essentially hydroponic production in the soil, and I wouldn't want that to be certified. And that's kind of what I was saying. There are ACAs that actually do enforce the soil health standards in OFPA and wouldn't certify that, you know.

I heard you comment on the, you know, raised strawberry beds that are, you know, covered in plastic and are essentially container, that shouldn't be certified as organic anyway. The National List with meant as an amendment, not to be the entire system.

MR. BRADMAN: Right.

MS. DIXON: And so hydroponics is where the entire system, you know, is based off of these highly soluble fertilizers.

MR. BRADMAN: Right. Right, I guess I'm just hoping in general that all the discussion around ammonia extract can also prompt a larger discussion about sources of nitrogen throughout

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

organic systems.

MS. DIXON: Yes, I would agree that that's important as well.

MR. ELA: And Asa, that sounds like a great thing to talk about at the Board meeting too between us all. So anything else for Linley? All right. Thank you so much, Linley. Very much appreciated. We are going to move onto Patrick Kerrigan as our final person on the normal list. We're going to circle back around to the people that weren't here.

And then we're going to go to the waitlist, and so if Laura Colligan and then Henry Ines will be on deck. We'll go to you if nobody else is present as we circle back around. So Patrick, please go ahead.

MR. KERRIGAN: Thank you. Dear organic stakeholders, I'm Pat Kerrigan with Organic --

MS. ARSENAULT: Pat?

MR. ELA: Patrick, you're a little faint, could you --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. KERRIGAN: How's that?

MR. ELA: Still not great.

MR. KERRIGAN: That's as loud as it goes. I'll talk loud. I'm Pat Kerrigan will Organic Consumers Association, OCA and the organic community has been witnessing for years the continuing erosion of consumer trust in the USDA Organic Gold Standard because of lack of enforcement of OFPA requirements resulting in a large and growing number of consumers looking beyond organic to regenerative livestock and poultry and other kinds of foods.

With the ever increasing demand for healthy foods being grown, raised on healthy soils, we've seen the widespread greenwash and coopting of the term regenerative to the of which we now have McDonald's, Monsanto, Bayer, Target, and Walmart claiming to be regenerative. The spirit of organic should be regenerative but false technological solutions such as biofuels and carbon banking abound further confuse any consumers trying to find the most nutrient dense

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and ecological sounds foods for their families.

Organic consumers are fed up with and appalled by the ongoing erosion of organic standards and enforcement. With synthetic substances being rubber stamped or having some hydroponic vegetables that are literally nutritionally watered down being marketed as organic. Animal livestock and poultry not being allowed to exhibit their natural habitat practices in organic CAFOs. All while consumers are paying a premium price for foods that do not meet their expectations.

Institutionalized regulatory neglect has resulted in organic producers having to create their own add-on organic label certified practices that consumers are erroneously expecting the NOSB and NOP to be protecting and enforcing. The fact that the vast majority of organic producers that are doing it right are having their livelihoods threatened by faux organic mega farms makes those prices even more onerous.

Organic consumers expect vegetables

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that are grown in healthy soils as part of healthy ecosystems and livestock products from humanely treated animals that are allowed to exhibit their natural behaviors on grass and pastures. OCA wholeheartedly support the policy positions of OFA, ROP, and Beyond Pesticides is essential in protecting organic integrity and increasing consumer trust.

Finally, it is of critical importance that the NOSB and NOP support existing opportunities and work collaboratively with the organic community in wholeheartedly welcoming into and engaging with BIPOC farmers and ranchers and increasing opportunity of engagement in the organic market, and for consumers to find their products. OFA -- I'm sorry. OCA applauds the efforts of OFA, Rodale Institute, and other organic leaders in providing opportunities for Black and organic farmers.

We all must join in uprooting racial inequity and nourishing the seeds of regenerative organic justice. Thank you.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Thank you very much for your comments. Are there questions? I'm not seeing any, Patrick. Thank you, again.

MR. KERRIGAN: I just want to say thank you, NOSB Members. I know this is an enormous contribution of your time. I just wanted to tell you the whole organic community really appreciates your work. Thank you.

MR. ELA: Thank you for those words, Patrick. We appreciate it. Just real quickly before we go to the waitlist. If Priscilla Iskandar, Artaynia Westfall, Kathy Park Price, Kirk Sparks, Otto Kramm, Israel Morales, or Jennie Chotirawi are on the call, could you please let Michelle know and we will go to you.

But if not, we're going to go ahead and go to the waitlist. We'll get through -- we're not going to go real long here, but maybe 20 minutes-ish or so. So Laura Colligan, you are up. And then we'll have Henry Ines and Martin Burger. So Laura, if you're there, please go ahead.

MS. COLLIGAN: All right. Hello. My

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

name is Laura Colligan, and I own and operate Dirtrich Farm in Springville, New York. My farm is a small diversified vegetable farm and has been certified organic since 2017. I'm part of the first generation of Americans who grew up with the USDA Certified Organic label.

I remember being in elementary school when Certified Organic milk began appearing on the grocery store shelves in the early 2000s much to my parents great excitement. As a teenager, trying to figure out what I wanted to do with my life, being a good student of the Earth was important to me and organic farming seemed to offer that possibility.

At the age of 18, I left my middle class suburban life and spent three years interning on organic vegetable farms. I learned that while consumers might define organic farming by what it isn't, no antibiotics, no synthetic pesticides, organic farmers describe organic farming by the mantra, feed the soil, not the plant.

Around that time, more and more

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

scientific knowledge was becoming available to the general public of the complex and beneficial relationships between plants and the soil microbiome. This confirmed the wisdom of that mantra and also helped inspiring my farm's name, Dirtrich Farm because I see good, well cared for soil as the basis of making a living in farming.

I've been shocked in recent years as I've read about the growth of hydroponic operations certified as organic. Without a relationship with the soil, how could a farm be organic? And I worry that in the near future as more consumers learn how so much of their organic lettuce, tomatoes, and berries are being grown, that disconnect between the image they had in their heads of what organic produce farming looks like and the factory farm realities of hydroponic production will cause a backlash that will undermine trust in the Certified Organic label just as concerns about organic mega dairies and pasture access have shaken many consumers trust in the label.

While as an organic farmer I disagree

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

with including hydroponics as part of the Certified Organic label, the NOP seems set on allowing it.

So I'd urge the NOSB to undertake a rule-making process for hydroponic production. There's been decades of rule-making for organic soil-based protection and organic hydroponic production should face the same level of thought and scrutiny.

There are many activities and materials being used in hydroponics that have not necessarily been reviewed for compliance to organic standards, such as artificial light, land leveling and long-term landscape cloth use. The scandal a couple of years ago of some certifiers not requiring hydroponic operations to undergo the same three-year transition to organic as soil-based operations also shows the necessity of rules to make sure all certifiers are upholding the same high standards and that soil-based and hydroponic operations are competing on a level playing field. Thank you.

MR. ELA: Thank you very much. Are there questions? Thank you so much, Laura. We

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

appreciate your comments. We are going to move onto Henry Ines, Martin Burger, and then Jennifer Taylor. Henry, if you are out there, could you let Michelle know? We're not seeing you.

In the meantime, will go onto Martin Burger followed by Jennifer Taylor and John Foster.

So Martin, please go ahead.

DR. BURGER: Yes. Somehow -- good afternoon, everybody -- the video was stopped by the host. Maybe you can --

MR. ELA: We'll work on that -- oh, there you are, Martin.

DR. BURGER: Yes. It's working now,.

MR. ELA: Go ahead.

DR. BURGER: Okay. I'm Martin Burger. I'm an environmental scientist with the California Department of Food and Agriculture Fertilizer Registration Program. And I will comment on the so-called ammonia extract petition.

So to register these products, we relied on the review of the ingredients and the manufacturing processes and inspections. This

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

included nitrogen mass balance audits and analysis of samples taken at several points in the manufacturing process.

We conduct two audits per year, announced and unannounced. And at this point, no one has touted that these products are non-synthetic by NOP's standards. We do not use nitrogen stable isotopes analysis to determine whether a product is organic or synthetic. However, we do collect nitrogen isotope data of finished lots so we could potentially detect adulterations occurring in the channels of trade because the isotope signature of a finished product would only be altered if another source of nitrogen is added.

We currently limit concentrations of liquid ammonia products to 7 percent nitrogen to reduce risks such as damage to plant and soil or contamination of water in the case of spillage of liquid ammonia in undiluted form. CDFA does not regulate application rights of fertilizing materials. Should NOSB set an application limit

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

for inorganic nitrogen, it could easily be implemented as the breakdown of nitrogen forms must be shown on the fertilizer labels.

I have one more comment to address the question of whether the application of liquid ammonia depletes soil organic carbon that was mentioned in a earlier meeting and maybe today also. I reviewed the scientific literature, and I could not find evidence of that.

On the contrary, long-term studies have found that additions of nitrogen in any form lead to increases in microbial biomass carbon and soil carbon when compared to adding no nitrogen at all.

On the other hand, poor soil management practices, such as lack of organic matter inputs or lack of cover cropping can lead to declines in soil organic car --

MR. ELA: We may have just lost you, Martin.

DR. BURGER: Oh, yes?

MR. ELA: Okay. You're still there.

Okay. It looks like Mindee has a question for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you.

MS. JEFFERY: Hi. Thank you. Thank you, Martin. I know the CDFA needs someone went to work on this issue, but I'm not totally clear on what you were saying about what your process was with taking samples and nitrogen isotope data. Can you spell that out for me?

DR. BURGER: Okay. So the samples are during the audit. I can't go into all the manufacturing processes, but there are different steps where you can verify that this is really happening. So we look at the process inquiry. Could this work? And then we take samples.

But the nitrogen isotope analysis, this is based on the samples that we take from the finished product. So if somebody has finished product, we can record, we can analyze for nitrogen isotope ratio. That number will not change anymore.

So if somebody down the line in the channels have tried, used that product and change it somehow or if there was -- me we could identify

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that and see that that it's no longer the same as the one that was produced. So it would be fraud committed in the channels of trade that this would help detect.

MS. JEFFERY: Thank you, Martin.

MR. ELA: Other questions from the Board? I have one, myself, Martin. And it's your statement that you've looked within the literature review and there's no evidence that adding nitrogen decreases soil carbon when compared to adding no nitrogen at all.

Do you see any -- does it matter in the effects of what form of nitrogen you're adding?

I mean, is that true of ammonia extracts, manures, fish emulsions across the whole spectrum?

DR. BURGER: Well, okay. So the research that you're asking for hasn't been conducted because these days, they're not available. It matters though which system you're talking about. There has been a lot of talk in the last 20 years or so on this question.

And in natural ecosystems, if

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

additional is added to them, they have sometimes seen some changes in the plant community and also declines in soil carbon. But in agricultural systems, any addition of nitrogen compared to a control that did not use any. It had, in fact, shown an increase overall. This is based on long-term studies that lasted for decades.

MR. ELA: Thank you. Any other questions for Martin? Thank you so much, Martin. Glad we were able to get to you on the waitlist. We are going to move on now to Jennifer Taylor, and then after Jennifer, John Foster and Dan Hazen. So Jennifer, please go ahead.

MS. ARSENAULT: Steve, it looks like Jennifer's not on with us.

MR. ELA: Okay. We'll skip over Jennifer. John Foster, if you're out there, we'll go with you and then Dan Hazen and then Heather Spalding. So John, are you on the line?

MS. ARSENAULT: Steve, John is on --

MR. ELA: No?

MS. ARSENAULT: -- it looks like his

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

mic --

MR. FOSTER: Yes. I'm here. Just, you know standard difficulties.

MR. ELA: All right, John. Go ahead.

MR. FOSTER: Thank you. Well, good afternoon. I'm John Foster with Wolf & Associates, although we're not representing any clients to NOSB process, so not talking about any materials here. Been a long time inspector in the past, past NOSB member. Thanks for providing your time and energy here. I know that burden. And particularly, welcome to all new members. There's a lot of work, but it's great work in front of you. So thanks for contributing, all of you.

So commenting on the additional support for NOSB members, which I know the need for really well. We would strongly support providing additional resources to NOSB members so that you can do effective, complete work and not kill yourselves doing it. Also while you're doing that, I do want to recognize first actually, NOP has provided, you know, very good, improved

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

technical reviews and specialist support staff already. And that has served the community very, very well.

Additionally, another idea for additional services could be regulatory comparisons with implications, alternative practices, applicability for multiple environments. Intent would be that the existing TRs could focus on the science and that addenda could focus on the practice of it. An example here would be where costs associated with alternative practices or strategies to be included along with review for materials to be retained or added to the National List.

Another provision can be draft proposals or recommendations not in terms of choosing content, that should remain with the NOSB, but the style of it and the regulatory language of it is an art in and of itself. I think NOSB could benefit from those who are trained in regulatory language writing.

Lastly, I think the process would

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

benefit from independent and impartial summaries of public comments, hopefully highlighting those that are articulating specific arguments for and against the matter being reviewed. And it would be very helpful for impartial summaries to be provided to make sure all NOSB members have the same kind of baseline understanding.

It would also mitigate disadvantages for NOSB members who can't manufacture the time to digest all the comments individually. We think it's really important in including examples with a bias toward and bias against industry positions, particularly with an emphasis on veracity of claims.

I'm going to go off script for a second.

With respect to inspector training, when I was on the Board, we did a lot of work with CACS regarding inspector qualifications and basically a certifier's abilities to make good choices. And I'd be happy to revisit that. Not now. But at some point, we did a lot of work and that may be useful. So with that, thanks for your continued

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

service. And I'll stop there.

MR. ELA: Another gold star. Well done on time, John.

MR. FOSTER: It's what I live for.

MR. ELA: I think that was to the second, but questions for John? John, you were making my ears ring about time to read public comments but not that I'm ever going to admit anything, but I'm always amazed the Board does as well as they do in getting through everything.

MR. FOSTER: It's stunning. Kudos to all.

MR. ELA: Yes. All right. Well, thank you so much for your comments. Very much appreciated.

MR. FOSTER: You're quite welcome. Thank you.

MR. ELA: We're going to go to the next to Dan Hazen followed by Heather Spalding and Mike Dill. Dan, are you on the line with us?

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

MR. ELA: We can. Please go ahead.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. HAZEN: Thank you for the opportunity to address the True Organics ammonia petition. My name is Dan Hazen, president of Perfect Blend Organics. We're the largest manufacturer --

MS. ARSENAULT: Hey, Dan. I'm going to stop you there because you have slides, we don't have them up.

MR. HAZEN: Just one slide. Just throw up the first slide. That'll go to my third comment.

MS. ARSENAULT: Okay. Thanks.

MR. ELA: Go ahead, Dan.

MR. HAZEN: Okay. Well, I'd like to address the Committee on three points. First, the technical review, while we appreciate their analysis, the materials used in creating the technical review do not track history with scientific literature. This is obvious from the repeated references to the lack of studies on human and soil health on the main materials.

The technical review then goes on to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

compare these materials to supposedly comparable synthetic products in certain respects. But in doing so, assumes that the materials named in petition will be acting in the same way as these synthetic materials. In reality, the organic materials differ greatly from the synthetic materials, both in concentration and other elements found in the name of materials. And therefore, these assumptions do not hold true.

The technical review names two different manufacturing processes, ammonium concentration, which is our product, and ammonium stripping, which is the process we do not use. However, it again makes incorrect assumption and lumps the two processes together when it says that both processes result in a material that acts as a step towards a finished fertilizer.

This is true of an ammonia stripping technologies which create an intermediate aqueous ammonia that must be further reacted to create a fertilizer. It is not true an ammonia concentration technologies which create a usable

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

end product on their own without a final reaction step. We believe these differences require very detailed technical expertise to better understand.

The technical review provides no clarity.

The second comment is regards to fraud.

I would ask, where is the fraud? Has there produced any evidence that fraud exists with our product in the marketplace? Are we now going to create policy out of, what I would call, pure fear?

We have in place the best tracking system set up with the CDFA that exceeds industry standards that Dr. Burger just mentioned a few moments ago.

And the third topic speaks to a trade dispute. The slide on the screen is provided for information purposes to help the Committee better understand the investment True Organics has currently in the liquid business. You can see the large --

MR. ELA: So hey, Dan. I'm going to interrupt. You know, I think it's just on a professional side, if we can stay away from company names, that'd be appreciated.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. HAZEN: Okay.

MR. ELA: They don't have a chance to respond. So actually, we're going to take that slide down because you're not speaking for True. You can keep your comments general.

MR. HAZEN: Okay. So we'd just like to remind the Committee, though, that we had a five-year exclusive marketing agreement with BioStar for the same ammoniacal concentration products referred to in the petition prior to providing the technical assistance to bring the product to market.

Our product is disruptive but is positive for the industry. Millions have been invested in fixed assets. PB just launched our newest CDFA approved liquid consisting of 25 percent Super-6 plus a 75 percent soy hydrolysate.

In closing, due to the constrained nature of the comment process to the NOSB, it's difficult to make clear the differences in chemistry between these new products and synthetic products, their manufacturing processes and their interactions

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

with soil.

The petition is too broad and combines all products containing ammonium is not founded on a sound scientific basis. We would ask that the Committee consider forming a separate working group that would include soil scientists and technical experts who fully understand this topic.

That would also include a wide variety of industry partners best with assisting (audio interference) with a final recommendation.

MR. ELA: All right. Thank you for your comments, and sorry to interrupt you, but we just want to make sure that --

MR. HAZEN: It's not a problem.

MR. ELA: -- for professional reasons, we're not calling any company out. So I probably should have called you out on that a little earlier. Are there questions? I am not seeing any from the Board. So thank you very much, Daniel. We appreciate your comments.

MR. HAZEN: Thank you for your time and energy and effort.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: We're going to move onto Heather Spalding followed by Mike Dill and then Matthew Molineaux. And we'll see how we come out on time there. That may be about the end of our day, but we'll play it a little bit by ear here. So Heather, please go ahead.

MS. SPALDING: Good afternoon, Mr. Chair and members of the NOSB. My name is Heather Spalding, and I'm deputy director of the Maine Organic Farmers and Gardeners Association. Thank you so much for your tireless efforts to keep organic strong after a very long day, especially.

MOFGA is a member of the National Organic Coalition, which has submitted detailed comments on our behalf. And we've also submitted some written comments on a few topics, but I was just going to zip through the list of actions that we'd like to see.

So first, the perennial challenges, we really want to urge the NOP to restore the organic certification cost share to the full reimbursement rates, reinstate the Organic Livestock and Poultry

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Practices Rule, issue the final rule on the origin of livestock and adequately enforce the pasture rule, and clarify the prohibition of genetic engineering in organic production.

We also would like to see you encourage the NOP to shine a light on organic management practices when USDA considers programs to help farmers adapt to and mitigate the effects of climate change. And please consider developing work agenda items focusing on carbon sequestration and soil health provisions, including a restriction on ammonia extract and use of all highly soluble sources of nitrogen in organic agriculture.

Regarding the SOE rule, we'd really like to understand better how funds will be allocated to increase the ability to fight fraud.

And we'd like to see increased support for accredited certifiers and the associated workforce, which has to comply with increasing demands from NOP, consumers, industry. And we all find it difficult to meet those demands without

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

increasing the fees for our farmers.

We also would like to see the NOSB's role and authority clarified. And we hope the NOP will provide an update on all previous and unimplemented NOSB recommendations. We also would like there to be consideration on the impact of NOP policies on BIPOC farm and ranch owners with special emphasis on certification challenges and barriers to land, markets, grants, and financing.

We want to ensure that planting aids and mulch products do not contaminate soil, water, and produce. We support the petition to add paper-based planting aids to the National List, but we urge caution regarding the percentage allowance of synthetic fibers. We do not feel that biodegradable bio-based mulch film is ready for prime time.

And finally, we oppose organic certification of hydroponic operations in hope that containers and hydroponics will return to the work agenda to ensure consistency across the industry. Thank you.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Good job, another gold star. People are racking them up today. Feel like a benevolent teacher today. It's great. Questions for Heather? I'm sorry. I'm trying to -- there we go. I don't see any. Thank you so much, Heather. We appreciate your comments and patients here.

We'll next go to Mike Dill, and then we're going to finish up with Matthew Mullen if he is here. So both of you two. Go ahead, Mike, and you've got the floor.

MR. DILL: All right. Well, good afternoon, everyone. I'm Mike Dill, coordinator for Organic Produce Wholesalers Coalition or OPWC, and also the compliance manager for Organically Grown Company. Organically Grown Company is a certified handling operation that relies on sanitizers every day. We don't apply any sanitizers directly to product, but do sanitize many different food contact surfaces.

Over the years, we've experimented with many sanitizers. All the chlorines, ozone,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

peracetic acid, and others, always trying to find the most effective, eco-friendly, and sustainable option. In our experience, ozone was great, but our workers were afraid of it and didn't understand the technology. Peracetic acid performed well too, but our workers complained of the odor.

So we listened to our crews as they repeatedly asked to go back to chlorine, chlorine dioxide mixed from powder for our packing line, hypochlorous acid generated on site for table tops, and sodium hypochlorite for rags used on food contact surfaces. In the packet for this meeting, there are several things related to sanitizers that concern me.

What's stood out was, one, the Board switched from a broader comprehensive review to simply focusing on chlorine alternatives. Two, basing research priorities for chlorine on anecdotal reports. And three, proposing during sunset review of sanitizer materials the new criterion of appropriateness, which comes with an unvetted draft framework based on questions that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

have been suggested without disclosing who suggested the new assessment questions.

Part of the dilemma, as you well know, is that material evaluation criteria requires a material be safe to humans and the environment, right? Very difficult considering sanitizers are designed to harm a broad range of microbes. What we should be asking is, what happens if we do nothing? What is the harm in not using effective sanitizers?

We'll take chlorine and salad wash water, for example. If an ineffective sanitizer were used or none were used at all, the resulting harm could be human illness or even death. I think we can all agree that we need to protect human life and that doing nothing to sanitize in our food handling systems is simply not an option. But how does this type of thinking about human and environmental harm fit into OFPA criteria?

The National List focuses on materials that are necessary for the production of an agricultural product, but sanitizers used in a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

handling system are different. Their only purpose is to protect consumers, organic and non-organic alike. Lettuce will grow just fine with E. coli on it, and ice cream can maintain its viscosity, smell, and taste regardless of whether or not it contains Listeria.

This is why sanitizers are an outlier on the National List, hard to evaluate against OFPA criteria. And why OPWC's comments offer new questions to help guide the research on sanitizers.

Lastly, perhaps it's time to accept that we need clear standards for post-harvest handling. We've been thinking that sanitizer use maybe better addressed through more specific handling standards as opposed to simply through inclusion on the National List. Thank you.

MR. ELA: Thank you, Mike. Much appreciated. Are there questions for Mike? So Mike, I have a question. So in terms of, I mean, given that the criteria that we have now are to, you know, we have to list them. We don't get a, you know, really don't have the option, you know,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

statutorily to do what you just said.

How would you think we should move forward in kind of grouping, adding new sanitizers?

You know, I think we recognize all your points, but it's a complicated subject. So what would be your suggestion for us to prioritize or such?

MR. DILL: Well, I think, you know, given that we have the criteria for harm to human health and the environment. I think we can take a different approach at looking at that. I mean, I think what we've looked at in the past is, you know, how does the sanitizer harm, you know, how's it harmful to the environment when it's released or when it's used?

But I think if we flip that around and look at what the harm is to human health and the environment. If we, you know, if people get ill or if people die, I think that's kind of a new way of looking at this. So we've always just kind of looked at how this affects the, you know, the soil, the ground, you know, the runoff water. But never really, you know, this do nothing approach or how

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it, you know, how the inverse would really affect humans.

So I think, you know, taking that kind of lead and just looking at it, flipping it around a little bit to see what really happens if we do nothing or if we do end up with an ineffective sanitizer, I think it might change the way that we look at this. And so what we are suggesting is, you know, we go back to this concept of comprehensive review and do it as a research priorities.

So if you look at our comments in the materials section or the research section, under chlorine, we've posed a bunch of questions that we think can help guide us through the next steps in developing kind of this, you know, comprehensive review. And so what we'd like to do is see us, you know, kind of look toward that research. Maybe consider the questions that we posed. I think we posed, like, eight or nine questions, and use that as kind of the framework to move forward outside of the sunset review to really kind of continue

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the discussion on, you know, this comprehensive review.

MR. ELA: Great. Yes. Thanks, Mike.

I appreciate that. You've got two more questions. One from Asa and one from Kyla. We got one more speaker. So if both of you can be concise in your questions, and Mike, if you can be concise in your answer that will keep the Board going there, so go ahead, Asa.

MR. BRADMAN: Yes. I'll do my best.

Steve, I appreciate that admonition, and I'll do my best. Because this is a issue that I've been working on a lot. Just a few things. You know, we have FSMA, we have food safety standards. There's no thought at all about doing nothing and was that resulting in human illness, death, I mean, I teach food safety in some settings.

And, you know, that's really a crucial issue. And, you know, I think the real question is: How do we evaluate new materials? Well, old ones and new ones. Right now we have CPC petitioned. We're dealing with the technical

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

report. We have another one that's been proposed that'll probably be coming up next year. We voted down silver dihydrogen citrate, which I had mixed feelings about.

There's a lot of concern about nanoparticles, and also what impact it might have on the environment. I voted against it, but I like that material in some ways, and I think it had a lower occupational health risk profile. You know, I think you raised some extremely important points in that we do have to think about how we use these materials. And we definitely need to ensure that organic complies with food safety standards.

You know, we talk about pesticides and inputs and that sort of thing, but if the food can kill you, that's not appropriate. So I think, though, it is important to think about the human health impacts. I mean, for example -- well, I started going off here, and I'm making perhaps more comments than questions but, you know, I've seen with farm workers, they were much more concerned about bleach exposures and the health of that they

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

were than pesticides.

They just bitterly complained about bleach exposures and the health impacts. So I think we do need a framework to think about these materials and also evaluate their use to judge their safety or improve methods to use the same materials but protect worker health and, you know, I look forward to continuing this discussion with the community and the Board because it's going to be an ongoing one.

MR. DILL: No. And I agree and I just, I mean, part of it is I don't want the focus to just be on chlorine because as we've experienced firsthand, which I thought was kind of, you know, interesting is, our workers complained about every material but chlorine, you know, they really were honestly afraid of ozone. They did not like peracetic acid in our enclosed environment, and they asked us to go back to chlorine, which I thought was a, you know, kind of a shock at first.

So we listened to what they said. But, I mean, ultimately, I think, you know, maybe this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

is a bigger question. And again, I don't even know if it's in the realm of possibilities, but one thing that we're suggesting too is that we look at, you know, really doing some research on, you know, what, if any, measurable residue of sanitizers are on the surfaces that remain after sanitation, you know, following label use or remain on the product?

And then, honestly, I mean, if there's no residue or very little, maybe we consider handling this just through, you know, through handling standards. And we can make the big question or ask the big question is: Are these even appropriate to be on the National List if there's no, you know, if it's not coming in direct contact, if there's no residue left behind?

But I think, you know, as we embark on this journey, I think answering some of these fundamental questions might lead us to, you know, maybe some discovery of a whole different approach.

And maybe, you know, the National List isn't the right approach or maybe restructuring the National List. I don't know, but I think, you know, we

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

really are standing behind our thoughts on these research questions. And we think that it can really open up the discussion. And from there we can, you know, figure out how to move forward hopefully.

MR. BRADMAN: Yes. I think that's great, and I really appreciate that input, and I think we all have to think about and talk about these issues.

MR. ELA: One more question from Kyla, and if we can keep this short. I want to get to our last speaker because I think everybody's getting fairly tired. But go ahead, Kyla.

MS. SMITH: Yes. Thanks Mike for your comments. I was just going to, which you sort of just already said, but I'll just hammer it home for good measure in that basically what I was hearing was that in addition or maybe in substitution, there's nothing within the regs besides the National List that cover how operators are really to apply, you know, there's no standards that govern the use of these materials, I guess

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

basically.

And so what I was hearing your comment saying about moving forward with the post-harvest regulations would be helpful to setting the context for certifiers to be able to enforce again. So I'm just making sure I heard you accurately.

MR. DILL: You did. And, you know, our SOE comments were very heavy on kind of this handling standard concept where, you know, there's a lot in the standards for crop production. There's a lot for processing and manufacturing.

But in-between there's a whole lot of nothing, you know, receiving, loading, storage, work-in-progress, sanitation, even pest control is, I mean, pest control has its mentions too.

But I think, you know, we feel pretty strongly that looking into expanding or getting some clarity behind some handling standards would help with enforcement, accountability. And especially with SOE coming out, going to be a lot more people that need to be certified. A lot of what we're calling these intermediate handlers or

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

auxiliary handlers that aren't processing but handling product, you know, post-harvest up until processing.

And I think it can really, you know, I think it's really helpful for everyone if we can kind of get that dialed in and get some clear standards put in place. So hopefully, you know, by the next meeting, we can possibly share what our draft was for SOE because we basically rewrote 20527 to be the way that we think it should be.

And I think we'd love to share that with you-all.

MR. ELA: We look forward to seeing it. So thanks, Mike. We appreciate your thoughts. You definitely have some experience in the field there. So we're going to move onto our last speaker.

MR. DILL: Thank you.

MR. ELA: Last speaker -- yes. Thanks, Mike -- Matthew Molineaux. And Matthew, you are up.

MR. MOLINEAUX: Well, thank you so much, especially for including me as the last

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

speaker here and thanks to the Board for hearing comments on these important issues. I did my IOIA crops training to become an organic inspector in 2003 shortly after the NOP rule-making in 2002 after completing my Bachelor's Degree in Agriculture. I worked as a small organic farm manager for a few years and was inspected by CCOF and Oregon Tilth for crops and livestock.

I began my inspection career in 2008 and over the years have inspected with five agencies, averaging 100 to 150 inspections per year, mainly on the west coast where I was born and raised in farms. My comments are centered around the struggle of independent organic inspectors to create a sustainable livelihood.

I want to recognize the attention the NOSB and other industry organizations have placed on the topic of human capital and the needs of these crucial players and the organic certification process. To be clear, my comments are based on my experiences. They're not representing Oregon Tilth, who I just recently became an employee of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

after 11 years as a contract inspector.

I will say Oregon Tilth has stepped up and done the right thing hiring inspectors as full-time staff with benefits and a competitive salary. To get personal here, I have incurred a federal tax debt exceeding \$30,000 over the past few years as an independent contractor for failing to withhold enough income to pay my appropriate tax. The struggle to pay in advance for inspection trips, airfare, rental cars, hotels, fuel, meals, submit my reports the following week, and then wait two to four more weeks to be paid or reimbursed all the while planning, scheduling, booking tickets, hotel rooms for the next trips, fronting often 2,000 a month in expenses during my peak season waiting to be reimbursed beyond my credit card limit.

This posed a stress on my family, and maintaining my own personal finances, mortgage, utilities, et cetera, challenging to the point of being routinely over drafted often during my busiest season. All these expenses don't include

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

extra insurances, trainings, and office expenses needed just to do the work. These factors can lessen an inspector's focus, encourage inspectors to overbook themselves just to get ahead.

I take pride in doing good work and have experienced several crisis moments where I hit a wall mentally and emotionally. In all honesty, I should've left this profession years ago and worked again as a farm manager or organic consultant or salesperson. But I've been committed to upholding organic standards for over 20 years that I've been in the industry.

I feel connected to the work. I'm good at it. I've seen nearly every crop grown and inspected in 23 states. I've detected fraud and prohibited substance use on inspections. To continue to staff these critical positions, certification agencies needed to take into consideration the aspects I've outlined with guidance by the NOP, a right livelihood can be realized for all organic inspectors into the future.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

We cannot take for granted the path built by past inspectors, especially those who worked consistently since 2002 to uphold the standard we're all working toward together. Thank you.

MR. ELA: Thank you, Matthew.
Questions from the Board? Sue has one.

MS. BAIRD: Matthew, thanks for sharing that. I think most of us that have done long-term inspections have all experienced exactly what you've said. Maybe not the tax issues, but everything else. Trying to keep your credit cards paid up for the next time so that you can charge some more trips is very stressful. And trying to book enough inspections over the year to make a good living, which results in less family time. So just appreciate your comments and your honesty. Thank you.

MR. ELA: Nate, you had a question.

MR. POWELL-PALM: Again, more of a comment. Just wanted to thank Matthew for that input. I think that really informs everything

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

we're working to address. And I really appreciate how you shaped it that, you know, a quality of an inspector's work, it does not exist in a vacuum.

And so making sure that inspectors are treated well on the road and given humane working conditions is going to contribute to good integrity as well. So thank you for highlighting that for us.

MR. ELA: Kim.

MS. HUSEMAN: Hi, Matthew. Thank you for your comments. Just curious, I'm not from the world of inspections. So what is your normal radius of travel and how does that vary, the perimeters of travel vary?

MR. MOLINEAUX: Yes. Well, you know, traditionally, I live in western Oregon and so I worked up in Washington State for WSDA and I worked for a few different agencies in California. And so I would drive often five, six, seven hours to the north or south on a Sunday or, you know, 4:00 Monday morning to be on the farm by Monday afternoon to do an inspection, stay overnight a few nights.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Often booking two inspections a day if they were pretty straightforward. And then, you know, heading home.

And the back-end work is really the report writing. And it takes quite a bit of time to get all those done, especially if you do six or eight farms on a trip. The airfare depended if I had farms in Arizona or southern California.

You know, I'd try to plan those more in advance to save money and have a cheaper ticket because those do get expensive to fly, rent a car, hotels, especially in some high-cost areas.

And that was generally how I traveled, and, you know, eight or nine months of the year was really when you made all the money. Because in the winter, especially with crops, much less work, and the phone doesn't ring as an independent contractor, you don't work.

MS. HUSEMAN: Understandable. Thank you very much. I appreciate your answer.

MR. ELA: Sue, did you have one more quick question?

MS. BAIRD: No. Just follow up. I've done inspections in all 50 states, and Mexico, and Guatemala, and Peru, and Egypt. So you can travel as much as you want. It's probably inherently you have to travel a lot. So --

MR. ELA: Starting to sound kind of like my farm. I can make more money by doing fewer things.

MS. BAIRD: Right.

MR. ELA: The credit card doesn't get as expensive. Thank you so much for your comments. I think that, you know, the human capital side of things is really important to our industry. So appreciate the personal thoughts on that.

MR. MOLINEAUX: Yes. I'll just say when that document came out, when that guidance from the NOP came out earlier last year, literally almost brought me to tears because it was everything that I wanted to say and thought about my career for all these years I built.

And finally a light was shed on these issues that I as an independent contractor never

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

got to talk to anyone about because I didn't really have colleagues that I worked with on a daily basis.

On an island unto myself, trying to do this work the best I could, and to finally recognize somebody's issues and challenges, I felt I wasn't alone. And again, appreciate you folks addressing this.

MR. ELA: Thank you so much. All right. Long day of public comments. Thank you so much to the Board for hanging in there. I know we went a little longer than I meant to. Told we'd go a half-hour over, but no more. Really appreciate the patience, great questions, and most of all, to our public commenters. All your thoughts really give us a lot of food for thought and a lot of help in our deliberations. I think that the stakeholders are so important to our process because it creates more than 15 brains on the board. It creates so many more.

So this will conclude today's public comment webinar. Again. Thank you to everybody who provided comments. We will try on Thursday

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to get to more people on the waitlist. No guarantees. It really depends how the day goes.

And we will pause for now, and we will reconvene on Thursday, April 22nd at noon Eastern. So take care. Enjoy your time off tomorrow, and we'll be back at it on Thursday. See you, everybody.

(Whereupon, the above-entitled matter went off the record at 5:41 p.m.)

UNITED STATES DEPARTMENT OF AGRICULTURE

+ + + + +

NATIONAL ORGANIC STANDARDS BOARD

+ + + + +

PUBLIC COMMENT WEBINAR

+ + + + +

THURSDAY
APRIL 22, 2021

+ + + + +

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

PRESENT

- STEVE ELA, Chair
- NATE POWELL-PALM, Vice Chair
- MINDEE JEFFERY, Secretary
- SUE BAIRD
- ASA BRADMAN
- AMY BRUCH
- BRIAN CALDWELL
- JERRY D'AMORE
- CAROLYN DIMITRI
- RICK GREENWOOD
- KIM HUSEMAN
- LOGAN PETREY
- KYLA SMITH
- WOOD TURNER

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

STAFF PRESENT

MICHELLE ARSENAULT, Advisory Committee
Specialist, Standards Division
JARED CLARK, National List Manager, Standards
Division
DAVID GLASGOW, Associate Deputy Administrator,
National Organic Program
ERIN HEALY, Acting Director, Standards Division
DEVON PATTILLO, Agricultural Marketing
Specialist, Standards Division
DR. JENNIFER TUCKER, Ph.D., Deputy
Administrator, National Organic Program;
Designated Federal Official

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

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

(12:00 p.m.)

MS. ARSENAULT: So welcome back, everyone, to day two of the National Organic Standards Board comment webinar, or welcome if you weren't with us on Tuesday. I'm going to -- a few administrative housekeeping issues and then I'm going to turn it over to Jenny to take us out of recess, I guess. Hold on one second; I'm just going to make sure, Jenny is unpaused. There we go. All right. So if you're online and you're having audio issues, you can call in on the phone.

The phone number was on your screen -- I lost the slide. I did chat it in, so at the top of the chat you'll see the phone numbers, if you need to dial in on the phone.

We ask that you please stay on mute with your video off until it's about your time to speak.

That just helps us with bandwidth and background noise. We can control both your mic and your camera from our side, so if your camera gets turned off, we probably did it on our end and we can send

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

you a request to turn your camera on -- you should see a on-screen pop up with that message from the program. The chat is enabled, but it is not part of the public record, so feel free to chat to each other, say hello, you know, talk amongst yourselves, but the Board doesn't answer questions that are sent in chat, so no need to send questions in the chat, and again, it's not part of the public record.

We have a transcriptionist on the call with us who is capturing every word that's said so will have an official transcript will be posted after the in-person meeting concludes next week, so after April 30th. If you're signed up to speak, please make sure that your name is displayed in your video window properly -- sometimes people are dialing in on other people's computers, or if you're just on the phone we can rename you so we can identify you in the participant list in order to make sure that you're unmuted and your cameras on -- if you want it to be on -- during your comments.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Also, please don't raise your hand, which is at the bottom of your Zoom window. We are not taking questions; only the people that signed up to speak will be allowed to talk, and Steve Ela, the Board chair, will call on you in turn when it's your turn to speak. If you're having technical problems, you can go to Zoom US and in the upper right-hand side of the screen you should see a support button. They are very helpful, so please contact support if you're having any technical issues that we can't resolve. And again, the webinars are being recorded as of this minute, and I'm going to turn it over to Jenny Tucker to start the meeting officially or take us out of recess. All right. Thank you, Jenny.

DR. TUCKER: All right. Good afternoon and welcome back, everybody. Thanks so much, Michelle.

My name is Jennifer Tucker. I am the Deputy Administrator of the National Organic Program. So first, a big welcome to all our National Organic Standards Board members. This

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

is our third online meeting and the group continues to come together beautifully in this unique environment. As I mentioned on Tuesday with our new board appointees that are just starting their first meeting, most board members, at this point, have not actually met in-person yet, and so it really is incredible how well they have done together. I wanted to in particular welcome our five new board members who are starting their first meeting, so this is their second day of public comments with you.

We have Amy Bruch, Logan Petrey, Carolyn Dimitri, Brian Caldwell, and Kyla Smith, and so like to give a round of applause to our new members and our returning members, and it's a good reminder of how we clap in Zoom. So we wave both hands in front of the camera in order to clap. So let's clap all of our new folks and our returning folks who just keep coming back for more. I also want you thank our public commenters. You are continuing to sustain a very important participatory process in this unique format, and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

so we thank you for signing up to share your comments. And I thank our audience, the folks who serve as witnesses to this event; we're also grateful that you continue to come back and listen to all the voices that are contributing to this ongoing dialogue.

This webinar continues a series of virtual webinars that will occur over multiple days. We are in day two of this week and there will be three days next week. Meeting information for all segments is posted on the National Organic Standards Board meeting page on the USDA website.

We need somebody to go on mute. Okay. Took care of that. Let's see. Meeting access information is posted on the NOSB meeting page on the USDA website and transcripts for all segments will be posted once completed. This meeting, like other meetings of the NOSB, will be run based on the Federal Advisory Committee Act and the Boards policy and procedures manual. I am acting as the designated federal officer for all meeting segments.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

To close, I want to, again, thank the National Organic Program for their great work in getting us here today. As I did on Tuesday, I particularly want to acknowledge Ms. Michelle Arsenault, Jared Clark, Devon Pattillo, and Andrea Holm. Michelle keeps our universe spinning, in particular, so Michelle, you are and always are amazing. Michelle is always so chipper; it's hard to remember sometimes how much she has going on behind the scenes at all of these meetings. She makes it look easy and keeps it cheery, so Michelle, I continue to be so grateful for you and for your work. I also want to thank Steve Ela, Chair of the Board; I continue to very much value our collaborative partnership. We've been doing that from afar for a while now, and you're terrific and I'm so happy you're here.

I'm going to now turn at the mic over to Erin Healy. We introduced Erin on Tuesday as our new Standards Division Director, so she has taken on the permanent role of Standards Division Director. We are thrilled to have her on board.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

She's been with us since beginning of January and is doing a terrific job and she is going to do a roll call of National Organic Standards Board members. So thanks everybody; I appreciate your-all being here and look forward to hearing your comments this afternoon.

MS. HEALY: Hi everyone. If I didn't get to virtually meet you on Tuesday, I just want to say hello and looking forward to today's meeting. It's my first public comment with the Board, so I'm excited to be able to listen in and I'm very excited to be with NOP. For the roll call: Steve Ela, NOSB Chair?

MR. ELA: I think I'm here.

DR. TUCKER: I have to go through it, you know. Nate Powell-Palm, Vice Chair?

MR. POWELL-PALM: Here.

DR. TUCKER: Mindee Jeffery, Secretary.

MS. JEFFERY: Morning Erin and everyone.

DR. TUCKER: Morning. Sue Baird?

MS. BAIRD: Yes, hi.

DR. TUCKER: Morning. And I think Asa is joining later, correct? Amy Bruch?

MS. BRUCH: Here.

DR. TUCKER: Brian Caldwell?

MR. CALDWELL: Here.

DR. TUCKER: Jerry D'Amore?

MR. D'AMORE: Good morning. Here.

DR. TUCKER: Carolyn Dimitri?

DR. DIMITRI: Good afternoon.

DR. TUCKER: Rick Greenwood?

MR. GREENWOOD: Here. Good afternoon also.

DR. TUCKER: Kim Huseman?

MS. HUSEMAN: Present.

DR. TUCKER: Logan Petrey?

MS. PETREY: Here.

DR. TUCKER: Kyla Smith?

MS. SMITH: Good afternoon. I'm here.

DR. TUCKER: And Wood Turner?

MR. TURNER: Here. Good morning.

DR. TUCKER: All right. Good morning

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

or good afternoon depending on your time zone, everybody. In addition to the Board, I wanted to also mention that we have several of our teammates on the call. Jared Clark, National List Manager; Devon Pattillo, Agricultural Marketing Specialist; and David Glasgow, NOP Associate Deputy Administrator. So I'll hand the mic back to Steve Ela.

MS. ARSENAULT: Steve, you're muted.

MR. ELA: Okay.

MS. ARSENAULT: There you go.

MR. ELA: I actually wasn't; I was just talking silently because, you know, we have to kind of have a little fun with this. Thank you so much, Erin; very much appreciate it, and I welcome the whole Board. Again, this is such a critical part of our deliberation for the NOSB, is to hear from our stakeholders and their collective advice and thinking. It really does help our decisions, so thank you to all out there. I would like to remind everybody that there is a policy in the policy and procedures manual about public comments.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

All speakers who will be recognized signed up during the registration period. Proxy speakers are not allowed. Individuals providing public comment shall refrain from making any personal comments or remarks that might impugn the character of any individual. We really want to stress that, you know -- make comments based on the evidence and on the documents before us, but please don't make comments about individuals or companies unless you are representing that company. Very important to keep this unprofessional professional level.

We will once again call speakers in the order of the schedule. If somebody's not present or has technical problems as we're going through at the end of all the speakers, we will wrap around and call on those people that we skipped over. And if we have time, we will move onto the wait-list that we have; we were able to get comments from about half the wait-list on Tuesday, so that was great. But I just remember that this is dependent on our time schedule. We went over about a half

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

hour on Tuesday, so thank you for the Board for having the patience to do that. Each commenter, again, has three weeks, or three minutes -- yes, three weeks, that would be a long time -- three minutes to speak, as per usual. We will use the timer that will sound when your time is up. When you hear that timer, please finish your sentence and end your comment.

Michelle, you want to give a demonstration of the timer? I just love that sound. So you will be able to see that timer in Michelle's Zoom window. We'll pin it so everybody can see it and give our speakers kind of a sense of where they are. Just procedurally, I will announce the next speaker and then the next two people that will be on deck so everybody can get prepared. At this time we're allowing speakers to use their video just so the Board can get a sense of who is out there. It is not required; if you have any problems with your video just go ahead and state your comments as we've done in the past.

But if you'd like to turn on your video, we would

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

welcome that.

I will ask everybody to state their name and affiliation when they start their comment, and it would be wonderful if people who are consulting or representing some other organization would also identify that so the Board knows who you were speaking for or who you are consulting with. After the comments, board members will indicate if they have questions by raising their hand in the chat room. I will recognize people in order of how they raised their hands. And if for any reason I do not see your hand, please, please, please barge in before we move onto the next speaker; we want to make sure we get all the questions from the Board we can.

I would remind NOSB members, in the interest of time, to ask your question right off.

Don't give an extended comment before; our time here is really to ask speakers questions. Next week will have time for the comments among the Board. Only NOSB members are allowed to ask questions, and we're going to go ahead and start

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

right off and dive into the public comments. So today we're going to start off with Jaydee Hanson.

After that, we will have Otto Kramm, and then Kate Mendenhall on deck.

So please start and state your name and affiliation.

MR. HANSON: Thank you very much. I'm Jaydee Hanson, Policy Director for the Center for Food Safety. I will address our comments on excluded methods and BPA. My colleague Meredith Stevenson will address the hydroponics later in the afternoon.

Beginning in 2011, NOSB began dialogue and debate regarding excluded methods and it developed a framework approved by the NOSB in the fall of 2016. This framework should be formally adopted by NOP and codified as a guidance document.

In 2016, NOSB identified 11 methods to be excluded from organic production. Without further delay, NOP should codify the prohibition for these 11 methods by publishing the guidance document in the NOP Handbook. All of the NOSB recommendations on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

excluded methods have been unanimous, which reflects the organics community's united stance that genetic engineering should be prohibited in organic. Delay in finalizing that guidance encourages lax and confusing enforcement of prohibitions on genetic engineering.

Unanimous agreement was found in allowing marker assisted selection in transection, embryo rescue in plants, and embryo transfer in animals. NOP should codify these four methods as well. NOSB must continue to move ahead to determine the status of to be determined technologies and other GE technologies that emerged to provide clarity to all stakeholders at work. We support the NOSB's work in updating organic seed regulations and guidance in recent years and strongly urge NOP to adopt these changes through making guidance documents.

Next, on BPA. The National Organic Program must proceed with research on Bisphenol A and related chemicals in packaging. Center for Food Safety has urged the NOSB to push the NOP to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

act on BPA and related chemicals for five years.

This year, one major organic company made the public commitment to eliminate ortho-phthalates from its products before companies one-by-one banned these chemicals from their products. NOP must implements its long delayed research into the prevalence of BPA and other chemical additives in organic packaging materials and the human health concerns associated with food contact with BPA and other chemicals used to replace BPA.

Consumers choose organic products because they seek to avoid synthetic and toxic substances. They want foods that protect their health and the health of their families.

MR. ELA: Thank you very much, Jaydee.

MR. HANSON: You have the longer version there. I would note that research is coming out on organic cheeses and organic drinks that have been found to contain these ortho-phthalates and that's a problem for us all.

Thank you.

MR. ELA: Are there questions from the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Board? Thank you for your comments, Jaydee. I'm not seeing any questions, so we're going to move onto the next speaker --

MR. HANSON: Thank you for your work.

MR. ELA: -- who is Otto Kramm -- you're welcome. We have Otto Kramm, then Kate Mendenhall and Greg Rawlings. Otto, you have the floor and would you please state your name and affiliation?

MR. KRAMM: Good afternoon. My name is Otto Kramm. I'm speaking on behalf of the Organic Industry. Currently, I'm director of internal farming for Dole Fresh Vegetables. Thank you for allowing me to reschedule my time; I had technical difficulties there on Tuesday. So anyway, 25 years ago in 1996, we stepped into our organic journey. After three years or so of fighting Mother Nature we finally understood the relationship we'd gotten into. Organic farming is about nurturing the soil -- not dirt, soil. A living, breathing body.

We learned to cover crop, use proper rotations, properly balanced inputs, all to build

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a strong base. Mother Nature responded well. We were a very successful organic farming operation.

We always questioned and re-questioned any input which had a readily available source of nitrogen.

How can it be organic? Can it be copied? Can it look the same by fraudulent operators or methods? We just feel that organic farming is a principal of working with Mother Nature, using proper inputs, understanding the business you've gotten into. Things happened. Weather happens.

You know, it's not going to be successful every time.

So to have a product that gives you a readily available source of N to fix those problems just rolls us back to -- I'll say it -- to conventional farming. Integrity of the Organic Program relies on the hands of the on-farm operator. We are the keepers of the trust. We have to be truthful to what we're doing. We need help. We need the NOSB to help enforce those laws; help enforce those products. It's about keeping things organic and really being an organic. We

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

must protect it -- the integrity of the organic industry. Thank you.

MR. ELA: Thank you very much, Otto.

Are there questions from the Board? I'm not seeing any. Thank you again, Otto, for your comments. We do appreciate them. We are going to move on to Kate Mendenhall, followed by Greg Rawlings and Harry Rice.

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

MS. MENDENHALL: Thank you, NOSB members, for the opportunity to speak before you today. Welcome new members. My name is Kate Mendenhall and I'm the Executive Director for the Organic Farmers Association. OFA was created to be a strong national voice and advocate for domestic certified organic farmers. In addition to leading OFA, I also own and operate a small diversified organic farm in my Iowa hometown. I grew up in small-town Iowa during the 1980s farm crisis, and by the time that I graduated high school, only a couple peers were still living on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

their family farm and small, rural towns across the state were boarded up.

Now in some cases there's merely a billboard showing a photo of the town it used to be, where now immense corn and soy fields take its place. I left there thinking that there must be a better way for family farmers to make a living, to better care for the Earth, and to keep our rural communities thriving, and I found it in organic agriculture. Organic farming grew as an alternative to the industrial conventional model.

It's based on principles of nature that not only care for the Earth and climate, but also our surrounding communities. I point this out because as organic has grown at record-breaking speed over the last two decades especially, we must not lose the spark that started it all.

Corporatization, consolidation, battles over price, sexy technologies with high lobbying dollars, pose severe risk to the principles of organic farming, both ecological and cultural. You must keep organic principles and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

values front and center at every decision for the evolution of the label. To do this, we need real leadership and enforcement from NOP. The 2019 NOP memo on container growing and transition left more questions than it answered. The NOP asked certifiers to prove there was inconsistency and interpretation of greenhouse transition, which NOC, OFA and ACA presented in the fall.

The NOP must provide clarity. Pass on outdated rule-making like OOL, OLPP, and SOE and stop allowing certifiers from certifying production system lacking national standard. We must work hard to clarify and enforce standards that maintain the principal of organic farming at heart. As we drag our feet, family farms suffer, and big industrial farms push their way through until they are too big to fail and we cannot allow organic farming to follow the footsteps of industrial agriculture.

Organic farmers continue to highly prioritize soil and do not agree with organic hydroponic. Already, family farms are being

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

out-competed in the market from hydroponic farms that are literally watering down organic standards. I was taught that when you make a mistake, you need to go back and fix it. This is something the organic community must continue to fight for. Already, hydroponic organic has become the Wild West of organic certification. Greenhouses are certifier shopping, the NOP is pressuring certifiers to certify a production system they do not have standards for, and the NOP refuses to provide clarity when certifiers need a unifying decision upholding OFPA.

The nitty gritty issues of the NOSB and NOP cannot be looked at through a microscope without seeing the holistic picture of this organic program that farmers built and are desperately fighting to hold onto. Thank you.

MR. ELA: Thank you, Kate. And you are the first of the gold stars today for nearly exact time. So are there questions for Kate? I am not seeing any -- Amy has a question.

MS. BRUCH: I'm sorry. Yes. Kate,

thank you for your contributions and being the director to the Organic Farmers Association. I was just reviewing your written comments and it looks like you had a survey with some of your farmer members about ammonia extract, and you said majority had appeared were not interested in using ammonia extracts, but it wasn't unanimous. Did you have additional comments on some of the folks that were in favor of using ammonia extracts, just to understand their side of things?

MS. MENDENHALL: Well, the comments that we received that didn't say they wouldn't use it weren't specific about why they'd wanted ammonia.

MS. BRUCH: Okay.

MS. MENDENHALL: And we brought it to our policy committee -- we have a very grassroots policy process -- so it was something that we wanted to provide the NOSB with more direction on from Organic Farmers Association, but we didn't get a lot of concrete feedback that was focused enough to be able to come up with a position for you.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So it seemed like farmers needed perhaps to talk about it more or, you know, we led to conversations about just soluble nitrogen is general, which is something that we don't feel like is in line with organic principles.

But as Patty noted in her testimony on Tuesday, it seems like there are some pressures from price that are a bigger a conversation, but sort of, like, the holistic framework of where organic is and going that need to also be a part of the situation, but I don't think a Band-aid is necessarily going to solve it, and the majority of farmers who did respond specifically to question said they wouldn't use it even if it was available.

MS. BRUCH: Thank you, Kate. Appreciate it.

MR. ELA: Any other questions from the Board? Okay. Thank you so much for your comments, Kate.

MS. MENDENHALL: Thank you.

MR. ELA: We're going to move on to Greg Rawlings. Then after that, Harry Rice and Dave

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Chapman. And before you start, Greg, I just really want to shout out to our ASL interpreters. There's a lot of jargon in these calls, they move very quickly and I know we make your job difficult, but thank you so much for hanging with us and including that segment of our stakeholders.

All right. Greg, please state your name and affiliation and the floor is yours.

MR. RAWLINGS: Morning. My name is Greg Rawlings. I work for Jacobs Farm / del Cabo, Inc. in California here. I've been an organic farmer for about 26 years now, and these are just my wishes to talk about ammonium extract and why it's so bad for organic agriculture. And it's actually all soluble nitrogen like Kate was saying; it's not just ammonium extract, but that's, like, the worst of the worst. And the reason is because it's breaking the symbiosis between the plant -- the crop plants and the biota in the soil -- the fungus and bacteria, which actually mineralize the organic matter and other rocks and stuff in the soil to bring nutrients to the plant.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

That is the important part of organic agriculture. That's what's gives you the flavor -- which is one of the big reasons why I became an organic farmer, was because I liked flavorful food and I wanted to provide that to other people as well -- but it also protects the plants in other ways such as, you know, pest management, you know, and also as the beneficial biota is said by the plants in order to -- you know, in exchange for the minerals that the plants need, it fills the niches in the soil. So there's no room for, you know, your diseases and your pests in the soil, and then it also -- how should I say -- it's, you know, providing a way to move nutrients underneath the soil between plants in your field, and it's also allowing for information passing about pests that are arriving and how to defend against those pests -- the plants themselves.

So for a true organic system, you need insoluble nutrients that are placed in the soil before planting and those soils and (audio interference) you know, you have to have that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

symbiosis for true organic -- and in my feeling, for true organic, you know, product that's also flavorful, you know, you need to be able to support the symbiosis and that is feeding the soil to feed the plants. I mean, that's a big organic maxim from days past, but it's true. And if you don't have that symbiosis, your field is weaker, your food is less flavorful, and just in general, you're not really running an organic system.

So, you know, the reason why I became an organic farmer was for flavor and soluble nutrients, especially things such as ammonium extract, are going to kill your flavor, you know, and really not allow a correct organic system to just flourish in your field. So even though some people may think that it's a good use of that product, really they should go to a conventional marketplace because that's what they're dealing with with the soluble nutrients. So thank you very much.

MR. ELA: Thank you, Greg. You also used your time very well. Lots of people are

setting the standard for today. Are there questions from the Board? It looks like Logan has a question for you.

MS. PETREY: Hi. Thank you. Okay. And so just reviewing on what you mentioned in farming -- when you talked about nutrients, you said, you know, it's best to put it pre-plant. I'm just curious: In your system, are you able to rely on a heavy pre-plant application or mainly a pre-plant application of fertilizer?

MR. RAWLINGS: Yes. I feel like I haven't done my job correctly if I have to apply after, you know -- during a cycle for an annual, obviously if it's a perennial block, you know --

MS. PETREY: Right.

MR. RAWLINGS: -- if it's a perennial rosemary block, you have to apply nutrients, you know, over time, and compost, you know --

MS. PETREY: Yes. Okay. How many days are your crops typically?

MR. RAWLINGS: We grow -- I mean, we have some spearmint blocks have been for 20 years,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and then we have dill and cilantro that are 60 day crops --

MS. PETREY: Okay.

MR. RAWLINGS: -- so we have a range of crops. Yes.

MS. PETREY: Okay. So you grow also, like, the 120 or 150 annual day crops as well?

MR. RAWLINGS: Yes.

MS. PETREY: Okay. Do you get leeching rains during your season?

MR. RAWLINGS: In the wintertime when it's, you know, it's not the best season for us, but it does happen. Yes.

MS. PETREY: Sure. Okay. So you are able to grow --

(Simultaneous Speaking)

MS. PETREY: -- sure. So you were able to go to the 120 day crop with just a pre-plant application --

MR. RAWLINGS: Right.

MS. PETREY: -- and not run into leeching rains.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. ARSENAULT: Okay. All right.
Thank you.

MR. RAWLINGS: All right. Thank you.

MR. ELA: Thank you, Logan.

Amy, you had your hand up, but did you
want to ask a question?

MS. BRUCH: Sure, Steve, thank you.

Thank you, Gregory, for your time today
and your written comments as well. I had a
question. You know, there's several commenters
-- and I believe your from -- is it California as
well? Is that right? Where you're located?

MR. RAWLINGS: Yes.

MS. BRUCH: Yes. Okay. So there's
several commenters in your same state that are,
you know, expressing the need for ammonia extract
and you're on the other side of the equation, and
you mentioned about -- I think your comments are
feeding the soil biota. Can you comment on some
of the alternative methods that you're using
briefly? Just because, you know, that's one of
our criteria in which we evaluate substances, is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

just looking for alternatives out there. Can you briefly touch on some of the methods you're using?

MR. RAWLINGS: Certainly. You know, the best is a compost that, you know, a good mix of 30, 40 percent animal manure and the green waste, and that's really the best way, you know, to provide nutrients to your soil long-term. Now, we also -- in our particular area, we use lime and we use gypsum. And then, you know, for kind of those shorter windows where the compost -- you know, compost is really like a multi-year additive, right? You know, if I need something like, for the dill and cilantro -- that's a 60 day crop -- I'll put in, you know, blood meal or feather meal -- organic blood meal or organic feather meal -- something like that. But, you know, it would still all be, you know, in the ground and not in a soluble form. So it's really about the soluble-ness of it -- the more soluble, the more problem you're going to have in your organic system.

MS. BRUCH: Uh-huh. Thank you, Greg.

MR. RAWLINGS: Thank you.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Other questions from the Board?

Greg, I have a quick question. How would you define highly soluble?

MR. RAWLINGS: Liquid. I mean, that's a good one. Liquid. Anything that's liquid I would define as soluble. I mean, if it's, you know, if it's in a solid form, you're much less likely to have problems than if it's in a liquid form.

MR. ELA: So like fish fertilizer -- you'd put in that, but not soybean hydrolysate?

MR. RAWLINGS: You know, if it's a liquid fish, then no. You know, like I said in my in my written comments, you know, I can taste it. You know, I was growing strawberries for a long time and I can taste that fish for 30 days. If you fertigate it within the time the flower was formed, I can taste that fish. And I know what it tastes like because I've done it myself, you know, unfortunately. But everybody else on his call probably has that similar flavor profile; they

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

just don't understand why they have that, because almost all -- even organic strawberries grown in California use a lot of liquid nutrients, mostly based in fish.

MR. ELA: Great. Thank you so much, Gregory. We do appreciate your comments.

MR. RAWLINGS: Thank you.

MR. ELA: We're going to move on to Harry Rice, followed by Dave Chapman and Stephen Walker.

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

MR. RICE: Thank you. Hi. My name is Harry Rice and I am with the Global Organization for EPA and DHA Omega-3s or GOED for short, which represents the worldwide industry for EPA and DHA, the primary long-chain Omega-3 fatty acids found in fish oil. Our membership is built on a quality standard unparalleled in the market, and our mission is to increase consumption of EPA and DHA to ensure our members produce quality products that consumers can trust.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Today, I'm going to address the handling subcommittee's proposed options for modifying the current fish oil annotation. GOED supports sustainable fishing practices. While fish oil for human consumption is always a value-added byproduct of fish meal or seafood production, because the protein's value is much greater than that of the oil, there are those that remain unconvinced. For this reason, GOED views the modification to the fish oil annotation as an acceptable solution to address sustainability concerns and ensure that fish oil is compatible with organic practices.

In GOED's written and oral comments from the spring 2020 meeting, GOED recommended a modification to fish oil annotation that is aligned with option one from the handling subcommittee's February 18th, 2021 discussion document on the fish oil annotation. GOED continues to support this modification. That is, GOED supports the expansion of the current fish oil annotation to include the following: Sourced from fishing

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

industry byproduct only and certified as sustainable by a third-party certifier.

At the same time, we understand a limitation of this annotation is that the NOSB would need to create and maintain a list of acceptable third-party certifiers. For this reason, GOED also supports option two, which expands the current fish oil annotation to include the following: Sourced from fishing industry byproduct only and certified as sustainable against a third-party certification that is international social and environmental accreditation and labeling code compliant, or Global Sustainable Seafood Initiative recognized with full utilization of said scheme.

This option essentially ensures third-party certifiers are held to the highest sustainability best practices. It is GOED's opinion that option number three: Sourced from fishing industry byproduct only, and has either a green or yellow Seafood Watch rating or is eco certified to a standard recommended by Seafood

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Watch, is not a viable option at this time because the scope of fish species and locations assessed is much too limited. The unintended consequence of adopting this option could result in the removal from the market of many of the products labeled organic fish oil, and thus defeat the purpose of green-listing fish oil on the national list.

It's important to keep in mind that the goal at the end of the day is to ensure the consumers who prefer organic products have access to products made with non-organically produced fish oil since organic fish oil does not currently exist. As always, thank you for your time and tireless efforts.

MR. ELA: Thank you so much. Are there questions from the Board? I am not seeing any, so thank you for your commentary.

MR. RICE: Thank you.

MR. ELA: We do appreciate it. We're going to move onto Dave Chapman, then Stephen Walker and Nicole Dehne.

Dave, please start with your name and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

affiliation.

MR. CHAPMAN: Thank you, Steve. I'm Dave Chapman, co-director of the Real Organic Project. Listening to testimony Tuesday and today, I am struck by the sense of loss with many people around the National Organic Program integrity. I don't mean that we're defeated, but I do see many of our friends, including many of you on the NOSB who are being pushed or guided to what you think might be possible in the world of regulatory reform, rather than what you think is important or even crucial. We're told that hydroponics, for example, is a settled issue. Congress and the courts at this point seem to mostly agree.

So it is attempting to turn away from the big picture and find some small rule that perhaps we can reform. Perhaps we can make better standards for soilless production, getting less plastic, better fertilizers, three-year transition period, all the while ignoring that you can't have organic farming that isn't based in the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

soil; that isn't based on the fertility of a healthy soil. So as we decide where to focus our limited energies, I am reminded of an old story.

A guy comes upon a friend in the night, under a street light on his hands and knees. He says, What are you doing? He says I'm looking for my keys. And so he gets down on his hands and knees and helps his friend, and they look hard for quite a while. And finally he says to his friend, Are you sure this is where you lost your keys? And he says, No, I dropped them in the bushes up there, but the lights much better here.

And the point is, you know, we shouldn't just look where the light is good. We should look at where we actually lost the important things.

The meaning that we think that we can win. USDA's mistaken when they assist that hydroponics is a settled issue. It will never be a settled issue as long as farmers and eaters say it isn't settled.

In fact, I haven't lost my keys; I know right where they are. I'm just trying to help my friends who have lost theirs. So I urge you to join us and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you'll find a lot of company out there in the dark looking for where we actually lost the keys.

I wanted to -- before I end -- yes, if I could have a few seconds. My friend Linley Dixon asked me to apologize for a misstatement she made on Tuesday. She was actually quoting me about the percentage of CAFO eggs in America. The actually horrifying number is 75 percent of the certified organic eggs that would be decertified by implementing the OLPP, and I'm happy to share where I got that if you're interested. Thank you very much and thank you, Mary for translating.

MR. ELA: Thank you, Dave. Are there questions of Dave?

MR. CHAPMAN: Don't I get a gold star, Steve?

MR. ELA: Well, you get a silver star for finishing early. Maybe that's actually platinum star, I don't know, though I appreciate the time. I am not seeing any questions, Dave, so thank you again for your time and -- oh, Mindee has a question.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. JEFFERY: Let me jump in, Steve. I was a little late with my hand. I apologize.

MR. ELA: That's fine. Go ahead.

MS. JEFFERY: Dave, I -- thank you for your comments and for your passion for organics.

I just want to know if you think that we can really produce diverse, equitable, transparent, and accountable food system without democracy.

MR. CHAPMAN: I would say that's pretty unlikely.

MS. JEFFERY: Thank you.

MR. CHAPMAN: Think democracy is what we hope we see in action in the USDA and I would say it's a struggle.

MR. ELA: Are there other questions for Dave? Again Dave, we appreciate your thoughts and comments.

MR. CHAPMAN: Thank you, Steve. We're going to move on to Stephen Walker, followed by Nicole Dehne, and then Garth Kahl. So Stephen, please take the floor and state your name and affiliation.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. WALKER: Okay. Happy international Earth Day. I'm Steve Walker from MOSA. MOSA certifies 2100 operations and we've been a part of NOSB meetings for over 20 years.

We have some insight on the human capital discussions and I'll touch on some of the high points and common themes from our written comments.

Enforcement responsibilities are ever increasing. We're concerned that regulatory burdens are inequitable, increase stakeholder costs, and cause burnout. We support strong standards with detail, but compliance schemes don't always improve organic integrity can derail organic vision.

In these times, in our current system our route constraint is an inability to pass increasing financial burden onto farmers. We're very sensitive to financial struggles many organic operators face. At the core, we need strong agricultural policies that support living wages and consider true cost accounting in supporting organic systems. Capacity factors impacting

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

inspectors and reviewers are just a part of broad increasing demands. Besides collaboration or financial support, we need creative thinking on compliance verification methods, but our current burdens eat the time and space needed to develop creative solutions. For example, standard scale critical, as opposed to scale neutral.

Operations like organic dairies, or large dairies or importers have higher risk, but resulting enforcement mandates impact all operations inequitably, and folks with market advantages in our current system are less inclined towards systemic change, but our planet needs creative movement toward organic principles like health, ecology, fairness, and care. To keep organic accessible, we're seeking practical respite. Ideas include using risk assessment to focus our limited capacity, using remote technologies, revisiting the \$5,000 exemption threshold and more certification costs assistance.

Without relief, we anticipate more small farm certification surrenders. Towards

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

solutionary thinking, we support assistance for the NOSB with more autonomy. We appreciate the breadth of skills and time needed for effective policy work. Non-prescriptive assistance with your busyness and burden can better enable your necessary creative and critical thinking. NOSB members should decide where or how you need support. However additional support is used, we expect the NOSB to offer your own proposals and documents.

Related, as private representatives and public private partnership, we support more work plan autonomy with balance. For some festering enforcement concerns, NOSB discussion could have great value, but these aren't finding their way to work plans. Conversely some past agenda items seemed an inefficient use of your time. Thanks.

MR. ELA: Thank you, Steve. It looks like we have a question from Sue.

MS. BAIRD: Yes. Hi, Steve. Thanks for your both written and oral comments. I was

reading with interest and agreement however we're conflicted when these changes cost and where they strengthen requirement. Also makes certification less widely important, and you talk about the cost to your certifiers -- burden to the certifiers -- and I've seen in the past, and we all know that a lot of our entities do shopping based on price.

And if we, as the whole certification system -- and I'm talking inspectors through certifiers -- start increasing prices that is going to result in inequity.

So I guess -- I'm supposed -- I'm asking -- and then I also read about your risk assessment and you just commented on that -- I think that could very well be some of our answers, so could you elaborate on that? I really like this flow.

MR. WALKER: Yes. Well, it's easy to ask questions and harder to come up with answers.

MS. BAIRD: Right.

MR. WALKER: I think there are ways -- I don't know, you know, exact ways, but if we have to hold every operation to the same measures, the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

same checklists and so forth, for some operations that doesn't make sense. Of course, they have to follow the same standards, but maybe we don't need to dig as deeply on some operations and maybe we need more time and capacity to dig more deeply on other operations.

MS. BAIRD: Right.

MR. WALKER: So that's where risk assessment comes in -- not necessarily having to hold every single operation to the same checklist and so forth. The challenge comes in in determining that risk assessment and ultimately that could translate to not doing some of the oversight that we're doing right now, but it would open up ability to do more oversight where we don't have the capacity right now. So how we divvy that up and make those decisions is a challenge, but it seems to be a good way to go.

The way we do certification these days, it always seems to be about more forms, more paperwork, more things that we need to look at. And sometimes there might be ways that we can

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

choose, that we don't always need more for every operation, or maybe -- I don't know. There's creative ideas out there and we need to start thinking creatively and have the pause that it takes to come up with creative ideas. In the meantime -- I think I used the analogy of fixing the plane while we're flying. We're so busy swimming -- there's like there's a lot of good and analogies here -- it's hard to find that pause to come up with working solutions and testing possible new solutions. But it's a good opportunity considering different ways of doing things.

MS. BAIRD: Right. May I follow up, Steve?

MR. ELA: Yes, if you can both be -- succinctly, then that would be great.

MS. BAIRD: This reminds me -- and the inspector's name was David Conrad, and he taught some classes in IOIA on risk assessment. His background was as a bank auditors.

Do you remember that? Were you in those classes, Stephen?

He outlined the whole matrix of risk assessment based on past non-conformances, size of operations, complexity of their lines of audits, and I'm really -- this brings me back to that, and I forgot all about that; that's been several years ago, but this really seems like a possibility to me.

MR. WALKER: Yes, the Accredited Certifiers Association had a working group a while back that tried to determine some risk assessment criteria. Also, I think there were several training sessions at this year's NOP and ACA training that talked about risk assessment. The effort in these is to maybe come up with quantitative criteria for determining qualitative factors. So, you know, maybe we assign a -- on a one-to-five scale a bunch of different factors, and if you rate something a three versus a four, it's a judgment call, but then you get a number at the bottom, and that can indicate relative risk with a system that is imperfect, but at least it's start. And then what we do with that risk

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

assessment is maybe a solution to some of these capacity problems.

MS. BAIRD: The other correlation I'm thinking about is IFOAM on their group certifications --

MR. ELA: Sue, I'm going to --

MS. BAIRD: I'm sorry.

MR. ELA: I'm going to jump in very quickly here. We need to move on.

MS. BAIRD: Okay.

MR. ELA: You can ask but make it make it very short.

MS. BAIRD: No, it was just a comment. IFOAM has a risk assessment for the group certifications and it's something we might go back and look at.

MR. WALKER: IFOAM has a lot of resources.

MR. ELA: All right.

MS. BAIRD: Yes.

MR. ELA: Thank you. Thank you, Stephen. We really appreciate it. We are going

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to move on to Nicole Dehne, Garth Kahl, followed by Francis Thicke.

Nicole, please go ahead.

MS. DEHNE: Great. Thank you, Steve.

My name is Nicole Dehne. I'm the Director for Vermont Organic Farmers and we represent over 800 organic producers in Vermont. I want to thank the NOSB, as always, for all of your hard work and for the opportunity to give comment today on a few items. The first one that I want to talk about is hydroponic and container production. You know, the issue of certifying hydroponic production as organic, as Dave Chapman said, is not resolved.

We disagree with the assertion that hydroponic operations have been allowed to be certified since the NOP began. If you look at past NOSB meeting transcripts, it shows that to be untrue.

So when I looked back, according to NOSB transcripts from April '95, the Board's recommendation was to consider allowing hydroponics to be certified if very strict conditions, that the Board would elaborate in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

guidance material, were met. And this discussion of guidance and needing clarity around whether and how hydroponic operations could be certified continued until the 2010 NOSB recommendation. Then with that recommendation that clearly prohibited hydroponic production, they provided past discussion documents on the issue, they provided needed definitions, and they created a new section of crop standards that really defined how plants in containers and enclosures can be certified. So it's unclear to me why the NOP has not taken out the 2010 NOSB recommendation that prohibits hydroponics and add those suggested parameters for container production to the crops section of the NOP rule.

As an industry I think you're hearing for many of us to say that we still need guidance on this issue that allows consistency, that provides transparency for consumers, and ensures a level playing field for producers. So we strongly recommend that the NOSB add this issue to their work agenda, that they collaborate with

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

the NOP to determine what clarity is still needed in order to finalize that 2010 NOSB recommendation.

The other issue I wanted to comment on was biodegradable bio-based mulch. We are grateful for the work that the Board has put into this very complicated topic and we do support the proposal. We agree that we want to be careful about the effect of synthetic polymers and their potential to accumulate into small particles of plastic in the soil. We believe research should continue on this. However, if we're honest with ourselves, then research should be extended to include other areas of risk for micro-plastic contamination as well, which would include, you know, the current allowed use of polyethylene mulch as well as the use of compost where food waste is a feed stock.

So we suggest that the current listing be amended to remove the phrase "must be produced without organisms or feed stock derived from excluded methods". Doing this would ensure that BBM is evaluated in the same way as other materials

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

on the national list. So it would still prohibit any products that rely on genetic modification, and instead would only allow materials with kind of incidental GE usage as long as there's no GE modification in the final product. That's it.

MR. ELA: All right. It looks -- yes, thank you so much. Looks like we have a question from --

MS. ARSENAULT: Steve, you cut out there, but I think you called on Brian.

MR. ELA: Yes, I did call on Brian, so go ahead, Brian.

MR. CALDWELL: Okay, thanks.

Thanks, Nicole. I'm wondering how hydroponic and container production systems would relate to our strong focus these days that organic promotes biodiversity and can aid with carbon sequestration.

MS. DEHNE: Yes, I would suggest that it does disservice to our messaging in the industry right now about the potential that organic farmers have to mitigate and prevent climate change. And

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

like you said, that the requirement to promote and maintain biodiversity -- I agree that allowing soilless production kind of hinders the strength of that messaging.

MR. ELA: We have another question from Wood. Go ahead Wood.

MR. TURNER: Thanks, Steve.

Thanks, Nicole. I really appreciate your comments about a broader risk assessment framework for micro-plastics -- that was compelling to me. You said something provocative though, that got me got me concerned. Are you concerned about the use of compost that derives from food waste? Because I was -- that got me a bit concerned, because I --

MS. DEHNE: Yes. Yes.

MR. TURNER: I understand where you're going with that, but I'd love to hear you talk a little more about that, if you don't mind.

MS. DEHNE: Sure. I had a very kind of depressing conversation, which sometimes I ended up having with folks and I feel like, Oh God,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I almost wish I didn't know that information. But I had a conversation a few weeks ago with a composter in Vermont who's been composting for 25 years, and he had been working really hard with, for example, grocery stores to make sure that they separated their food waste from their plastic containers, right? And Vermont, as a state is doing this wonderful thing -- we are now requiring that everybody in the state compost, which is great, but we're sort of industrializing the system at the same time.

And in order to do that, what's happening now is when they go to mix the food waste, instead of separating it at the source, they just put all the food waste with the plastic packaging, all together in one spot. Then it gets hauled over to Maine, where they have a new machine that depackages, and what that means is it, like, chops up all the food and sort of separates the plastic, and often you'll get like .3 percent to 1 percent of all the food waste is still plastic, right?

Then that comes to the composters at

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

the feed stock, and then they use it as an ingredient to make compost. And what they're starting to find is that, you know, that we're basically -- got micro-plastics in the compost now, and now we're applying those to organic farm fields. So there's, like, this, you know, this foundational belief that compost is what is good -- we've, like, grown with our understanding that organic farming means, like, amending the compost, but now we're creating a compost that is very problematic in that way, so --

MR. TURNER: Yes, I get the concept, I'm just trying to understand how big of a problem this might be, and I know we're getting ahead of ourselves in terms of this risk assessment that you're talking about, which -- I love that idea, but don't even get me started on PLU stickers.

MS. DEHNE: Yes. Right. I learned about those, too. I was like, Oh, God, I'll do better.

MS. ARSENAULT: Steve, you're on mute.

MR. ELA: Sorry about that. I have one

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

very quick question before we move on. I didn't quite follow that you wanted the biodegradable mulch to remove the phrase about excluded methods; that the mulch couldn't contain excluded organisms but the process could. Did I hear that correctly?

MS. DEHNE: Yes. Well, I can just -- like, the layperson's version would be right now, when we add that annotation, we're actually making it so that BBM has a higher standard compared to other materials on the national list. So if you look at like microorganisms -- you know, sometimes it's easy to say this is genetically modified in this isn't, but sometimes it's harder and certifiers and material review organizations often have to make a call whether something's genetically modified or not, right?

So with the bacteria and the microorganisms, you know, it might be that the bacteria is being grown on genetically modified corn feed stock, right? They're consuming the corn, and we know it's genetically modified because most corn is, but because it's being consumed, and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

then the bacteria that is not in the final product, that process is allowed. But by leaving this annotation in with the bio-degradable bio-based mulch, we are basically saying that that would not be okay for biodegradable bio-based mulch, even though it's okay for microorganisms and dairy cultures and all the other examples on the national list.

MR. ELA: All right. Thank you for that clarification. I just wanted to make sure I followed your thought process there. Thank you so much for your comments.

MS. DEHNE: Thank you.

MR. ELA: We very much appreciate them.

We're going to move onto the Garth Kahl and then Francis Thicke and then Jennifer Landry.

So Garth, please go ahead.

MR. KAHL: Thank you. Dear NOSB Members and NOP staff, thank you for the opportunity to comment, and as always, thanks for your service. In that vein, let me make a quick plug before the proposal to provide support staff

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

for NOSB members. I think this is an idea that is long overdue. My name is Garth Kahl and I wear many, many organic hats, among those being a certified organic grower stockman, IOIA, accredited inspector, inspector trainer, peer evaluator, contract reviewer, and together with my wife Angela, co-owner of the organic consulting company Independent Organic Services.

You already have my written comments on a variety of topics and I'm drinking my coffee this morning sweetened with organic stevia to remind you to please tread softly and not eliminate ion exchange resins from the organic toolbox. But what I really want to talk about this morning is human capital, specifically what I think are the bottlenecks preventing the education and development of new inspectors and the retention of existing ones. If you are not scared by the specter of the new SOE rule and the tidal wave of additional inspections it will bring, you are not paying attention.

As an IOIA trainer who has taught in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

multiple countries, I truly believe IOIA has the best materials and the capacity to train hundreds of new inspectors a year, but this will not address the real bottleneck, namely apprenticeship. The current process for inspector apprenticeship is broken. Here's what I think can fix it. One: We need a well-funded, structured apprenticeship training that pairs veteran mentor inspectors with small groups of trainees and includes multiple days of mock and/or actual inspections.

IOIA has already created a pilot program for this and is seeking funders and hosts.

This training must be supported by the organic industry -- yes, brands. This means you, the NOP, and organic certifiers. Brands can help by contributing generously to the IOIA and by agreeing to host groups of inspectors on their farms and facilities. Certifiers can and must help by permitting apprentices to attend inspections of their clients regardless of whether or not they are hiring new inspectors or not. This is a textbook definition of a pre-competitive factor.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

No amount of on-boarding new inspectors will help close the current gap and looming gap in the industry unless we work to retain them. No amount of credentialing will help unless that system leads to a more uniform pay rate between certifiers. Currently, credentialing accreditation makes virtually no difference in what inspectors are willing to pay, or certifiers are willing to pay. During the accreditation audits, NOP auditors should be looking at how long inspectors spend on-site and asking about the ACA's pay rates.

If inspectors are doing three to four hours on a dairy or a large multi ingredient processor are only earning \$300 for that inspection, that inspector probably isn't qualified, or is too overworked to identify critical but little known threats to organic integrity, like milk withdrawal for flunixin, use of quats without adequate wash or rinse, and volatile amines in live steam. If you're scratching your head and reaching for your copy

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

of the rule, that's because this is specialized information and a skill-set that takes years to fully develop. We need --

MR. ELA: Well done, Garth.

MR. KAHL: -- to support and foster a professional class of inspectors.

MR. ELA: Are there questions for Garth? I have one with your lead off point with organic stevia. So do you think organic -- I mean, obviously the recharge materials needed to be on the national list and everybody agrees on that from what I can see -- but tell me again, on resins: Are you feeling like they should or should not appear on the list?

MR. KAHL: Well, I think there's a lot of FDA precedent that says they're a food contact surface in, I think we run the risk of going down an endless rabbit hole. So if we're going to call resins a food contact surface, but we're also going to need them to be on the list, then we also need to look at the resins inside barrels, the little o-rings, the flexible plastic inside transfer

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

pumps, you know, barrel liners -- there's myriads of plastics and materials that are classified as food contact surfaces.

If the Board does decide to take the approach to list resins -- obviously, you know, that's within your prerogative -- I would ask that you do so in a way that is not disruptive to the industry; that allows, you know, resins to get listed on the national list, and also allows, you know, processors and the food system in general to adapt and find those resin materials or substrate materials that are allowed. So, you know, if you need to do it, do it carefully so that you don't create disruptions in the supply chain.

MR. ELA: Great. We have one other question from Logan.

MS. PETREY: Hi. Thank you. Okay. I agree with you on the specialization of inspectors; think it's really important. Even regions have specializations within each commodity on the farmer, not on livestock or milk. Just a question: Do you think that specialization is more

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

important than location? Like having an inspector cover an area that's over a wide variety of different commodities or different types of industries?

MR. KAHL: That's a good question. I think that, in general, we need training that increases, you know, the capacity of inspectors in all regions. Obviously, you know, the pandemic has shown that we can't depend on flying inspectors all over the country. And that, you know, carbon footprint too -- I have probably, you know, there's a circle in, you know, Hades for me in terms of my carbon footprint as an inspector. But I think we need to do both.

So I think -- and Steve from MOSA actually talked about this. You know, we need to potentially look at doing risk assessment -- so maybe three years out of five, a normal inspector goes to that -- or an average trained inspected goes to that facility, but then, you know, two years out of five or one year out of five, maybe a specialized inspector who has particular

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

expertise, say, in auditing like Sue brought up, goes to that facility. I think there's ways to address that -- you know, obviously, we can't be bringing inspectors -- it's not sustainable to fly inspectors all around the country and all around the world.

MS. PETREY: Okay. Thank you.

MR. ELA: We have another question from Nate.

MR. POWELL-PALM: Thank you for your comment, Garth. I just wanted to ask: When we talked about the burden on farmers and the number of inspections being done, I was wondering, do you only find fraud in large operations?

MR. KAHL: No, absolutely not. You know, I find fraud and all scales of operations, and particularly, you know with dairy farmers, I find failure to meet the 30 percent DMI requirements all across the board; all scales. Everybody's facing economic pressures and hardship. So a lot of people say, Oh, well, you know, a large, thousand-cow dairy -- there's no

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

way they can be compliant. But honestly, I've seen issues -- feed audits that come up really funny looking or lack of sufficient DMI on people that are milking 60 or 70 head as well.

So no. Fraud is -- scale is not a barrier to entry for fraud, and in fact, just anecdotally, I find less fraud in larger entities simply because they have a brand to protect and cheating is going to be that much more costly to them. They don't want to damage their brand to save a few thousand dollars. Now, obviously, you know, this is not absolute, but -- no. Fraud cuts completely across the Board and can be found at all scales.

MR. POWELL-PALM: Thank you so much for that. And just one more thing if I may follow up, Steve -- could you just speak a little bit more -- how mature is the program that IOIA is putting on to have a more structured mentorship for organic inspectors and are brands able to now participate?

MR. KAHL: Yes. So there is a pilot program; it came out of a very dedicated membership

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

committee of veteran inspectors -- the apprenticeship committee. There is a pilot program. There's a proposed budget and brands can go to www.IOIA.net and make a contribution, and they can contact IOIA Margaret Scoles and talk about how they can host one of these apprenticeship at their farm or processing facilities.

MR. POWELL-PALM: Thank you so much.

MR. ELA: Kim has a question -- Kim, can you make it quick?

MS. HUSEMAN: Yes. Just quickly here, Garth, how long is that apprenticeship and what do you think is an equitable amount of time to decrease the learning curve for a new inspector?

MR. KAHL: So the current apprenticeship as proposed is five days -- we're calling it an apprenticeship boot camp -- so it's five days of on-the-ground inspections with a mentor inspector. So the students would write, you know, five inspection reports that would be reviewed by the mentor inspector, and then that's followed by one day of didactic learning that might

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

bring in experts. So for example, experts on fraud, experts on business management -- because let's face it, being an independent inspector is running a business -- experts on veterinary medicine, pasture management, and that kind of thing.

The other component of the apprenticeship, which is also key, is ongoing mentorship for one year after the apprenticeship.

So that apprentice inspector, they're going to go out, they're going to start working, but they may have questions. They may have questions, -- you know, what do I do at an unannounced inspection, or I have this grower who's really resistant or is really, you know, throwing up a lot of roadblocks. And they're going to have that inspector, basically, the mentor inspector on speed dial. So for the next year they can call them up and the mentor inspector will provide them with guidance and help and support, in addition to, of course, what the certifier would do, but oftentimes you can't get someone on the phone at

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

the certifier's inspection department. So the idea is long-term -- you know, a year or more of guidance and mentoring.

MS. HUSEMAN: Thank you.

MR. ELA: Thank you for your comments, Garth. Very much appreciated. We're going to move on to Francis Thicke, Jennie Landry, and Aaron Gardner after Francis. So Francis -- former NOSB member during my term on the Board.

So go ahead, Francis.

MR. THICKE: Thank you, Steve. Actually, that's a good segue because what I'm -- oh, I didn't even say who I am. I'm an organic crop and dairy farmer from Iowa, and I'm going to read to you excerpts from a letter from former NOSB members to the Secretary of Agriculture, Tom Vilsack. This letter was just completed this morning; we have 40 former NOSB members who have signed on. And I don't know if I can -- this share screen thing works or not -- it's disabled. Okay. What I'm going to do is hold this up, if you want to look at who's doing it while I'm speaking --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

who's signed onto his letter. You may have to use a large screen. I'm just going to read excerpts.

Dear Secretary Vilsack, we the undersigned have all served on the National Organic Standards Board. Our tenure on the Board has covered the full span of the NOSB's existence from 1992 until the present day. We are writing to share with you our concern that the integrity of the National Organic Standards has eroded significantly over the years. We think the erosion of the organic standards is in violation of the Organic Foods Production Act of 1990, and it is undermining consumer confidence in the integrity of organic food and the confidence of real organic farmers and the integrity of the USDA National Organic Program.

In the last 11 years, the National Organic Program has failed to bring a number of key NOSB recommendations to rule-making. We urge you to take immediate action on these recommendations. Number one, the production standard for terrestrial plants in containers in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

enclosures. This recommendation called for the prohibition of organic production in the Organic Program. Number two, USDA published a proposed rule to close the loopholes relating to the origin of livestock in 2015. This rule would clarify that after a one year time, no new animals can transition to an organic farm.

Number three, the National Organic Program finalized a comprehensive set of animal welfare standards referred to as the Organic Livestock and Poultry Practices Rule in January 2017. This has not been implemented. The OLPP should be immediately reinstated in its final form.

A couple of other issues: The pasture compliance program needs to be fixed, and green fraud -- in spite of congressional funding, we still haven't had significant action taken to stop this fraud.

So while this letter contains key issues, there are other issues of importance not raised here. The National Organic Program can only thrive if it is built on public trust. We urge the USDA to act on these NOSB recommendations

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

aimed at enhancing the foundational goals as spelled out in the Organic Foods Production Act.

And so this letter will go to Secretary Tom Vilsack today.

MR. ELA: Thank you, Francis. Are there questions from the Board? I'm not seeing any. We always appreciate your comments and good luck on your dairy.

MR. THICKE: Thank you, Steve.

MR. ELA: We're going to move onto Jennie Landry, Aaron Gardner, and then Harriet Behar.

So Jennie, please state your name and affiliation.

MS. LANDRY: My name is Jennie Landry.

I represent DSM Nutritional Products, manufactures 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 regarding proposed fish oil annotations to address environmental concerns. Out of the three

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

options proposed in the handling subcommittee's discussion documents, DSM support options one and two that require a third-party sustainability certification because they directly impact and improve the sustainable sourcing official for human consumption.

They are also clear and enforceable and are not overly burdensome because many fish oil manufacturers already have reputable certifications in place. We agree with including organizations who can accredit certification schemes to meet global best practices, as in option two, although we'd like to emphasize that it is business critical to allow as much flexibility as possible. ISEAL and GSSI in combination would allow manufacturers more options with third-party certifiers, which is important for our diversified and complex supply chain.

DSM does have reservations with option three that relies on an assessment and reading from Seafood Watch because it is not as clear or enforceable. First of all, we found that the scope

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of fish species in locations assessed is very limited, especially for small pelagic fish species that are typically used in fish meal production.

There is no rating for many of the fish species in locations that are the primary source for food grade fish oil used in organic products. In this case, compliance cannot be verified. It is not known if a certifier would interpret this as a non-compliance, potentially and unnecessarily reducing the availability of organic-compliant fish oil.

Option three would be the most difficult to enforce because sources of crude oil are highly confidential for fish oil manufacturers and will not easily be available for organic processors or certifiers to verify. In addition, a fish oil manufacturer's supply chain can be very complex and widespread. Often, multiple blends, fish species, and sources are required to meet supply demands plus demands for Omega-3 EPA and DHA, which are naturally occurring and can vary with every lot of crude fish oil.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

It is not feasible for an mechanic processor or certifier to verify fish oil manufacturers' compliance. They would have to rely on the fish oil manufacturer to comply. Therefore, option three also creates additional complexity and obligation for fish oil manufacturers to manage and demonstrate compliance. This responsibility is not value-added as the fish oil supply has already been thoroughly assessed and certified as sustainable, as in the case with DSM. I'd like to thank the NOSB for your time and the opportunity to provide comments.

MR. ELA: Thank you very much. Are there questions from the Board? I am not seeing any, so thank you so much for your comments. Greatly appreciate them.

MS. LANDRY: Thank you.

MR. ELA: We're going to move on to Aaron Gardner, followed by Harriet Behar, and then Meagan Collins.

So Aaron, please state your name and

affiliation.

MR. GARDNER: Thank you, Steve. Aaron Gardner; work for Organic Valley/CROPP Cooperative, certification senior specialist on the handling side of our business CROPP/ Organic Valley. And thank you, Steve, and current and past board members for all of your hard work and dedication to organics. CROPP is the nation's largest organic independent and farmer-owned co-operative, organized in 1988. We represent nearly 1900 certified organic farmers in 34 states and three foreign countries achieving over 1.1 billion in sales in 2020, so we respectfully submit the following comments pertaining to animal enzymes and cellulose.

Animal enzymes -- we use them in the form of lipase in the production of our delicious organic blue cheese. Many aged cheeses do not hold up to the process when non-animal based, vegetarian rennet is used. To the best of your knowledge, there is no lipase formulation available derived from organic livestock and the loss of this vital

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

processing aid could greatly harm the organic artisan cheese market. These enzymes are accepted for use in many other countries -- Canada, the EEOC, Codex, IFOAM, and Japan. They're listed in the rule at 205605, and we support the continued listing of animal enzymes on the national list.

Cellulose. We use cellulose in two applications -- cellulose in casings for organic hot dogs and sausages, and also in shredded cheese.

The casings are extremely important to the organic hot dog and sausage production. The casings are permeable to allow smoke, water, and air to pass through the hot dogs and sausages. They're made from virgin wood pulp and processed to dissolve the cellulose and reform it into casings. There's currently no organic source of raw materials. The only alternative are plastic casings and they don't function in the same way, as they don't allow water and air to flow -- to do that cooking process and flavoring.

Powdered cellulose is used by us as an anti-caking material for shredded cheese as well

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

as graded Parmesan cheese, and there are no other materials available that function in the same manner at this time. For this particular use, powdered is an acceptable term and we're not advocating for any descriptor to this material that may preclude the use of cellulose for peelable casings. We support the continued listing of cellulose on the national list for regenerative casings and as an anti-caking agent. So please keep cellulose as currently annotated the national list. Thank you.

MR. ELA: Good timing, Aaron. Do we have questions from the Board? Kim has one.

MS. HUSEMAN: Hi, Aaron. Thank you for your comment. Just out of curiosity, when we talk about animal enzymes and the availability of animal enzymes from organic livestock, can you expand on any opportunity that you've seen in that market space or what barriers might be there?

MR. GARDNER: I haven't seen that there is -- the number of organic livestock available and what I've been told by our specialist in product

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

development, the numbers just aren't there to provide us with the amount of the enzyme that would be needed for production.

MS. HUSEMAN: Thank you.

MR. GARDNER: Yes.

MR. ELA: Other questions from the Board? I'm not seeing any, so thank you so much for your comments. Very much appreciated.

MR. GARDNER: Thank you.

MR. ELA: We're going to move onto Harriet Behar, followed by Meagan Collins, and then Tim Stemwedel. Harriet's another former NOSB member during my term. Please go ahead.

MS. BEHAR: Hello. Can you hear me?

MR. ELA: We can.

MS. BEHAR: Okay. My name is Harriet Behar, a recent former Chair of the NOSB, and my Wisconsin farm has been certified organic since 1989. Ammonia extracts -- the NOSB needs to review all highly soluble fertilizers and develop a use policy. Rather than looking to restrict the percentage of use for any time, a better way is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to restrict the use to times of emergency, such as an exceptionally cold spring, or heavy rains, or other extreme conditions that are not typical for that region.

Organic producers are mandated to approach farming using systems first before the use of materials. By allowing highly soluble fertility inputs at any time, our regulations ignore this mandate and mirror conventional ag, which rely upon a few highly soluble nutrients rather than through the complex ecosystem of our soils. Both existing and especially new producers would be better served through clarifying that organic farming does not just substitute prohibited inputs for approved ones, but instead builds soil resilience as the farm matures.

The NOSB could use help in the development of their proposals, but please be careful -- NOSB members now express their own valued perspectives as well as the voices of their stakeholders, and it would be a tragedy if this was lost. NOSB members are not bureaucrats, but

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

bring a passion that is important to see in your documents. Please do not give you up your mandated responsibility in deciding on the review of ion exchange materials. It is a slippery slope to give the NOP more and more say over the materials list.

I urge you to build a more equal partnership with the NOP to gain more control over your work agenda. You are there to represent the important needs of the organic community, and that should not be thwarted by political road blocks, which have happened at the USDA at times. Specifically, the review of greenhouse and both field and indoor container production was approved by the NOSB as a work agenda item, and then abruptly ended by the NOP. This is an area where inconsistencies and problems are rampant and must be revived by your review.

Lastly, I asked NOSB to push the NOP to start rule-making on the native ecosystems proposal and congratulate the Wild Farm Alliance for their excellent comment on how to implement it, and that you referred to the NOC written

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

comments on paper pots and biodegradable mulch film for my thoughts on those materials. Thank you.

MR. ELA: Thank you, Harriet. Much appreciated for your thoughts. Are there questions? Looks like Logan has one.

MS. PETREY: Hi. Thank you. That was a very interesting comment that you had about the use policy being on when needed. Curious -- how would you justify that need? Would weather data showing an amount of rain for a certain area 00 would that justify the use or is that how you would measure that? Or would you be expecting a tissue analysis like we find in other products like calcium chloride with the deficiency and calcium?

In my opinion, if you're low on nitrogen, that can be too late sometimes, especially if you're a leafy veg that's selling, you know, for a lot of aesthetics, but do you have a comment on that?

MS. BEHAR: Yes. So it's very similar to other items in our pest management hierarchy.

You have to show that you tried through other systems, methods, to accomplish what you needed

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to, but then they were climactic conditions that caused you to need this highly soluble fertility input, you know, at that time. And of course, if it's being used year after year after year, there must be an issue with the system.

And I would, you know, suggest that it go through the NOSB process where you get input from the public on what it might look like. You'd hear from certifiers, what they need to see, what producers can provide, and that sort of thing. So I think, rather than -- I know Steve was asking a lot of people what percentage of ammonium extract might be permitted; I think it needs to be looked at differently as used only when the system has failed, usually by outside, you know, climate or, you know, that's really most of the time -- weather -- that would make it so what you had done in your system did not provide the nitrogen you needed, and you had to then rely.

MS. PETREY: Correct. So in your opinion, would you be able to prove that you needed the product if you were able to show that you made

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

applications of these natural fertilizers that would be able to grow the crop, however, you had a climactic events. And these are emergencies, so typically there's there is a timeliness to it, and so the data had taken would just be the climactic event and you can assume that things have leached out, you know, available nitrogen that's been made. So if you are adding the correct amount of nitrogen that you will need to grow the crop, however, come into a climactic issue, would that be enough to justify the use?

MS. BEHAR: Well, I think that would be one aspect, but again, I think it should go through the NOSB process and there's some -- you know, we'll hear from soil scientists and others who might have other aspects that would be useful.

So we have good guidance to producers and certifiers on how an emergency use would be implemented.

MS. PETREY: Okay. Thank you.

MR. ELA: Harriet, quick question; my own. How would you define highly soluble

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

fertilizers?

MS. BEHAR: I know when you asked the other person. Well, I guess when we see it. I didn't really prepare for that. But, you know, it's mostly liquid feeding that would be given to plants that have a quick uptake.

MR. ELA: Okay. Great. Thank you so much, Harriet. Didn't need to put you on the spot there, but Brian had one quick question.

MS. ARSENAULT: Steve, I actually don't think that's our Brian.

MR. ELA: Oh, sorry. Yes. I didn't look fully. So we're only taking questions from board members, so -- all right, Harriet. Thank you so much as always.

MS. BEHAR: Thank you.

MR. ELA: Appreciate your thoughts.

MS. BEHAR: Thanks to the full board for all you do.

MR. ELA: We are going to move on to Meagan Collins, then Tim Stemwedel, and Daren Stemwedel.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So Meagan, please go ahead. State your name and affiliation.

MS. COLLINS: Can you hear me okay?

MR. ELA: We can. Go ahead.

MS. COLLINS: Okay. Great. My name is Meagan Collins and I'll be commenting on behalf of the Accredited Certifiers Association. The ACA is a non-profit created to ensure consistent implementation of the USDA organic regulations through collaboration and education of accredited certification agencies. Our membership includes 63 certification agencies worldwide, including all 46 US-based certifiers. Thank you for the opportunity to provide comments to the NOSB on the most recent proposal on human capital management.

We would like to thank the NOP and NOSB for the work that went into developing this proposal. The proposal does an excellent job highlighting the barriers for inspectors to get started and the reasons inspectors leave. However, the issue is deeper than paying inspectors more for their work and this solution will not fully

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

address the inspector shortage issue. The organic certification process has become increasingly more complicated and globalized and represents a large diversity of operations from small farms to large processors. Thus, there's a greater need for more qualified inspectors and ongoing training. In order for certifiers to pay inspectors higher fees based on these qualifications, certifiers need to increase the costs they charge their clients to obtain certification.

Another issue to address is the cost differential between certifiers which creates competitiveness among certifiers and inspectors because there are no standardized fees. There are benefits to that, but also concerns. For instance, we do not know what certifiers pay their inspectors, and whether larger certifiers are out-competing smaller certifiers for inspectors, or whether inspectors are reducing their fees to secure work with certifiers. Because there is no uniformity among inspector pay, certifiers do not know where on the spectrum they fall for inspector

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

pay.

Furthermore, the industry should consider organic inspection and certification review as a professional career path to address the issue of how inspectors are treated in the industry. Standardization and education is needed. This may involve a certification or accreditation program for inspectors.

Finally, the pandemic has shone a light on what can be done differently to improve work conditions for inspectors, specifically requiring less travel. Many tools can be utilized now, including virtual inspections to improve reporting and resolve some of the issues related to flexible work-life balance for inspectors.

With that being said, we would like to emphasize that the organic industry needs additional financial support to address these human capital issues. The NOP should be funded in a more appropriate fashion through governmental policy and fiscal allocations. Organic food is important to the American people, and in order to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

protect the industry from fraud, it should be supported by taxpayers. Increasing certification costs while reducing cost share programs can price small farmers out of certification and undermines their value to the industry.

The ACA welcomes opportunities to be involved in future working groups to develop collaborative strategies to increase the trained inspector pool, and can also work on educating certifiers on creating awareness of the value of experienced inspectors and reviewers. Thank you.

MR. ELA: Gold star for you, as well.

Thank you so much for your comments. Are there questions from the Board? Brian has one.

MR. CALDWELL: Yes. Thanks, Meagan.

I was really intrigued by your comment that basically the whole system maybe could be funded in a different way, and I wonder if you'd expand on that. And in particular, I've been thinking more and more lately about the sort of conflict of interest there is of organic farmers paying for their own certification, engaging specific

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

certifiers, and that sort of thing.

MS. COLLINS: Right. We did discuss this as a working group and I don't have, like, very specific examples of how it can be more appropriately funded, but right now we have this very, you know, capitalist system. So certifiers are competing against each other, they're reducing their fees to obtain clients, and that really falls on the inspector -- they're not getting paid enough to do their work, and at the same time, you know, farmers are being out-competed as well, because they can't, you know, get money for their crops because certification keeps increasing and things like that.

So it all really goes back to -- it either falls on the consumer, and so I think if we really value the organic industry, and -- because it shows that consumers really do value it, you know, congress should step up and start, you know, considering that. I mean, I don't know if that answers your question. I'm sorry.

MR. CALDWELL: Well, thanks. Yes. I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

think there's a lot of different aspects to it and I appreciate your thoughts.

MR. ELA: Any other questions from the Board? Thank you so much for your comments. We're going to move on to Tim Stemwedel and then Daren Stemwedel, and I think after Daren gives comments, we will take a short break. We're running just a little bit behind, so just want to point that out.

Go ahead, Time. You have the floor and state your name and affiliation.

MR. T. STEMWEDEL: Hi. I'm Tim Stemwedel, but first good morning and Happy Earth Day to all. I'm a certified crop advisor and owner of California Organic Fertilizers. I've spent most of my career developing and manufacturing organic products, including natural ammonia. I have three things to comment on: the petition, the technical report, and farm systems.

The NOSB has been asked to place natural ammonia fertilizers on a list of prohibited substances. Doing so would place one of two forms

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of nitrogen utilized by crops into a category currently occupied by arsenic, lead, and nicotine.

It would place an element essential for life on Earth onto a list of prohibited substances. The petitioner confirms AE as a natural product by filing this petition, but the documents provided are for synthetic ammonia. The petition's full of inaccurate information, most of which has been thoroughly discussed in written comments by PhD soil scientists and other stakeholders. I urge the NOSB committee to revisit these comments and to reach out to the authors for further clarification.

I asked you to reject this petition.

It has no scientific or legal basis to move forward. The natural ammonia is the same as the ammonia in other common inputs. It stimulates the soil biome the same way, it meets NOP regulations and the spirit of organics by recycling, sequestering carbon, and building the soil to increase microbial activity. It does not have the social justice issues associated with many other

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

inputs. The TR states seven times that natural ammonia is the same as synthetic ammonia. If this for true, none of us would be talking about it today. It would already be prohibited.

How did we get to the point to where we're willing to believe that a natural material is the same as the synthetic way? That's like saying air and water are the same thing because they contain hydrogen and oxygen. The TR repeatedly states there is no information on AE and instead writes about synthetic ammonia. The committee asked for more information on natural ammonia -- that's not what you got. If this petition moves forward, the TR should be discarded and replaced by one done by qualified soil scientists to understand the soil food web and organic systems.

In closing, organic farm plans have a section on nutrient management. These plans will not allow AE to became the sole or main input. As a CCA, I always recommend diverse use of nutrients including compost, cover crops, and dry

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

fertilizers, leaving liquid products -- and everybody's talking about soluble nitrogen products -- as a tool to be used as needed. Thank you very much for listening and for all of your services to organics.

MR. ELA: Thank you, Tim. Carolyn has a question for you.

DR. DIMITRI: Thanks very much for your comments, Tim. Could you clarify one point that you made, where you said it doesn't have the social justice problems that are associated with other inputs. Can you be more explicit about what you meant by that?

MR. T. STEMWEDEL: Well, we see products in the market -- things like seabird guano that's being scraped off of islands that are essentially being harvested by people that are being paid, you know, less than a few dollars a day to do that work. We also see a large amount of liquid fish materials coming in out of Asia, that's coming from areas severely damaged environmentally, as well as the people there that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

are doing this work that, many times are under slavery.

DR. DIMITRI: Thank you for that clarification.

MR. ELA: Amy has a question.

MS. BRUCH: Thank you, Steve. Thank you, Tim. I really appreciate your written and oral comments, and your experience as an agronomist as well. I was reading one of your comments that you've made and I'm just going to quote it real quick. You say, In California, organic produce farms commonly apply nitrogen or nitrogen manure-based inputs at levels that far exceed nitrogen input levels on conventional farms.

So I was really curious about that comment, and then in conjunction with your oral comments, how you spoke about the nutrient management process that was more comprehensive with cover crops and crop rotations and such. So when I was reading your written comments, it looked like the main fertility sources for strawberries were ammonia extracts and manure. So can you

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

highlight and connect what you said orally with what you wrote in your written comments for me?

MR. T. STEMWEDEL: Yes. There's a lot of things at play. We're -- you know, it's an arid region in California, in the West. So we have a lack of water, so we're seeing more and more drip irrigation systems coming into play. And many of these crops are on very long time frames -- like strawberries can be in the ground 180, 200 days.

You know, trying to do a pre-plant on strawberries, to get through the whole crop isn't really possible so liquid products are really essential for that.

Relative to the excess fertilizer applications, what we see is -- it's kind of like, well, I guess it's best described as -- crop nitrogen demand is a curve that is not synchronous with the nutrient availability from all the sources that we put out there. This is why we needed different inputs. So to have enough nutrients available, we could pre-plant excessive amounts in order to cover demand periods, but that results

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

in excessive total nutrients being applied, and also into accumulation of insoluble nutrients such as phosphorus.

MS. BRUCH: Okay. Thank you.

MR. ELA: All right. Other questions from the Board?

Very quickly, Tim, I have one. Obviously, ammonia occurs in the soil and from other products. I think the ammonia extract is referred to as essentially a pure ammonia. How -- you know, for applying pure ammonia versus those other products that contain much smaller amounts of ammonia, are you saying the pure ammonia reacts the same?

MR. T. STEMWEDEL: Yes, it does. It, you know, it goes through a biological process in the soil. You have to look at it like -- soluble nitrogen in general, other than sodium nitrate, doesn't bypass the soil. It doesn't matter whether nitrogen's soluble or not. If you're putting down an ammoniacal form of nitrogen, it's still going to -- it gets assimilated very quickly

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

into the soil biome by the microbes. There's nitrobacter, nitrosomonas microbes in the soil that are just waiting for nitrogen forms to be able to put them in a bioassimilation-type form.

So, you know, and also you're saying, well, pure form of nitrogen -- well, we're not talking about just anhydrous ammonia here; we're talking about an ammonia form of nitrogen that would be there with carbon dioxide, you know, with it, there would be different forms of carbon, there's citric acids -- there's all kinds of other -- you know, since ammonia is a weak base, there's going to be some acids in there along with it that counter that.

MR. ELA: Great. Thank you for that clarification. All right. We're going to move on. We have Daren Stemwedel -- I'm not seeing Daren on the line. Tim, are you switching connections here? Yes? Okay.

MR. D. STEMWEDEL: Hi.

MR. ELA: Perfect. We thought that might happen. So Daren, go ahead. State your

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

name and affiliation.

MR. D. STEMWEDEL: Okay. My name is Daren Stemwedel, also with California Organic Fertilizers. Thank you for the opportunity to comment today on natural ammonia. I oversee the formulation and manufacture of our products including testing, traceability, and record-keeping, and I worked directly with our MRO to conduct auditing of liquids with greater than three percent nitrogen.

I also happen to be an attorney, and in 2009 I published a comment in the San Joaquin Agricultural Law Review advocating for greater regulation and oversight of VIT (phonetic) fraud in organic fertilizer production. I'd like to speak to you today regarding this issue of fraud.

So as you know, fraud is an attack on the integrity of the organic brand and this means everything to California Organic Fertilizers. We're a family-run business; we are founded in 1990, the same year the OFPA was enacted. We support growers who run the gamut from small U-pick

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and CSA farmers to the major brands you see in the grocery stores. Our success completely depends on their success, which in turn depends on consumers continuing to choose organic, and the continuing viability of that organic brand.

The petitioner asked you to apply a fraud standard here that's unreachable for any organic input, singling out one particular class of organic fertilizer as a fraud risk is arbitrary and unfair, given that any organic fertilizer could be adulterated. The OFPA makes no provision for using fraud as a criteria to place the non-synthetic on the national list. An essential element like ammonia does not belong in a section of the national list traditional reserved for the likes of arsenic, lead, strychnine, and nicotine.

Natural ammonia products are no more susceptible to fraud than other organic fertilizers. In fact, due to the additional auditing of high-nitrogen liquids, they're less susceptible. For example, pelleted products such as chicken manures can be adulterated with

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

something like ammonium sulfate, which is easy to obtain and cannot be detected using lab testing, because chicken and your naturally contains both ammonia and sulfur.

This difficulty of lab verification is also true of other commonly used inputs with complex elemental profiles such as fish, corn steep, or sugar beet byproduct, many of which fall under the three percent auditing threshold. While input fraud is always possible, the truth is, instances of it are exceedingly rare. The MROs, certifiers, and growers do a great job of regulating the market, and due to food safety rules, you actually have a really high degree of trace ability on organic fertilizers. As you've heard from others, numerous safeguards exist to prevent fraud.

Finally, I just want to go on record with a formal request that the technical report on ammonia extracts be set aside and taken out of consideration. It was written by a chemist with no apparent agronomic or soil science background

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and analyzed synthetic ammonia as a substitute for natural ammonia, with little to no effort to obtain data regarding the actual material sought to be prohibited by the petition. They certainly didn't contact us, one of the very few manufacturers of it. As proponents of organic, I would hope we can all agree that it matters a great deal whether material is synthetically or naturally derived.

With that, thank you for your time and I'd be happy to answer any questions.

MR. ELA: Gold star for nearly exact time. Are there questions from the Board? One quick question: When you -- I'm a little confused by statements such as yourself where the natural and synthetic ammonia are different compounds. I don't see how they're different, so could you clarify, you know, what the difference is between the two?

MR. D. STEMWEDEL: It's kind of how you look at it. I mean, obviously, synthetic ammonia is going to be made using a Haber-Bosch process that has a lot of environmental cost with it. Our

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

product is made using a biological process similar to what would happen, you know, in a soil plant -- you know, in the soil food web. You know, you can also look at an organic carrot and a synthetic carrot and say, Well, these are both carrots, and they're made out of carrot, and they're the same thing. Well, it's not true. You know, the system and the process by which it's derived matters a lot.

You know, also, it's -- the context really matters here in how it's applied. You know, this is a product with a pretty low percentage of nitrogen that's diluted when it's applied. You don't end up with a massive amount of pounds of ammonia going onto the soil compared to something like anhydrous which is injected directly into the soil. So you really have to look at the greater context here of how the product's made, how it's stored, how it's handled, how it's used -- all of these things are different than synthetic ammonia.

So if you take an approach that just says, Well, the molecule's the same in synthetic as, you know,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

natural, you're really missing the greater picture -- and I mean, really, this is what organic is about, right? It's that greater picture of -- can you make something synthetically, or can you make it using natural processes? And I think you really need to take a closer look into that.

MR. ELA: Logan, you had your hand up.

Did you want to ask a question?

MS. PETREY: I did; it was already answered. Thank you, though, Steve.

MR. ELA: All right. Just wanted to make sure we covered it. All right. We're going to take -- and Daren, thank you for your comments. We appreciate them. We're going to take a short break; we're running a little bit behind, so if we could just take a ten-minute break. After the break, we've got Rhoda Benson on deck with Nate Lewis and Sarah Pinkham coming up. So we will start with Rhoda, and we will be back in ten minutes. And that would be at the top of the hour. So -- all right. Take care.

(Whereupon, the above-entitled matter

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

went off the record at 1:49 p.m. and resumed at 1:59 p.m.)

MR. ELA: Okay. We're going to dive back into it. I do want to acknowledge -- I meant to do it several speakers ago -- that we now have Asa Bradman with us, as well. He joined, actually, I think three or four speakers back, but just for the record.

Okay, our first speaker is gonna be Rhoda Benson, followed by Nate Lewis, and then Sarah Pinkham. And, Nate, if you are on the line, could you let us know. We're not seeing your number right off here. So, Rhoda, please state your name and affiliation and you have the floor.

MS. BENSON: Good afternoon. My name is Rhoda Benson. I am the Technical Issues Specialist for the Northwest Horticultural Council representing organic apple, cherry, pear production in the Pacific Northwest. I appreciate the opportunity to speak today on the upcoming sunset review of organic materials listed in the most recent NOSB Materials Report. The Council

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

has submitted detailed written comments to which I direct your attention for more detailed information. In short, the Council supports continued listing of ozone, gas, peracetic acid, and the four chloride materials by the NOSB. Today I will highlight the importance of our growers and packers of these sanitizers and disinfectants under sunset consideration.

First, produce is grown in the open environment where dangerous and sometimes deadly pathogens exist and it is impossible to eliminate the potential for these pathogens to reach the surface of produce in the field and, therefore, it is critical for growers and packers to have the tools necessary to combat these pathogens before produce reaches a consumer. This includes cleaning the produce itself, as well as cleaning and sanitizing all food contact surfaces, including water, to reduce the potential for cross-contamination. Protecting public health is the top priority for the tree fruit growers and packers we represent. We encourage the NOSB to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

not make it more difficult for them to deliver a safe and healthy product to consumers by limiting the availability of safe and effective materials used to manage microbial contamination.

Growers and packers need to access more than one type of sanitizer to achieve the critical objective of delivering a safe and healthy product to consumers. Each sanitizer and disinfectant has specific benefits that make it the most effective and appropriate choice in certain circumstances.

It is also important to note that different products with different modes of action are regularly used in post-harvest handling to cover the vast array of public health micro-organisms, which include viral, protozoa, and bacterial targets. Therefore, growers and packers must have access to multiple products to combat the full plethora of pathogens of human health concerns.

For example, a grower may use peracetic acid to sanitize food contact surfaces in the field. Once the fruit reaches the packing house, the packer may use calcium hypochlorite as a wash

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

water sanitizer and peracetic acid in spray bars.

At the end of the day, the lines may be sanitized using chlorine dioxide or ozone, while sodium hypochlorite might be used to sanitize the cold storage rooms. This regiment changes when environmental monitoring data show that effectiveness of sanitation on particular food contact surfaces is reduced.

In addition to the need to manage these pathogens from multiple directions, the maintenance of multiple sanitizers is also important because of concerns that reliance on a single type of sanitizer could lead to evolution of pathogen resistance. Finally, it should be noted that in addition to protecting human health, these sanitizers are needed for growers and packers to comply with the requirements of Food Safety Modernization Act rules. Thank you.

MR. ELA: Well done, Rhoda. Do we have any questions from the Board? I am not seeing any, Rhoda. Thank you so much for your comments. We do appreciate it.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. BENSON: Thank you very much.

MR. ELA: We next up have Nate Lewis, followed by Sarah Pinkham, and Maria Ignosh. Did we find Nate, Michelle?

MS. ARSENAULT: I am not seeing Nate on the call with us.

MR. ELA: Okay. We will jump over. So we're gonna have Sarah Pinkham, followed by Maria Ignosh, and Bill Denevan. So, Sarah, you have the floor. Please state your name and affiliation.

MS. PINKHAM: Thank you. Hello. I'm Sarah Pinkham with OEFFA Certification at the Ohio Ecological Food and Farm Association. Thank you for all your work to support and nurture organic production, and for the opportunity to speak today.

My comments will touch on a number of issues of interest to OEFFA as the certifier and to the organic producers our organization represents, all of which are united by the spirit of continuous improve.

The Crops Subcommittee has several

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

items before it that throw in to relieve crucial issues of consumer trust, organic integrity and the entire notion of organic agriculture. If we are to hold the line on livestock antibiotics, despite humane concerns for animal health and according to the clear wish of organic consumers, we cannot add kasugamycin for crops. Ammonia extracts and other highly soluble sources of nitrogen are a shortcut that feeds the crop, not the soil. Biodegradable biobased mulch film is highly desirable, but the proposed annotation allows products made partially from petroleum. We cannot confidently say that the long-term effects on the soil food are benign. And unlike other plastic mulches, these films cannot be removed from the field after harvest. Continuous improvement requires us to say no to these inputs and focus instead on building healthy farm ecosystems.

OEFFA participated in an ACA working group to interpret the NOP's June 2019 memo on land transition. The group was stymied by the lack of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

functional standards for greenhouse and container production. Certifiers also have inconsistent policies on outdoor access, dairy herd conversions, mushroom production, apiculture, and aquaculture. Lack of consistency undermines consumer trust and damages the livelihoods of organic farmers who don't take shortcuts. These inconsistencies cannot be resolved without action by NOP to finalize rulemakings, including origin of livestock and the organic livestock and poultry practices. Continuous improvement means NOSB must not abdicate its responsibilities under OFPA.

It must finish making recommendations to NOP for these missing standards and request that NOP provide an update on all previous recommendations.

Continuous improvement means that as the organic industry grows and becomes increasingly complex, we find new ways to cover the cost of increasing oversight and expertise and do not pass them onto the smallest farmers. Please refer to OEFFA's extensive written comments on the Human Capital Management proposal. Just like

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

organic agriculture itself, the NOSB work agenda must focus on practices, not inputs. Organic is only as good as the practices used. We must focus on soil building and nutrient cycling, protecting native ecosystems, and engaging the expertise of diverse groups, especially black, indigenous, and farmers of color, to build a truly sustainable food system that is accessible to all. Thank you for considering my comments and thank you also to the excellent sign language interface.

MR. ELA: Thank you so much, Sarah. Are there questions from the Board? I am not seeing any, so thank you for your comments. We do appreciate it.

We're going to move on to Maria Ignosh, followed by bill Denevan. Bill, we're not seeing you on the line. And then, let's see here -- I'm trying to think. Oh, and Nate Lewis has joined us, so we will go back to Nate. So we'll do Sarah, and then Maria, and come back up to Nate. So, Sarah, please go ahead. I'm sorry. I just did that wrong. That's what I get for not marking

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

something on my list. Let me correct myself. We're gonna do Maria Ignosh, followed by Bill Denevan. Bill, we're not seeing you on the line. and then we're going to go to Nate Lewis. So I apologize. Go ahead, Maria.

MS. IGNOSH: Good afternoon. My name is Maria Ignosh and I'm the Vice President of Controlled Environment Research and Development at Shenandoah Growers. Shenandoah Growers would like to comment on the discussion topic of ammonia extract. We believe that if this input is prohibited or restricted from soil application, an annotation should be made for certain uses which do not impact soil health and are aligned with organic crop production regulations. Shenandoah Growers is a producer of certified organic culinary herbs and greens with a 20-plus year history of good standing. Collectively, SG annually packs 135 million units of fresh culinary herbs, which are supplied into leading retailers across the country. Eighteen of the top 20 retailers depend on the company as a source of premium organic herbs.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

To honor this commitment, SG maintains 15 facilities and employees over a thousand people.

Since 2007, SG has been striving to perfect our bioponic production method for which the development of a proprietary nutrition system has been key.

Our organic nutrition program is built around a biofiltration process that converts ammonia extract to nitrate. This is the backbone of our nutrition program and allows us to move away from other inputs, such as sodium nitrate. Our biofiltration system uses natural organisms to convert the ammonia extract fertilizer feedstocks into plant available nitrate and increases the biodiversity present in our growing media. It is only after the conversion process that the nitrate solution is used as a foundational component of our nutrient solution and subsequently provided to the crop. This process prevents the direct application of ammonia extract fertilizers to our crop and fosters the microbial diversity of our growing media. The biofiltration method of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

ammonia extract conversion was developed specifically to allow Shenandoah Growers to operate in accordance with NOP regulations, and has been perfected over 14 years of certified organic production of culinary herbs and greens.

We respectfully request that if ammonia extracts are prohibited or restricted for soil application, then an annotation be added to the CFR that allows for use as a feedstock for nitrate conversion through the biological process. Thank you.

MR. ELA: Thank you very much, Maria.

Are there questions from the Board? It looks like we have one from Brian.

MR. CALDWELL: Thanks, Maria. Am I correct, from listening to what you just said and seeing what's behind you there, that you're mostly or maybe solely, sort of, indoor production or greenhouse production?

MS. IGNOSH: We do both indoor and greenhouse production.

MR. CALDWELL: And so, I guess, I asked

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

this of one of the other people today, as well.

How do your production methods jive with requirements for biodiversity and soil carbon sequestration? I mean, I guess, carbon sequestration is not a requirement, but it is something that the organic community is touting as sort of an advantage of organic production.

MS. IGNOSH: Right. So when I think about it, I think about the fact that it is a very efficient growth method to stack plants vertically and these facilities. It gives a small footprint, so we're not converting much land for the amount of crops that we grow. And actually a lot of our facilities are built, our growing facilities, are built inside of existing facilities. We also do a lot of conservation of water and nutrients because the amount of water that you need to use in a facility like this is greatly reduced and it also lets us be able to recirculate our nutrient solution. So we're not, you know, releasing any nutrients into the environment. And the other, you know, proponent of this, I guess, is we grow

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

where we need the product to be, so it decreases, you know, the transportation costs and there's an efficiency gain there, as well.

MR. CALDWELL: Thank you.

MS. IGNOSH: Thank you.

MR. ELA: I have one quick question, Maria. You noted that if we were going to prohibit the ammonia extracts, we should put an annotation on that would allow them if they're going to be bioconverted into nitrate. Doesn't that happen in the soil, as well? I mean, if we put that annotation on, wouldn't that pretty well just allow ammonia extracts and sidestep the whole prohibition?

MS. IGNOSH: Well, I have to say my 13 year career at Shenandoah Growers has been devoted to controlled environment ag. I think one of my colleagues would be better suited to address that and be happy to. But, yeah, I mean, I think you're right. That is what happens in the soil.

MR. ELA: All right. Thank you so much for your your comments. We do appreciate it.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. IGNOSH: Thank you.

MR. ELA: Okay. Now that I've thoroughly confused myself here, we're gonna go to Bill Denevan, and then back up to Nate, and then we will go down to Jackie DeMinter. So, Bill, please go ahead and state your name and affiliation.

MR. DENEVAN: Hi. My name's Bill Denevan and I work for Viva Tierra, and I'm part of the Board of Directors of the California Apple Commission, and I work as a consultant, and I grow, on top of that. So, my talk has to do with kasugamycin and it's a product that's before the Board right now and I wanted to talk a little bit about it?

So, as a field rep, I can truly say there's no bug infestation, no fungus, no freeze, no bad market that can destroy a grower as quickly as fire blight. Under the right conditions, blight bacteria can double in 96 minutes. It's pathogen ooze can survive for a year, be moved by wind, be picked up by flying insects and rain, and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

move from flower to flower. Within a season, blight bacteria can spread across an entire orchard. Kasugamycin can help stop this.

Anyway, as I said, I'm a field rep for Viva Tierra and I've grown commercial quantities of apples and pears since I was first certified with Happy Valley Farm back in '76. For 30 years, I leased, packed, and sprayed up to eight organic orchards a year in Watsonville and Santa Cruz. 2006 was my last year of borrowing lines of credit and putting my money where my mouth is. Today I still farm, but no longer grow for the fresh market.

My apples and pears go for hard cider and juice.

Crystal clear in my mind, I still remember all the risks that I took to pull in a good crop of quality packed fruit. Now I mainly work as a grower rep and meet with farmers who walk the same financial path that I once did. During my time as a grower, I had blight so bad on my 2000 plus Bartlett trees, I had to cut, burn the damaged and loose fruit, and only leave the main leader branches and retain those, and retrained the trees

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

over again. It took many years to pay back my defaulted loans and come back to the black.

California growers face the additional challenge of being dramatically affected by global warming. Pear and apple trees grown here frequently do not get the required winter chill hours below 44 degrees, as a result. Now there's a less compact, more extensive rat tail bloom period. We're obviously more vulnerable to blight infection for many more weeks than orchards in cooler areas. Not to say that blight is not a major problem for those people in cool areas. Since 2014, when antibiotics were banned by the NOSB and unproven organic materials and controls were hurriedly introduced and put into practice, there's been a surge in blight damage.

MR. ELA: During my yearly travels to many states, I've seen thousands of acres of severe blight damage and tree death. To try to get a handle on that problem, I've gone to seminars and talked to many growers attempting adjust to the use of the new materials and growth models.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Anyway, I guess, as organic pear and apple growing becomes more difficult with resistance to materials like copper, warmer Springs, we have a great need to have additional materials to use in our spray rotations. Normally eight to 10 blight sprays are used per year and a mix of alternating materials are needed to help prevent resistance.

All trials using kasugamycin have demonstrated the product should be an essential part of the mix.

According to exhibit --

MR. ELA: Bill, I'm gonna jump in here.

Your time is actually up. We have a question from Brian.

MR. DENEVAN: Yeah. Go ahead.

MR. CALDWELL: Yeah, thanks, Bill. So, in the many orchards that you've looked at, are there combinations of scions and rootstocks that are showing better performance against fire blight than others?

MR. DENEVAN: I didn't see any difference in that. What I did see was basically climate had a lot to do with it. The fact that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you don't have the winter chill, at least in California, but then in Washington, you know, it's a crap shoot. Every single year, you're presented with a bunch of different situations. You have the weather, you have the new materials that are coming out, and, my god, there's probably 10 or 12 different materials that are presented for blight that supposedly work. So I would say more than the rootstock or the scion, it has to do -- we don't even have dry bore -- trees rootstock for pears yet. We do on apples. And the scion -- there's really no resistance, so it's a crap shoot, whether you're going to be able to control with the various weather situations and new materials.

So what I really wanted to say in my talk -- I wasn't timing it correctly -- was that we have all these experiments and we ended up russetting. We overspray because we're afraid we're going to get blight. And so, as a result, we have two situations: we either underspray and get blight or we overspray and make a cosmetic mistake that causes fresh pack to be nonexistent.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So it's --

MR. ELA: Amy's got a question for you, Bill.

MS. BRUCH: Yeah, just a quick question for you, Bill. Thank you for your oral comments today. Kind of tagging onto what Brian was asking, you know, is there some common threads here? It seems like maybe more prevalent fire blight happens in the Pacific Northwest California. There was a grower earlier that said maybe minimal problems in the Midwest. We talked about different varieties. You mentioned climate, as well. Is there a soil health component with this? Are you seeing, you know, sometimes crops are more susceptible to stresses such as disease if there's a soil deficiency. Are you seeing any soil deficiencies in these areas, as well?

MR. DENEVAN: No, I have to say it has nothing to do with the soil deficiency. It has to do a lot of times with over fertilizing. It has too much nitrogen. If the tree is -- the funny thing about this is, if you put too much nutrition

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

on the tree and it's a young tree, it can die faster than an older tree with less nutrition. So, in other words, you've got to measure; you've got to do some soil tests; you have to do some leaf analysis; you have to have the appropriate fertilizer amount. It can't go over the top. Same thing with the sprays. You can't go over the top. You have to have this happy medium that'll work.

MS. BRUCH: Sure. That makes sense.

In agronomy, we have a law of maximums and a law of minimums, so that makes complete sense. Okay. Thank you, Bill.

MR. DENEVAN: Sure.

MR. ELA: Bill, we have one last question here. How do you reconcile the NOSB-- you know, they voted against streptomycin, tetracycline, however many years ago, and has pretty well, pretty consistently voted against any use of antibiotics, whether, you know, and especially in crop use. So how do you reconcile that, going against all that precedent, we suddenly

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

add kasugamycin?

MR. DENEVAN: Well, number one, you know, those of us who wanted to have a more secure situation using the old-fashioned antibiotics, we lost by one vote in El Paso and the situation was that they were worried about -- at the time, a doctor from Johns Hopkins came in and he said, oh, we may have an antibiotic. This could get into society and people that -- it could affect people.

But it was proven that this kasugamycin is a different kind of product than those two products.

They're not used in any kind of medicine or any kind of human or animal use. And also, the way that this kasugamycin is created, it has a totally different process. It's described in the 11 pages that were put together by the California Apple Commission. So if you read those 11 pages, you'll find out everything you need to know about the scientific details of that.

MR. ELA: Great. Thank you for answering that. We are going to move on, Bill. Thank you for your testimony. Always

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

appreciated. We are now going to go to Nate Lewis, and then we'll come back to Jackie DeMinter and Todd Linsky. So Nate, please go ahead and state your name and affiliation.

MR. LEWIS: Hello, folks. My name is Nate Lewis. I'm a farmer in Olympia, Washington. My wife and I farm organic crops, beef, lamb, chicken, eggs. My sister is deaf, so ASL is my first language, so I'm using a little bit now. I will trade off with Nick here, so I'm really very happy to see ASL interpreters on this webinar. Awesome. Thumbs up. Thank you.

Behind me is a picture of my farm. We farm on the sacred lands of the Squaxin Island Indian tribe and, as I mentioned, we have a pretty diverse operation. I want to talk to you today about a couple of things. First, ammonia extracts products. I encourage the Board to move swiftly with a full prohibition on that. Those products are incompatible with a system of sustainable agriculture and they're not necessary. We have plenty of high-nitrogen fertilizers, some of which

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I know might release a little more slowly than these do, but organic production is based on a system where we have plant roots interacting with soil microbes and they do the nitrogen cycle. So I just, again, encourage you folks to move forward with a full vote for prohibition in the Fall meeting, also recognizing that we have an entire rulemaking process ahead of that. So any, sort of, adjustments we need to make to the definitions or specific types of products that are being prohibited can -- we'll have a number of times to revisit that, just through the notice and comment rulemaking process, just to do a little nuts and bolts reminder for folks.

And then secondly, I would really encourage -- this is maybe a little more for the program, but I would love to see the Board support this. -- that NOSB take a leadership role in President Biden's Equity Commission as a FACA Board raising his hand for looking at personal bias, organizational bias, and really developing an action plan so that we know that all of our

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

recommendations coming out of the Board don't have these biases included in it. And I see the NOSB as a leader and a potential pilot in how FACA Boards that advise the Secretary can ingrain equity into everything that the USDA does. So looking for financial and resources from the program to support that, and then also engagement and support from the Board members to engage in such a topic. Thank you.

MR. ELA: Oh, man, Nate, I think you're the only one so far that exactly hit it on the money. Thank you for your comments and are there questions from the Board? Real quickly, Nate, how would you say, in terms of the diversity issues, what would be the one thing the Board could do to at this point to move things forward?

MR. LEWIS: Drawing from my experience at the Washington Farmland Trust, where we have engaged in a multi-year diversity equity inclusion process, in an all-white organization engaged in Food and Agriculture, which is a area that's fraught with equity issues, I think the one thing

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the Board can do is to request that the NOSB provide a budget to hire an outside consultant to guide the program and the Board through that process.

MR. ELA: Great. I appreciate that thought. We know that's an issue, especially with another nomination cycle coming up. So I appreciate your thoughts. All right. I'm not seeing any other questions, so thanks again, Nate.

We are gonna move onto Jackie DeMinter. Peggy Miars is on the list, but has canceled, to my knowledge. So, Peggy, if you change your mind, let us know. But we're gonna go to Jackie DeMinter, followed by Todd Linsky, and then Emily Musgrave. So Jackie, please go ahead.

MS. DEMINTER: Hello. Can you hear me?

MR. ELA: We can.

MS. DEMINTER: Okay. Perfect. Hello. My name is Jackie DeMinter. I am the Certification Policy Manager at MOSA. We certify almost 2,100 organic operations throughout the US, including over 1,800 with crops, 765 with livestock

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and 325 handling operations. I will be summarizing our written comments on mulch film, paper-based planting aids, and sunset materials.

Thank you for your work and for providing this meeting in a virtual format.

Paper pots. We continue to support the listing of paper for use as a plant production aid and are excited to see the decision coming to a close at this meeting. We encourage the NOSB to pass the proposal. Our written comments outline a few technical corrections we think should be made, but those should not hold up voting to pass the proposal. We encourage all manufacturers to plan for swift rulemaking action and to list their products with a materials review organization and with the USDA's BioPreferred program. We will quickly re-evaluate materials allowed at MOSA to ensure continued compliance with the new regulation.

SPEAKER 4: Mulch film. Almost 500 MOSA certified operations report using a mulch product. This alternative would be appreciated

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

by farmers. We support the proposal to change the biobased content requirement from 100 percent to 80 percent, and we do not support the commercial availability requirement. We feel that revision to the standard proposed is necessary. First, consistent language should be used and plastic should not be referred to. The defined term biodegradable, biobased mulch film works. The commercial availability requirement should be removed. It does not reflect the intention that greater than 80 percent biobased material be used when available, and also includes 100 percent biodegradation requirement and compliance verification is unclear. We encourage a review of currently manufactured mulch film products to see if there are any with potential for compliance with all parts of the standard, the new proposed biobased content, biodegradation, and compost stability. If not, we think the listing should be allowed to sunset at the next review.

Of the livestock sunset materials, calcium borogluconate and calcium propionate are

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

commonly used electrolytes. The individual listings are not necessary, but also do not affect our decision-making. Injectable vitamins under nutritive supplements are widely used. Surprisingly, we don't have any clients using zinc sulfate for hoof care. We do not see any misuse of mineral oil or kaolin pectin for intestinal disorders.

This concludes my comments. Thank you for the opportunity to comment and I'm happy to answer any questions you have.

A gold star for you, as well, Jackie.

Are there questions from the Board? Asa has a question.

MR. BRADMAN: Yeah. Sorry, I'm just joining here in the program. Could you talk a little bit more about your concerns about the use of the word plastic with the biodegradable mulch?

I mean, it is a form of plastic, and noting also that 500 of your crop certifiers you said used plastic mulch. Out of 1,800, that's over 25 percent. Is there a trend of growing use of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

plastic and, particularly, polyethylene films and, again, if you could clarify a little bit more on your suggestions for the definition here, and why not use the word plastic?

MS. DEMINTER: I want to clarify real quick. Please refer to our written comments for exact numbers on the breakdown of how the mulch products are used at MOSA. We have 183 clients that use synthetic plastic mulch, and the rest of the mulch products that add up to the 500 are other types of mulch. So 500 in total that use a mulch product, not just synthetic plastic mulch products. So that's one clarification. And the clarification -- it's not necessarily anything against the word plastic. It's just for consistency in the use of the terms in the rule. The rule currently defines -- uses the term -- I'm scrolling -- uses the term biodegradable, biobased mulch film and that term should be used consistently throughout the proposed regulation. If you start mixing up the terms, then it just breeds inconsistency in interpretation, is my feeling.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. BRADMAN: Just a quick follow-up.

Have your clients raised concerns about the petroleum content in an 80 percent biobased requirement and also, to segue over to plastic pots -- I know you have a potential fear of actually -- paper pots, I'm sorry, not plastic, paper pots -- introducing plastic materials, non-biodegradable plastic materials directly into the soil. Have there been concerns raised about that?

MS. DEMINTER: Anecdotally, I have not heard any concerns coming from staff or from clients directly about either of those. Our clients that use paper pots greatly support the inclusion of paper pots as a planting aid on the National List. For mulch film, we've anecdotally gotten responses that alternatives to the use of plant -- or plastic, the synthetic plastic that must be removed, it would be a viable alternative. It would be good for them.

MR. ELA: Okay. We have another question from Brian.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. CALDWELL: Thanks, Jackie. Just a quick one, and that is you said that none of your livestock folks were using zinc sulfate. Do you think they're using copper sulfate instead?

MS. DEMINTER: Actually, let me pull up my written comments here. We have 100, I think, -- I'm looking for zinc sulfate. It is in our written comments, under zinc sulfate. We surprisingly report that our database shows that we have no clients using a zinc sulfate foot care input and we have almost 100 clients using a copper sulfate input.

MR. CALDWELL: Okay. Thank you.

MR. ELA: Any other questions for Jackie? I have one quick one, Jackie. You know, and Asa followed up on it, but the use of the word plastic. I think we were worried about the paper mulches that are already out there possibly falling under this definition and growers being forced to use the paper mulch because it is a biobased mulch, and so we put in the plastic comment. Would you kind of respond to how we would differentiate the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

paper mulches that are out there versus, you know, these biodegradable plastic mulches?

MS. DEMINTER: I would feel like the paper would fall under the paper listing, whereas biodegradable or biobased mulch films would fall under this listing. So I would have to probably give that some thought and comments with a proposed rule. I hadn't thought of that being the reason for delineation including the word plastic. But, again, the rule defines biodegradable, biobased mulch film, and that guides it's entire three-step compliance factors in the standard.

MR. ELA: Great. Thank you, Jackie. We are going to move on to -- let's see, Peggy's not on the line. We're gonna to go to Todd Linsky, and then Emily Musgrave, and then Gina Colfer. So, Todd, you have the floor. Please state your name and affiliation.

MR. LINSKY: Thanks, Steve. Good afternoon. My name is Todd Linsky with TLC Dot Organic. Thank you to the NOSB and the NOP for providing a platform to share my perspective and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

plant some seeds for future thought in the ongoing discussion about organic certification of next generation farms. As an active member of the organic community for over 35 years, my career has taken me from small natural food store to the boardroom of more than a dozen companies. I found farmers across the spectrum from soil to emerging ag technologies and everywhere in between, working to honor the purpose and core values of organic, feeding more people better food while working to heal the earth. This simple message is powerful, and its impact has truly changed the world. Where we're heading today concerns me because instead of embracing our uniqueness and our membership, we're working to disassociate for what I see is the next generation of farmers. Attempting to exclude these non-traditional farming methods from the organic table has a potential to hurt, misrepresent, misinform, and will cost us consumer confidence and ultimately market share.

I'm here today as a reminder that there is room at the table. Whether we like it or not,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

the next generation of organic farms is no longer just in the dirt. It's also in a greenhouse, a cargo container, a downtown space, or maybe even in a parking lot. But look what these non-traditional farms are accomplishing. They're pesticide free, herbicide free, non-GMOs, in some cases never being touched by human hands. And to top that, they can grow almost anywhere using a fraction of the space and a fraction of the water.

They have a platform and a story to share. I think the part that we fail to see is this next generation farmer can dilute the organic message and lessen organic's impact. Recognizing that these folks have huge ideas, huge brains, and even bigger checkbooks, if we exclude them, we're in effect forcing them to establish their own certification and a narrative that's alt-organic. Currently, some conventional growers in this space are saying they are beyond organic, and I believe you cannot be beyond organic unless you have the organic seal to start with.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The move to exclude non-traditional growers seems to be in opposition to the mission and values we've always portrayed at our core. Again, I emphasize, feeding people better food while healing the planet. More importantly, these growers have even greater social impact right now as there's millions of people going without adequate nutrition and millions every night going hungry. I love our industry and its mission and purpose. I love the dirt and I'm proud of my personal contributions to help grow this industry.

This isn't about right or wrong now; this is about common sense. I'd like to continue to honor the investment of those who took the time and energy in building the runway we now walk so freely. Soil is one element of the ecosystem, and I'd like to think that we can step back and take a bigger picture view of all the components that are needed to support life. Let's all step up and raise the bar on ag technology by bringing them into the world of organics. Because I certainly don't see that there's gonna be any less demand for fresh food

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

going away anytime soon. Thank you and I will yield my eight seconds back.

MR. ELA: Thank you much, Todd. We appreciate that. Are there comments or questions -- any questions from the Board? Excuse me. I have one quick one for you. I appreciate your thoughts. One of the things we're governed by, of course, are the OFPA regulations. Anything we do has to be governed by those, even though we may individually feel differently one way or the other.

So, with your comments, how would we -- in terms of complying with OFPA -- how do we reconcile what you're saying with the OFPA regulations?

MR. LINSKY: Steve, I think that we've all got to sit down and we need to come together as a group and talk this thing through. That's the bottom line issue I see. The greenhouse growers cut their own throat. Everybody's got a physician, but nobody's talking together. And I think that's our biggest fault that we have right now. As I've shared with other people before, I believe this issue is going to require people

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

sitting together and having a beer and talking this thing through because this technology is not going to go away. There's \$26 billion invest in 2020.

It's coming, and we have to recognize that. And I'm more concerned about us hurting the organic arena by not coming together than anything else, because that's what ultimately is going to happen.

And I think that's my biggest fear and that's where I come from with my perspective.

MR. ELA: Thank you for your thoughts on that.

MR. LINSKY: Thank you for the question.

MR. ELA: I do not see any other -- yeah, I'm not seeing any other comments or questions from the Board, so thank you for your comments --

MR. LINSKY: Appreciate it.

MR. ELA: -- and we do appreciate it.

Next up is Emily Musgrave, followed by Gina Colfer, and then Peter Johnson is the next person. Peter, we're not seeing you on the call,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

so if you are there, could you please let Michelle know? So, Emily, please go ahead.

MS. MUSGRAVE: Can you all hear me?

MR. ELA: We can.

MS. MUSGRAVE: Good morning. My name my name is Emily Musgrave. I'm the Organic Regulatory Manager at Driscoll. I would like to thank the NOSB for their commitment to protect the integrity of the organic program and uphold the vital regulatory processes of the NOSB. My comments focus on the following: the need for a biobased alternative to plastic mulch and requesting the Crops Subcommittee further develop the ammonia extract petition as it is too broad and does not clearly distinguish between the two different manufacturing techniques.

First, Driscoll supports the subcommittee's push for an alternative to plastic mulch. We support the annotation to allow BBMFs that are at least 80 percent biobased if manufacturers can actually meet this requirement.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

You heard from some commenters that BBMF is not ready to be utilized by organic growers. We disagree. Organic growers need a tool to reduce the amount of field plastic usage, and this tool, BBMF, has been delayed long enough. Commenters also mentioned that current petroleum-based plastic mulch is being removed while biodegradable mulch is not removed and we do not know the long-term effects on soil health. While this is true, it is also a double-edged sword. Although the current plastic mulch is being removed, it is all going straight to the landfill. My colleagues have spoken to dozens of researchers and dozens of recyclers, and there is no recycler who will take the plastic mulch. And yes, more research is needed on the effects of biodegradable mulch on the soil. However, this research is already in the works. Folks from Washington State University and others are already working on these studies and collecting the data on the long-term soil health impact of BBMF. The Board must weigh in on this quandary. The longer we wait means

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

continuing with million pounds of plastic mulch from organic farming going to the landfill each year.

Lastly, we believe the petition to prohibit non-synthetic ammonia extract for use in crop production is too broad. The TR mentioned the two different manufacturing processes, ammonium concentration versus ammonium stripping, but then does not distinguish between those two processes when seeking to prohibit ammoniacal nitrogen. This is a complex issue and needs further attention and clarification on the two different manufacturing processes. A few public commenters suggested a working group or task force on the subject. A task force in which the Board could hear from the experts on the manufacturing processes on both sides would be a reasonable way to navigate this complex issue and ensure you are making a decision based on sound science. I thank the National Organic Standards Board for your service and for consideration of manufacturers.

MR. ELA: Another one exactly.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Everybody's doing great today. Much appreciated.

It makes my job much easier. We have a question from Amy.

MS. BRUCH: Emily, hi. Thank you for your written and oral comments. I had a question for you on the biodegradable biobased mulch. One of the proposed annotations is -- actually, I'm gonna read it for you -- that the mulch demonstrates at least 90 percent biodegradation, absolute or relative, and then it goes on. So that question, that 90 percent biodegradation in less than two years -- my question for you is how many consecutive years of plastic are some of your fields using on average, and will that be hard to quantify that biodegradation in that two-year time frame if there's a significant annual usage of this plastic?

MS. MUSGRAVE: That's a great question, so I mean, I think it depends on what kind of crop you're talking about here, right? For strawberries, you're removing -- currently with petroleum-based mulch, we're removing the plastic annually. But then you've got perennial

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

crops, right, where, you know, if you're using plastic mulch, say, in blackberries or blueberries, that is obviously there for a lot longer. So that is a really good question. And we have a group on our agronomy team that's actually working with Washington State University on some of this research. So I think that is a question that we can take back to the group with WSU and really give that some further look. I'm not a complete expert. I know bits and pieces, but I want to leave that to our soil scientists and agronomists, but I will relay that question and get back to you.

MS. BRUCH: Thank you, Emily. I appreciate it.

MR. ELA: We'd love to hear that information. Emily. I have a question on your comments about the ammonium extracts, of the two different methods. In terms of the ammonia concentration versus stripping, would you like to see one of them prohibited and not the other?

MS. MUSGRAVE: Yeah, that's a really

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

good question, and I think coming up, you're gonna hear from a few -- Allen, I think, and a few others with PhDs -- but from what I know, again, I'm not an expert here. This is kind of complex. But from what I know, I think ammonium concentration, in my opinion, should be able to be allowed versus ammonium stripping, which is a totally different process and may be not allowed. However, I really think that there just needs to be a much more focused discussion on this. But, yes, from first preliminary glance, I would say ammonium concentration manufacturing process, yes, versus ammonium stripping, no. But I also think you should ask that question to Allen coming up shortly. I think he'll be able to give you a much more robust answer. I'm still learning all of these technical issues, so... I appreciate it, though.

MR. ELA: Fair enough. I guess I've just given them a heads up to answer that question.

Thank you so much, Emily. We do appreciate your comments.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

We are going to move on now to Gina Colfer. We're not seeing Peter Johnson. Again, Peter, if you're on the call, please let us know.

After Gina, we'll go to Marie Bertram or Burcham, and then onto Jim Koan. So Gina, please go ahead and state your name and affiliation.

MS. COLFER: Thank you. Good afternoon. Thank you to the NOSB members for your time and dedication. I would like to add my comment in support for the use of ammonia extract products in organic foods production. My name is Gina Colfer and I'm here representing Wilbur Ellis Agriculture, a company built on high ethics and integrity, celebrating our 100th year in business this June. I'm a licensed pest control adviser and certified crop advisor, specializing in organics with a passion for soil health and biodiversity. For over 30 years, I have dedicated my work in the sector of organic farming, consulting, and research on the Central Coast and Salinas Valley of California.

Organic growers in this region rely

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

mostly on pelleted and liquid organic fertilizers to build their soil fertility and do not rely on cover cropping for a myriad of reasons, one being the inconsistent nature of how and when a cover crop residue breaks down and releases its nitrogen in the form of plant available ammonia and nitrate.

The dry pelleted fertilizers these organic growers rely on are made from chicken litters, proteins like meat and bone meal and Peruvian seabird guano. The nitrogen mineralization rate from guano is fast and consistent, as is meat and bone meal, both of which contain phosphorus that is mostly unavailable in the western states, which can result in excess nutrients. Depending on the crop, use rates range anywhere from 1,000 to 3,000 pounds per acre per crop, which is between 60 to 240 pounds of nitrogen and phosphorus per acre per crop, respectively.

With a product like ammonia extract, a grower could feel more confident in planting a vegetable crop following a cover crop and/or a high carbon to nitrogen ratio compost without

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

compromising nitrogen availability to that crop.

Ammonia extracts are designed to be spoon-fed to the crop at rates where the uptake is most efficient. Ten gallons per acre supplies 7.4 pounds of nitrogen per acre, giving the crop food when it needs it. This can help to incentivize growers to incorporate more soil building cover crops and high carbon to nitrogen ratio compost into their system plan to help mitigate climate change by sequestering and storing more carbon in the soil. Ammonia extracts are also not comparable in any way to sodium nitrates. I would never recommend sodium nitrate to any of my growers.

The issue of fraud is real throughout the entire input in production change, so I think thorough and unannounced audits by qualified inspectors should be part of the approval process for all inputs. Strengthen the regulations to prevent fraud. Please consider my comments. Ammonia extracts are from a biological process and are sustainable and are important for the future

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

of organic farming. Thank you.

MR. ELA: Another gold star on timing.

We have a question from Brian for you, Gina.

MS. COLFER: Great.

MR. CALDWELL: Hi. Thanks. And I'm just wondering why the sodium nitrate products would not be acceptable, but the ammonium ones would be.

MS. COLFER: Well, the sodium nitrate products are mined from old seabeds in Chile and Peru, and they contain as much sodium as they do nitrogen. So, when applied to the soil, usually in a liquid form, they go into solution readily as a sodium nitrate. And then you're receiving a quick nitrate application, but you're also receiving a sodium application at the same time, which will displace your potassium and calcium on the soil cal-life and increasing the salinity in that soil. So that's why sodium nitrate is so detrimental to the soil. It's the sodium content.

MR. CALDWELL: Great. Thank you, and just a quick follow-up. What is the percentage

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

in the products -- of the ammonium products that you're using -- and what kinds of other components are in them?

MS. COLFER: In the ammonia products, they're 8 percent at this time and they are half ammonia, half nitrate. And they're from a biological system from a manure waste stream.

MR. ELA: Asa has a question for you.

MS. COLFER: Sure.

MR. BRADMAN: I have some questions here, but they're all related.

MS. COLFER: Okay.

MR. BRADMAN: You said about 1,000 to 3,000 pounds per year.

MS. COLFER: Per crop, not per year. And in the Salinas Valley, we can have up to two to three rotations. So it's per crop.

MR. BRADMAN: Okay, thanks. And you mentioned pelleting and liquid sources. I once met with one of the owners of some of the -- one of the bigger growers in the Salinas Valley and his comment is we don't have enough manure -- he

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

didn't use the word manure -- but we didn't have enough manure to expand organic and fulfill all the needs of organic. So I have a couple of questions here.

MS. COLFER: Okay.

MR. BRADMAN: One, you mentioned pelleting -- are there also, you know, general unpelleted manure applied and, two, what is the source of the manure components? You mentioned chicken, I assume, perhaps, steer, also, in the pellets for general use. Are those coming from organic operations or are they coming from conventional operations where the animals are essentially processing non-organic grain and other food into, you know, an organic approved product? And then in terms of the liquid sources, what are the liquid sources? Is it --

MS. COLFER: Okay. So let me start -- I've got to keep this straight. So a lot of the pelleted products that are used right now are manufactured with a base of, like, a chicken litter

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that's brought in from different areas throughout the United States into a manufacturing plant. And then that chicken litter can act as the base of a pelleted product, but then there are other protein meals that are added to it. Say, like, meat and bone meal, feather meal, blood meal. So there's a myriad of proteins that can be added to that pellet and then applied to the soil as a pre-plant at these high rates, and then the mineralization process breaks down those organic nitrogens into the inorganic forms. And, you know, they're put down at pretty high rates at pre-plant, and then -- the problem I see is, as the mineralization process goes along and as the plant is growing, there are different nitrogen requirements from that plant and it can't take up big slugs of nitrogen all at one time. So what happens to the remaining nitrogen that's been mineralized? You know, if an irrigation occurs, that excess nitrogen can be leached out. So, I mean, that can be an environmental hazard at that point. And the phosphorus can runoff because

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

there are high amounts of phosphorus in these products, also.

MR. BRADMAN: It sounds like most of the nitrogen is coming -- originated from the Haber-Bosch process, much farther upstream though.

MS. COLFER: No, no, no, there's no synthetic nitrogen that's being applied.

MR. BRADMAN: Right, but --

MS. COLFER: It's all animal --

MR. BRADMAN: Right, but the animals ate crops that were probably raised with, you know, synthetic nitrogen?

MS. COLFER: Correct.

MR. BRADMAN: And for the liquid sources, are we talking like hydralazed soybean --

MS. COLFER: Fish.

MR. BRADMAN: -- or fish?

MS. COLFER: Fish, molasses, soybean protein hydrolysate, yeah.

MR. BRADMAN: Okay.

MS. COLFER: Fish is predominant.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. BRADMAN: Thank you.

MR. ELA: Amy has a question for you.

MS. COLFER: Yes.

MS. BRUCH: Gina, quick question for you. In your written comments, you mentioned that if you see a product that has a 1300 analysis and comes out at a certain price point, a red flags should be raised. This is kind of in the fraud section. Can you just elaborate on that piece so I can understand a little better?

MS. COLFER: Well, it's not easy to make these types of products. A lot of technology and monies and infrastructure has gone into making these ammonia extracts, and it's not an inexpensive process. So, you know, for the return on investment for these manufacturers, they are going to have to charge a certain amount. And there's, you know, we're talking anywhere in the \$11.00, \$12,00 per unit of nitrogen that is going to be charged for these products. Whereas, a, you know, ammonia product could be a dollar, you know, the synthetic, the Haber-Bosch type of ammonia. The

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

synthetic ammonias can be really inexpensive. So, yes, I think if someone's out there selling an 8 percent ammonia extract that they are representing at, you know, way below, really, market value then, yeah, a red flag should go up, right? If it walks like a duck and talks like a duck, it's usually a duck. So that's the thing. If it's too good to be true, it usually is. So I think growers need to, you know, use their due diligence and have that red flag go off in their brain and say, this is not right. There's an issue here if this product is priced way under, you know, under value, what the market value breaks.

MS. BRUCH: Thank you, Gina. Appreciate it.

MR. ELA: Thank you for your comments and answers to the questions, Gina. They are much appreciated.

MS. COLFER: Great. Thank you for having me here.

MR. ELA: We are going to move on. Michelle, I'm assuming Peter Johnson still hasn't

shown up on the call list?

MS. ARSENAULT: I haven't seen him.

MR. ELA: No. Okay. We will move on to -- Yeah, we'll move on to Marie Burcham, followed by Jim Koan, and then Ryan Brandt. So Marie, please go ahead.

MS. BURCHAM: Good afternoon, members of the NOSB and NOP. My name is Marie Burcham.

I am the Policy Director for the Cornucopia Institute. We were pleased to see research priorities touching on climate change concerns, including identifying the most effective practices to reduce greenhouse gas emissions and rebuild resilience. The industry can and should do more to support climate smart practices within the label. While reduction in fossil fuel use is of primary concern for the climate crisis, it will be impossible to meet the Paris Agreement's goals without major reductions and emissions from food and agriculture, as well. Agriculture produces approximately 10 percent of total greenhouse gas emissions. Organic producers who already

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

emphasize their stewardship of the land hold the key to making all agriculture, whether organic or not, more environmentally resilient. In fact, organic systems produce about two-thirds less emissions than conventional, almost entirely due to the avoidance of synthetic fertilizers and other chemicals.

However, there are some internal conflicts in the organic standards and application of those standards that conflict with the climate health goals. The lack of regulatory progress to keep up with the changing marketplace is of serious concern. You've already heard the Wild Farm Alliance speak to the issue of native ecosystems. We support their comments in full. The NOSB's recommendation on this issue has languished since 2018. The organic label cannot credibly speak about sustainability, protection of biodiversity and climate resilience, while still allowing the destruction of native ecosystems in the name of organic farming. Native ecosystems provide services for the public good that we cannot afford

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to lose.

The Wild Farm Alliance and the NOSB have already done the hard work in creating comprehensive guidance and tool kit. It's time to push for this regulation on all levels. The stated purpose of OFPA is to establish national centers that will then be used to govern the marketing of organic products to assure consumers that organic products meet consistent standards, and to facilitate commerce in organic food. Ultimately, OFPA gives NOP broad authority to enact regulation that furthers the aims of the statute.

Regulatory improvement is expected and often necessary to meet OFPA's edict. Most of the regulatory change recommended by the NOSB is needed to cure unintended loopholes or existing problems in the current regulations. For example, the origin of life-cycle rulemaking would cure a systemic issue in organic dairy. The Organic Livestock and Poultry Practices Rule was also intended, in part, to make the livestock standards more consistent. We do not have these fixes in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

place yet, despite the majority of stakeholders calling for them again and again.

This is the task of the NOP and the NOSB.

Recognizing immense challenges in developing comprehensive enforceable regulations, we support greater funding for the NOP to create and enforce the law. Part of this work can and should include better uniformity among accredited certifiers as the driver of consistency within the label. Consumers choose organic food for many reasons.

As an understanding of the system continues to increase, we need to meet that. The Cornucopia Institute supports authentic organic farmers and we need our regulators to support them, too. Thank you very much and have a great afternoon.

MR. ELA: Another perfect time. This is, I think, a record for a public comment webinar.

Thank you, Marie. Are there questions for her?

I am not seeing any, so thank you very much for your comments. They are very much appreciated.

MS. BURCHAM: Thank you.

MR. ELA: We are gonna move on to Jim

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Koan, followed by Ryan Brandt, and then we have several speakers after that that we are not -- well, actually, then we'll have Allen Philo. So, I'll talk about the other speakers after we get through these next few speakers. So Jim, please go ahead and give your name and affiliation.

Jim, we're not hearing you, if you are there.

MR. KOAN: Hello?

MR. ELA: There we go, Jim. Go ahead.

MR. KOAN: Can you hear us now? Okay.
Great.

MR. ELA: We do.

MR. KOAN: I had to have my son be the technician here. Thank you. Okay. I have an organic 80 acre apple orchard about 80 miles north of Detroit. I grew apples conventionally for 20 years and have now grown them organically for 24. The first few years of my organic production, I averaged about 20 percent to 30 percent loss to coddling moth and now have only 2 percent to 3

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

percent damage because of mating disruption using pheromones. All my apples, about 25,000 to 30,000 bushel, are sold on the farm to the public. Nothing is sold to processor companies. We sell our apples for only \$1.00 a pound. I could easily get double, or maybe even triple, that price, but take pride in making available good organic food at a very reasonable price that families can then afford. Many people travel from Ohio, Indiana, Illinois, Chicago to get my apples and apple products, making big purchases to take back to their home and to their friends. I'm not sure that anyone can comprehend, except maybe Steve, the joy I get from growing good, healthy food for others.

If you took mating disruption from me and I had to return to 30 percent to 40 percent damaged fruit, I would have to at least double my selling price to my customers. Many would have to go back to having to eat conventional apples and others would have to make sacrifices someplace else in their budget to continue buying the higher priced, \$2.00 a pound apples. So we're looking at \$42.00 now,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

\$84.00 later. All farming practices -- a bushel.

All farming practices negatively impact the soil and the environments. We all know that. My definition of sustainability is negatively impacting the environment as little as possible while growing food for others. Every input has both positive and negative consequences.

Sustainable methods means growing food with the least negative impacts to our earth. Using pheromones and mating disruption, where Lepidoptera moths and leaf rollers falls dead center on that definition, I can easily see this as an organic apple grower. But unfortunately, most others do not have to do battle with these bad pests like I do and they cannot. Any other tool that I can use to control these pests by keeping pest population levels below an economic threshold would be far less sustainable. I understand that you may be considering kasugamycin as organic use. NOSB made a big mistake, in my personal growers opinion, but probably not from the political perspective. I ask you to please

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

consider kasugamycin carefully using good science in your decision-making foundation. I have -- Can I finish the sentence?

MR. ELA: You can finish the sentence, Jim.

MR. KOAN: I personally lost hundreds of trees and tens of thousands of dollars due to streptomycin being allowed to sunset. Hopefully, you will consider kasugamycin and pheromone dispensers as great, sustainable organic tools.

MR. ELA: Thank you for those comments, Jim.

MR. KOAN: Thank you.

MR. ELA: Are there questions from the Board?

MR. GREENWOOD: Yeah, Steve.

MR. ELA: I am not seeing any -- oh, go ahead.

MR. GREENWOOD: Steve, it's Rick. I put up my hand. I guess it didn't show.

MR. ELA: Go ahead, Rick.

MR. GREENWOOD: Okay. Yeah, Jim,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

thanks for your presentation and interested in your comments about kasugamycin. And I guess the question is, in looking through the written comments, there were literally hundreds of written comments about keeping antibiotics out of the food chain, and I was just wondering, based on your experience, and you say, consumers come to your property, how do you think they'd feel if you were spraying kasugamycin?

MR. KOAN: Some of them may understand and some of them may not. My concern is that you make decisions based on good sound science. That was my point.

MR. GREENWOOD: Yeah.

MR. KOAN: If you feel as the Board that when you understand the science behind that, that it's not good for the environment, then, you know, by all means, don't allow it. But if good science is there, I think then we look at it a second time and ask, okay, maybe we need to do education here to the consumers, because most people make decisions not based on education, but emotion.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Education is the key here.

MR. GREENWOOD: Yeah. No, I agree and it's obviously a useful tool. I mean, I'm a farmer also and you want all of them -- but there is pretty good evidence that it does change the soil microflora after it's used very quickly. Now I don't know how significant that is, but there is a noticeable change that was written up in the TR. But, anyhow, thanks for your comments.

MR. KOAN: You're welcome. Thank you for asking.

MR. ELA: Jim, I'll ask a real quick question. Do you have any alternatives for fire blight control?

MR. KOAN: I transitioned over to a lot of varieties that are more fire blight resistant. We do an awful lot of monitoring. We have to use copper close to bloom and a minimum amount of growth in the trees to keep the nitrogen levels down, which then answers the fire blight susceptibility. And then we diligently patrol the orchard manually several times after bloom, knowing when the first

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

strikes are gonna be coming out, and then cut those out and disinfect the cuts with copper. So we still lose trees, but it's just accepted. It's not a game changer. It would just be nice to have that in the toolbox because it does cost me a lot in my bottom-line without it.

MR. ELA: All right. I don't see any other questions.

MR. KOAN: That was my point is, I think, also, we need to grow apples as cheaply as we -- or food, organic food -- as cheaply as we can so, to make it available to everybody.

MR. ELA: Thank you so much, Jim. Very much appreciate your comments.

MR. ELA: We are going to move onto Ryan Brandt, then Allen Philo, and then we've got a couple of speakers that we don't see. Jodi Rodar and Linda Lake, if you are on the line, could you please let us know. And if those two aren't on the line, then the third person on deck is Chris Schreiner. So let's go ahead with Ryan Brandt.

Ryan, are you out there? If you are,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you're on mute.

MR. BRANDT: Steve, can you hear me now?

MR. ELA: Now we can hear you. Go ahead.

MR. BRANDT: All right. Thank you very much. Thank you for the opportunity to comment on the petition to prohibit ammonia extracts for use in the National Organic Program.

I strongly oppose the petition and believe that the definition is too broad and needs to be more refined. NuOrganics is the manufacturer of both dry and liquid organic fertilizers. Our biological manufacturing process uses 100 percent non-synthetic ingredients and is currently OMRI-listed. We utilize an ingredient that is 100 percent renewable as our sole feedstock, which is animal manure. Manures have traditionally been used by organic farmers and are a valuable source of micro and macro nutrients and carbon. Their use in unmodified form, however, is inefficient and has its own host of challenges which include,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

one, difficulty in applying manure with varying moisture contents; two, the inability to transport the manure through the logistical costs; and, three, restricting the use of the manures based upon the limiting micro or macro nutrient. In some area, manures are used for nitrogen needs and phosphorus can be over applied into the soils, leading to soil imbalance.

We've created a novel technology that better utilizes the manure by unlocking the phosphorus from the nitrogen, allowing for a more efficient delivery of nutrients in separate products. By taking raw manure and creating the dry form of fertilizer and a separate liquid fertilizer, the manure derived products may be applied at different prescribed amounts. This allows the organic farmer to minimize the potential for over application, while also using the manure in a way that optimizes its use.

Further, our manure-derived liquid fertilizers come with soluble organic carbon, which fingerprints our product. This provides the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

ability to confirm the product's authenticity, which is a fraud prevention strategy. The soluble organic carbon also helps support the microbial organisms in the soil. This is a major differentiator compared to synthetic ammonia, which does not support soil health. When used and directed and in coordination with organic certifiers, manure-derived liquid fertilizer products can provide a needed source of nitrogen at the right time while minimizing the potential for nitrogen leeching. Manure-derived liquid fertilizers provide a secure natural and domestic source of organic fertilizer. When processing the value-added products, these products can supplement the other organic nitrogen projects on the market, creating a more robust system and allowing organic farmers the ability to have options to fit their needs accordingly.

Manure-derived products are uniquely transportable, being able to reach customers in different US regions where transport was not possible in the past due to cost. This allows

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

organic farmers access to these products when they could not in the past. These benefits decrease pressure on the environment from a production standpoint and since these products can be used in a way consistent with precision agriculture strategies, we believe the products can greatly improve organic operations and improved efficiency impacts to the environment. Thank you.

MR. ELA: Very well done on time, as well. You're a member of the gold star family.

Are there questions from the Board? I don't see any others, but I do have one for you. Your statement -- let me go back, I was trying to take notes -- that the ammonia extracts unlock other nutrients in the soil, but whereas ammonia applications in conventional agriculture don't, could you say that again and clarify why one would unlock it and the other would not?

MR. BRANDT: Well, Steve, in our process, what we do is we take raw manure and we separate the ammonia from the solid fertilizer, and being able to do that and unlocking that ammonia

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

from the phosphorus and the potassium, it allows you to then prescribe that ammonia or the phosphorus and the potassium at a different prescribed rate. So that provides more of an environmental win and more of a precise application of the nutrient to the crop. That's what I was referring to.

MR. ELA: Yeah, but then later you said, in terms of -- I think you were talking about carbon and my notes -- I didn't get the great notes here -- when you apply the ammonia extract to the soil, since that's not including the carbon that manures would -- how are you -- I guess how are you promoting carbon sequestration or carbon development in the soil?

MR. BRANDT: Got it, and I think my point on this -- and luckily, I have my colleague following up here in another hour to talk a little bit more about this. But there is a soil organic carbon source within the liquid fertilizer, and my point was, is that having some of that soluble organic carbon in the liquid fertilizer itself

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

helps support the soil microbes in the soil itself.

So that's what I was pointing out and that's unique to a manure-derived liquid fertilizer.

MR. ELA: It's not true ammonia extract, but it does include carbon in it. Am I hearing correctly?

MR. BRANDT: Yes. We have a small amount of soluble organic carbon in the ammonia product, in the liquid ammonia product.

MR. ELA: Great. Thank you for that clarification. Any other questions? Thank you so much for your comments. They are much appreciated.

MR. BRANDT: Thank you.

MR. ELA: We are going to move on, and are Allen Philo or Jodi Rodar -- well, Allen, you're here. I'm sorry. Looking at my lines wrong. So, Allen, we're going to go to you next. But if Jodi Rodar and Linda Lake are on the line, please let Michelle know. If they are not, we're going to go to Chris Schreiner and then Michelle Miller after Allen. So, Allen, please go ahead and state

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

your name and affiliation.

MS. ARSENAULT: Allen, you're on mute.

MR. ELA: Allen, we're not hearing you yet.

MR. PHILO: Good now?

MR. ELA: There you go.

MR. PHILO: All right.

MR. ELA: Yep, you're good now. Go ahead.

MR. PHILO: Thank you. My name is Allen Philo and I am speaking for BioStar Renewables, one of the companies named in the petition as a producer of novel ammonium products.

I think many of the Board members and members of the organic community that are listening to these comments were surprised by Dr. Martin Burger's comments on Tuesday, first regarding fraud and how the CDFA tracks and regulates our OMRI-listed product. Second, about the effect of nitrogen fertilizers on soils and long-term studies. I want to encourage everyone to read the white paper written by Dr. Jerry Hatfield and myself, which

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

summarizes the latest scientific understanding of how ammonium acts in soils and contains a meta meta analysis that draws on over 125 scientific papers over the past several decades and reaches the same conclusion as Martin Burger. This was submitted in the written comments.

Next slide, please. It has been repeatedly stated during these comments that ammonium fertilizers bypass the soil system, by which I am assuming that they mean the soil microbial system, and are feeding the plant directly. The short pithy version of the statement being they are feeding the plant and not soil. Today, I'm sharing with you field trial results from this past growing season. These trials were done at a third-party research farm, Agri-Tech Consulting, LLC in Whitewater, Wisconsin by Dr. Tim Maloney. Due to time constraints, please see the slides for the total amounts of nitrogen credited for base fertility applications.

Next slide, please. The total supplemental nitrogen applied with our product and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the predicted and actual yields from this trial.

In this trial, the total nitrogen released from the base fertility application increased by 86 percent as a result of stimulating soil biology early in the growing season with six pounds of ammoniacal nitrogen and a combination of other organic products. This is a recognized phenomenon in soil science known as the positive priming effect.

Next slide. Please, to be pithy about it, we fed the soil and not the crop. Also, these yields matched the highest yields on the research farm and beat the county average by 90 bushels.

Last slide, please. The proponents of this position have acting in their favor a set of longstanding assumptions and narratives inside the organic community about how soils and fertilizers function. This data-driven example, along with the comments provided by Dr. Martin Burger, show that these narratives do not always stand up to the latest scientific understanding available. The proponents of the petition have also repeatedly

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

asked that the regulation process be expedited, which further stands in the way of allowing this scientific information to be made available and understood. We are asking the NOSB to slow the process down and form a working group or task force where more detailed and extensive comments can be given and discussed to allow for all of the scientific and technical information regarding these products to come to light.

Also, due to the constrained nature of the oral comments, I have not had time to provide information about a number of other issues, namely that none of the products named in the petition are pure ammonium products, as has been stated repeatedly during these comments. But the technical review makes a major distinction between ammonium concentrate and ammonium extract manufacturing processes and that an ammonium extract differing in its manufacturing process from our own ammonium concentrate was listed by OMRI in December of 2020 on a line of reasoning that could allow for a whole new set of chemistries

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to enter organics that have always been recognized as synthetic in the past. To be clear, I do not think OMRI erred here, but this process as disclosed a possible loophole in the regulations regarding synthetic/non-synthetic distinctions.

Thank you for your time.

MR. ELA: Okay. Thanks Allen. Are there questions from the Board for Allen? Amy has one for you.

MR. PHILO: Amy, you're on mute.

MS. BRUCH: Shoot. I got hit by that. Sorry about that. Thanks for your comments, Allen. There's a lot of information there. Just a big picture question. When you were performing these tests and comparing them to other plots of land, what were the soils that you were working on? Were they balanced? Did they have access, did they have deficiencies? Because it's really hard to understand when you get a bushel increase when you don't understand the base conditions. So what were those?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. PHILO: The base conditions of these were 4 percent organic matter soils. Very good soils for the Whitewater, Wisconsin area. Generally, they had a pH of around 7 or just below that and they were pretty well balanced. I'm sorry to go through the slides so fast, but again, this format just does not allow for good explanation of what's going on here. You know, they were all provided with a base application rate of basically two tons of chicken manure. There was a credit from soybeans and there was a credit from soil organic matter. Mineralization, just naturally.

What ended up happening was when we applied six pounds of nitrogen, typically based on a 0.75 pounds of nitrogen to one bushel yield increase, you would expect that to result in eight pounds -- or eight more bushels, and we ended up with 42.

So basically what happened is this this ammonium, when we put it in here like this, was not directly feeding the crop. That would have just resulted in that eight bushel increase. What it did, was it stimulated biology to break down many more of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the recalcitrant features of the basic fertility programs, specifically probably the chicken manure. And that's where we got the extra nitrogen from. In all of these things, were seeking to put a product out there, often in accommodation with other products, that stimulates soil biology and works together with that. That's where we get our biggest factors.

MS. BRUCH: Okay, so 7 percent pH and 4 percent organic matter?

MR. PHILO: Yeah. I can send you the actual study --

MS. BRUCH: Sure.

MR. PHILO: -- if you'd like.

MS. BRUCH: If you could do that, that'd be great. Thank you.

MR. ELA: I have two follow up questions on that. First of all, were those soils certified organic and then the other --

MR. PHILO: No, but --

MR. ELA: -- follow-up --

MR. PHILO: Okay.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: It helps us. Did you do these studies over the long-term or it's just the one-year view?

MR. PHILO: Okay, so the first answer is no, but it's almost impossible to find a third-party research entity that will do an organic trial or has the ability to do that. We are simply forced to deal with what is out there. We do the best to have them follow organic protocols during the system. What is interesting about that is it actually works not in our favor because the organic systems are based on having active good biology in them to be able to release nutrients from the base fertility program. And in these studies, it's actually some of the only places where I've seen microbial products actually have a huge impact. And in this case, we were actually putting our product on with an acromial product to help repopulate the soil with the microbes to help breakdown those base fertility loads.

And yes, this was only one year of research, but we have repeated this across, I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

think, six different crops types and we're going on three years of research. We have seen this repeatedly in almost every single crop that we have researched this in and in every single application.

MR. ELA: So do you want to speculate if this were applied year-after-year? You were talking about it releasing some of these, you know, other base nutrients, but if you applied it multiple years, year-after-year, would you run out of those other base nutrients to release?

MR. PHILO: No, because the base nutrients that I'm talking about were actually the nutrients that were further applied as two tons of chicken manure as part of the fertility program.

What we're allowing is for the fertility that's being applied to act in a more efficient manner.

Typically you only credit 30 percent of the total nitrogen that you're going to get out of a chicken manure when it's applied to the soil. We basically raised that credit to 56 percent instead of 30 percent. Does that make sense?

MR. ELA: It makes sense, and I'm still

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

curious that in subsequent years you have less of that. If you're entering 30 percent, your figuring 30 percent the next year, 30 percent the following year, but if you release half of it right then, you don't have that other nitrogen the following years.

MR. PHILO: I'm sorry. I'm sorry, but that's actually not what the research shows and those are not the amounts that are generally credited year-after-year. The credit falls off very quickly. It's less than 15 percent the following year.

MR. ELA: Okay. Thank you so much. And if you would send those research studies. The best way is sent it to Michelle and she will send it out to the Board so they can see that documentation. Thank you so much for your comments. We'd really appreciate it.

Next up we have -- sorry, I've got to get my -- so we're not seeing Jodi Rodar or Linda Lake, so we're going to go on to Chris Schreiner, followed by Michelle Miller and Michael Hansen.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So Chris Schreiner, please go ahead.

MR. SCHREINER: Thank you. I'm Chris Schreiner, Executive Director of Oregon Tilth, a leading non-profit organic certifier, educator, and advocate, and I'm here to discuss human capital strategies with a focus on the scarcity of organic inspectors. My comments reflect our unique perspective as a certifier that recently redesigned our inspection team from being primarily independent contractors to a department of full-time staff. While much focus is on how to increase the number of people entering organic certification as a profession, we must recognize building the pool of qualified inspectors is contingent upon reducing the number of people leaving. A strong retention strategy relies on creating opportunities for connection developments and a long-term career path. In the last six months, we've persuaded experienced inspectors to continue their organic careers by offering them full-time employment, responding to concerns about benefits and quality of life that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

inspectors gave as reasons for exiting the field.

By creating a staff inspections team, we offer career stability, insurance coverage, localized travel, training opportunities, and competitive salaries. This helps stabilize the existing pool of qualified or experienced inspectors and we gained highly valued personnel.

Organic inspectors are on the front lines protecting trust in the organic label. Let's keep the best we have and incentivize the rest by establishing a career path and a workforce pipeline for certification professionals. The NOP can financially assist the school in several ways.

First, as more universities develop certificate programs and degrees and organic food and ag, work with them to create access to grants and student loans. Second, support IOIA and the ACA by funding development of additional or organic integrity learning center content and curriculum for more advanced level inspection courses. Third, provide funding to support the creation of online platforms for mentorship matching and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

one-on-one apprenticeship and mentoring services.

Finally, as organic certification becomes more complex and globalized, the costs are increasing to ensure comprehensive compliance and protect organic integrity.

Let's use what we've learned during the past year of conducting inspections during a pandemic as an opportunity to evaluate new procedures that serve the goals of keeping certification accessible by controlling costs, while also ensuring integrity and accountability.

Going forward, we believe there are opportunities to explore continued use of remote virtual inspections, in conjunction with on-site and in-person inspections, based on client-specific risk assessments. We need more well-trained and committed inspectors to match the organic sector's continued growth and to ensure its success, and we need to ensure existing inspectors are supported in new ways to retain their expertise. Thank you.

MR. ELA: Well done, Chris. Questions for Chris? Nate has one for you.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. POWELL-PALM: Hi, Chris. Thanks for your comments. Could you speak a little bit to your feelings on this idea of creating a more standardized and, kind of, full buy-in from stakeholders on a mentorship program, kind of bringing it out of the more one-on-one mentorship to a more standardized program that would be administered by the IOIA?

MR. SCHREINER: Yeah, Nate. I mean, I think that consistency is key. As certifiers, we want our work in the field to be consistent. We need our inspectors to be using consistent procedures and have consistent levels of qualifications, and so credentialing this and having a standardized system, I think, will just help advance that consistency across the field in terms of the service experience our clients have, as well as just the experience that apprentices in organic have, as well. So I think, you know, I've heard this idea of, like, certification programs, like, for credentialing of inspectors is a common theme. And I think there's real

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

opportunity to just build the professionalism in that space.

MR. POWELL-PALM: Thank you.

MR. ELA: Question from Brian for you.

MR. CALDWELL: Yeah, thanks, Chris, for sharing that information. And I'm just wondering, did that increase your costs and then did you have to also -- I mean, the change in employment status, did that increase your your costs and did you have to pass that on to the farms?

MR. SCHREINER: Yeah. This is a brand new thing, Brian, so, in short, it certainly hasn't shifted our costs from a lot of more direct costs that we were paying Independent contract inspectors, those are shifting into our payroll and benefits costs. And, of course, when we were paying contract inspectors, we weren't having to pay payroll taxes and we weren't paying benefits for health insurance and those sorts of things. So we've seen increased costs. However, and this is the experiment that's occurring right now with our clients and with us at Oregon Tilth, is we have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

now standardized an hourly rate for our inspection services. And so from our clients perspective, they won't see as much variation year to year based on which contract inspector that we use, because sometimes contract inspectors are charging us, or were charging us, at different rates. And so we are expecting a more consistent price experience for our clients and we've set a standardized hourly rate that we anticipate to cover our total increase in cost for payroll and benefits, but we'll see if the math plays out at the end of this year.

MR. CALDWELL: Yeah, thanks very much. That's really helpful.

MR. ELA: Kyla has a question.

MS. SMITH: Hey Chris, great comments. My question is in regards to working with universities. I live in a town with a land-grant university and it's sometimes been a challenging relationship to get organic courses in there to even talk about this as an optional career path. And so I wondered if you had any experience or any thoughts or recommendations what that outreach

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

could look like to help bolster that as even an option. Thanks.

MR. SCHREINER: Thanks, Kyla. Yeah, I guess I can offer our experience. We're fortunate here in Oregon to have a really strong land-grant university partner with Oregon State University. Oregon Tilth has had a ten-year partnership with them. And, you know, at OSU, they do have organic classes and they just actually launched an online organic certificate program that students can take. In terms of how to build those relationships -- I know there are other land-grants that are doing this. I've been in touch with -- we have a board member that's on the faculty at the University of Madison, Wisconsin.

Here's my advice to organic advocates in states where their land grants aren't quite on the leading edge of organic. Engage, show up, bring the credible science and, you know, and the voices of the farmers who those land grants are designed to serve. And engage administrators, engage faculty and, you know, just participate.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Part of it is just showing up, engaging, and being a valued partner. And part of our partnership with OSU, to be perfectly frank, has been investment.

We have invested in their center for small farms and regional food systems. We've invested in the launching of their organic extension program. And because we've shown some financial commitment to the work that they do and the services they provided, that, you know, grants us some access and some influence in setting the research and education agenda going forward.

MS. SMITH: Thanks for those thoughts.

MR. ELA: All right. Thank you so much, Chris. We really appreciate your thoughts.

MR. SCHREINER: Thank you.

MR. ELA: We'll move on to Michelle Miller, and after that, Michael Hansen and then Ramani Narayan. After Ramani, we're going to take a short break. So, go ahead, Michelle, and state your name and affiliation.

MS. MILLER: Okay. I'm Michelle Miller. By the way, thank you for having this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

meeting by zoom. So myself, I just want to give you a bit of background. I have a bachelor's, master's, and a philosophy degree from UC Berkeley.

Years ago, I was a tech entrepreneur, licensed software public company at a young age. I was healthy, very athletic, and won trophies from competing and sea swim events. I should've lived happily ever after, but instead I was an innocent bystander in a mosquito abatement operation and nearly died. And despite it being 20 years later, I have had permanent damage. In my case, it was documented by metabolite test from Pacific Toxicology Labs.

And I say all this to say there's a way to live healthier, and I do. For many years, we remodeled properties using various safer materials and methods, and I still live that way and it works.

And I tell that to say, please don't compromise the organic food standards. It's just not worth it. I feel like for problems, people can be creative and find some other way to solve the problem rather than compromise our standards. So,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

in particular right now, it's the antibiotic I'm going to mispronounce, kasugamycin. Please don't allow it. And with the biodegradable biobased mulch film, BBMF, please don't change the definition. And with the ion exchange, I think it should be labeled.

I appreciate that you guys are doing a great job and just would appreciate the organic standards not being compromised. Thanks.

MR. ELA: Thank you so much for your thoughts, Michelle. We really appreciate you taking the time to reach out to us on your own personal thoughts. Are there questions for Michelle? I am not seeing any, so thank you, again, Michelle for taking --

MS. MILLER: Okay.

MR. ELA: -- the time to testify before us.

MS. MILLER: Yeah. Thank you guys, kindly.

MR. ELA: We next have Michael Hansen, and then Ramani Narayan, and then, like I say, after

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that, we will take a break. So Michael, take it away.

MR. HANSEN: Hi. I am Michael Hansen, Senior Scientist with Consumer Reports, and independent non-profit organization that work side-by-side with consumers to create a fairer, safer, and healthier marketplace. I will speak on carrageenan, kasugamycin, and excluded methods.

On carrageenan, we oppose it's relisting on the National List. We strongly supported the Fall 2016 NOSB vote to remove carrageenan from the National List due its lack of essentiality. It has no nutritional benefit and, due to potential health effects, which we explored in detail in our Fall 2016 NOSB comments.

We urge NOSB to once again recommend removing carrageenan from the National List due to lack of essentiality and potential adverse health effects.

On kasugamycin, we oppose it's listing on the National List. Our 2015 consumer survey found a large majority, 80+ percent, of consumers think that reducing use of antibiotics in food is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

important and that organic should mean no use of antibiotics or other drugs. Thus, kasugamycin is not compatible with organic production. We also note that kasugamycin is not permitted for use and organic production in Canada, EU, Japan, and Codex Alimentarius. There is also the potential threat of antibiotic resistance for both human health and the environment, although there is insufficient evidence to properly evaluate the issue. The TR notes that the normal use of kasugamycin has already led to resistance in several plant pathogens and even notes that there is good reason to believe that fire blight will become resistant to kasugamycin. Finally, kasugamycin is not needed, as alternatives exist, including cultural and biological controls. Thus, we urge NOSB to oppose listing of kasugamycin due to incompatibility with organic, potential impacts on environment and human health, and due to the fact that alternatives exist.

On alternative methods, we applaud NOSB for moving forward on this topic. We note that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

the recommendations of NOSB since Fall of 2016 have been unanimous. We urge NOP to take up these recommendations and codify by publishing a guidance document for the NOP Handbook of the four evaluation criteria used to determine if a method should be excluded or not, the 11 listed methods that should be prohibited in organic, and the five listed methods that should be allowed in organic.

We also urge NOSB to vote on the six methods on the To Be Determined list at the Fall 2021 NOSB meeting. NOSB should also develop specific definitions for each of the methods on the excluded, not excluded and TBD list to make clear what is and is not being excluded. Thank you.

MR. ELA: Thank you so much, Michael.

Are there questions? We have one from Brian.

MR. CALDWELL: Yeah, thanks Michael.

We have a strong impetus to try to make decisions about the TBD list and the excluded methods, and, very briefly, I'm just wondering whether you feel like cell or protoplast fusion would qualify as an acceptable method? Like, say, if it was new

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

today, should it be approved?

MR. HANSEN: Well, if you look at the definition of modern biotechnology, which is what we've always put forward, that does ban cell fusion, but above the level of the family. And the reason that was done is because there have been these techniques used in the cold crops for quite a while. So if you use the definition of modern biotechnology, it would be permitted. But there are some people, like I'm for one, that don't think that it should be used at all. So, that should be debated. Although from our perspective, using the term modern biotechnology, cell fusion would be allowed, but below the level of plant family.

But anything above that would be considered excluded.

MR. ELA: We have a question from Mindee.

MS. JEFFERY: Hi. Thank you for your comments, Michael. I'm wondering if Consumer Reports has current consumer survey data about consumer expectations around excluded methods in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

organic?

MR. HANSEN: No, we have -- every time we'd asked in 2015 and elsewhere, It's actually been very clear one of the highest things is anything that's considered genetic engineering should be excluded, along with, you know, pesticides and drugs. But, no, we have not done that survey in the last couple of years. Hopefully, there'll be one done this year, but we shall see.

MR. ELA: Jerry has a question for you.

MR. D'AMORE: Hi, Michael. I, too, thank you for your comments and I appreciate your expressed concerns about human health. And I was wondering if you go beyond that and have looked at any environmental concerns for the carrageenan?

MR. HANSEN: Well, we didn't look at that issue, although I noticed others, both NOC and Beyond Pesticides, have put forward arguments that there could be adverse environmental effects from the, you know, from carrageenan production. But that's not something that we looked into in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

any detail. We just noticed, given a lack of essentiality, the fact that most other organic programs don't allow it and that there are human health -- clear human health effects, that those are enough.

MR. D'AMORE: Thank you, sir. Appreciate it.

MR. HANSSEN: Sure.

MR. ELA: Any other questions from the Board? Thank you so much. We appreciate your comments.

MR. HANSEN: Thank you.

MR. ELA: We are gonna move on to Ramani Narayan, and he'll be the last speaker before the break. So Ramani, please go ahead. Michelle, are we seeing Ramani?

MS. ARSENAULT: Yeah, he's on the call with us. We've just asked him to unmute himself.

MR. ELA: Okay.

MS. ARSENAULT: We have a bit of a delay here. Here we go.

DR. NARAYAN: All right. Now I am set.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Thank you. I am Ramani Narayan from Michigan State and I thought I would offer some comments to the group on mulch film. So today, USDA organic regulations permit the use of synthetic PE mulch film, provided it is removed at the end of each growing season. However, PE will become brittle due to weathering and fragment into small pieces that even micro plastics. And is well documented in literature that they have adverse effects on soil. So the use of certified verifiable soil, biodegradable mulch films, which is based on approved NOSB requirements for biodegradability, should be permissible even with today's regulation, I think, provided it is recovered at the end up season for on-farm composting. But it could also be plugged back into the soil because it will ensure complete removal of the carbon of the mulch film.

The problem which is sort of holding this back is the issue of biobased content, and I would like to submit to the Committee that the biodegradablility requirements is that all the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

carbon is removed by microbial assimilation to CO₂.

That is the requirement. So there is no biocarbon or any carbon remaining and if biobased content is essential or needed, a minimum biobased content, as is per the USDA BioPreferred Program, would be useful, valuable. But to put up a 100 percent biobased content is essentially holding back this valuable technology which would prevent any accumulations of resistance of PE in the soil and this, as I understand, is now CA regulation also.

So I'm open to questions. I just wanted to bring this back to the table before this committee. I think these documents have been there in my report, as well.

MR. ELA: Thank you very much. Asa has a question for you.

MR. BRADMAN: Yeah, I mean, this is issue though a lot of us on the Board are torn on. We're proposing right now the idea of allowing 20 percent non-biobased, but biodegradable, and, you know, many of the concerns are one, philosophically allowing a petroleum material

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

directly added to soil, although we already do that in at least one other area of NOSB regulations or NOP regulations.

The other is that, you know, if climate, and especially in arid areas or cold areas, are such that even with the biodegradable mulches, whether in my mind, a 100 percent biobased or partially synthetic, can break down more slowly and we can find micro plastics and other particles forming that are persistent, especially maybe if it gets into a water, aquatic or other environment blown off-field. And so these are, again, the continuing concerns with biodegradable mulch. I'd be curious about your thoughts on that.

DR. NARAYAN: Yeah. Those are all absolutely valid comments. This is why I thought that today since you've permit PE mulch film full recovery, and then whatever is done with it, please as an interim, you could say if you use a biodegradable mulch film, you recover it and then you dissolve, on-farm composting, or whatever you do with it. The rationale for this is that if there

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

are any fragmentations or small fragments of particles which are foamed because of degradation in the soil, it will completely biodegrade. And you have to be verifiable and certified, 90++ percent carbon to CO₂. So I just think that it could be useful to get it. It is valuable for agriculture because you don't leave any persistent particles, which today you do irrespective because the regulations allows mulch film. If you said no mulch films, then yes, it could be a harder argument to make. Does that makes sense?

MR. BRADMAN: Yes. And this is kind of what we're, really what we're grappling with.

DR. NARAYAN: The other comment, if I quickly offer, is the biobased carbon has nothing to do with whether it biodegrades, doesn't biodegrade, end of life. It is of value for agriculture and should be there to some extent, but you would not be having any technology if you wanted 100 percent biobased because the monomers in all are not in place still, and it would take you a long time for this to get implemented, which

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

would seem, you know, unnecessarily taking it backwards.

MR. ELA: Amy has a question.

MS. BRUCH: Dr. Narayan, thank you so much for your contributions on this topic. I had a question for you on the biodegradation. You mentioned about plowing, and I guess my first question with that is, if you're plowing, you're gonna be going quite deep into the soil, six plus inches, and I'm concerned with the amount of microbial activity that exists at that level because, from my information, and you can calibrate with me on this, I think 95 percent of the microbes are actually in the top four inches of the surface.

So for plowing this biodegradable biobased mulch at a deep level, what's the idea on the timeline on this biodegradation?

DR. NARAYAN: Unfortunately, I am going to be honest on this and say that there is not perfect data on what happened. These are more anecdotal data, right? This I understand, which is what we are trying to correct. That, yes, I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

plow it and no, I don't see any part. And I think we are -- at least I, please, I am pushing for -- maybe USDA is listening -- to say you need a project which says what actually happens and what is the exact data on it, which is why I am suggesting -- and this is my own personal comment because I don't think industry likes this and neither does the USA probably -- but if you permit it to be removed because the instruments of removing is there and then you do on-farm composting, then the amount of the fragments which goes into the soil is not going to accumulate. And that I always thought was a valuable benefit, as opposed to polyethylene films. So you're not changing anything. You are improving what exists today to a better material that, even if it gets fragmented and goes into soil, It's not going to be persistent. That is definitely proven because the soil biodegradability tests are all done and removing it and composting it, I think, is a doable proposition. It is on-farm.

The question you are asking, do you have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

definitive proof that when you plow it into the soil, will it all be completely removed? What is the time frame? Soils are different, like it was pointed out. Desert conditions was with this. It will have an effect and the two projects, which was funded by the USDA, basically confirmed that.

They said that if it was done in Washington State, it biodegraded very quickly and that was not a problem. If you did it in Tennessee, it was much slower. In Texas, it's slower. So you'll have these variations.

But the belief is that within a two-year time-frame, which is the turning of the soils, that nothing should remain and, therefore, as a part of this approval of standard in the California regulation, it does require a pilot state test to be done by the farmer to prove and satisfy himself that there is no persistent particles remaining.

So that's the only answer I can give you for that, Amy.

MS. BRUCH: Okay. Thank you so much.

MR. ELA: We have a question by Brian,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and then a question by Asa.

MR. CALDWELL: Yeah, sorry to keep pounding on this biodegradability issue, but, so I'm a little confused. Are you are you saying that the products that are out there right now, there are products that are a 100 percent biodegradable?

DR. NARAYAN: Yes, as per the standards.

MR. CALDWELL: I'm sorry. So, as per the standards, is that the same as 90 percent biodegradable over two years or am I not understanding that?

DR. NARAYAN: So let me let me --

MR. CALDWELL: Apparently not 100 percent.

DR. NARAYAN: Let me clarify that. Because 90+ percent is the statistical value set on it. And this is where the confusion rests. It does not mean that you can add 10 percent of a non-biodegradable stuff. It also doesn't mean that you can add a polymer which will not biodegrade and only 90 percent biodegrades. But if you look

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to your setting an absolute value, because the error in biology of this test method is plus or minus 10 percent, to set an absolute value, you set as 90 percent. In fact, the standards actually require that if you add any polymer, organic polymer, between 1 percent and 10 percent, you should test it separately. So this question of what if you put 5 percent non-biodegradable, you won't be able to detect it, is eliminated because if you're adding that, you must test it separately.

So I know it sounds like conflicting, but the 90 percent absolute level is corresponding to complete removal of the carbon from the environment. That is what that 90 percent is. It has not got anything to do with 10 percent being allowed to be non-biodegradable.

MR. CALDWELL: Thank you.

DR. NARAYAN: And you could use a statistician on this, that there is a fundamental difference on saying, you are permitted 100 percent plus or minus something or yours is 90 percent plus or minus. He could have said 90 percent plus or

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

minus 10 percent. But if you said 100 percent, there's no way you're going to achieve 110 percent.

So statistically when you're setting these numbers, you set it 90 percent because we know that you cannot go over 100. But to avoid that problem, which I think is so very prevalent everywhere, it's not an exemption to add 10 percent non-biodegradable and therefore, to overcome that, the requirement is that when you are certifying, you have to prove that the 1 percent to 10 percent is also completely biodegradable. Hopefully that helps.

MR. ELA: Let's move on to Asa.

MR. BRADMAN: So one of the comments from the people in Washington was that after a season, the biodegradable mulches become too brittle to handle and remove, and it would be challenging to gather up the material and move it to on-farm composting. And I'm curious if you have any experience with that or comments on it?

DR. NARAYAN: I am sure that the technology could make that last for one year at

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

least. So this is the balance, right? If you want to plow it back into soil, of course you want to make it brittle so that it's easy to plow it back into soil, and so the industry would make it that way. If you said that, no, I want you to recover it, I am sure they would find a way to be able to make it last long enough to be pulled out. I still think the ideal solution, which is where I feel sort of ambivalent about, the ideal solution for farming is still to plow it in and to prove that nothing persists. But if you ask me, as a scientist, do you have data statistically proving that this PE value I can say every time so much is not going to be left, I don't have that data.

But in a large-scale, it has been shown that within the two years, there is no carbon remaining. That is for sure. Now, how do you define the rules so that you want to be between what you're doing real-world versus what you do in the lab, that's why I thought this interim step of allowing this and getting more data, so they come back and say I can plow it in would be a doable proposition.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. BRADMAN: Thank you.

MR. ELA: Thank you so much. I have one kind of yes or no question for you. Do products exist on the marketplace that would meet this annotation? Let me say that again.

DR. NARAYAN: Say that again.

MR. ELA: Do products exist on the market that would meet this annotation?

DR. NARAYAN: Sanitation?

MR. ELA: Annotation. Do products exist that -- do products exist on the market that are compatible with this listing?

DR. NARAYAN: Yes, except for your biobased content requirement, which I am not sure where it stands, but it says 100 percent, I think.

That was the last time I heard about it. If you removed that one -- not remove it in totality, but if you did not require 100 percent biobased content, then there are products in the marketplace today which can -- not just from one supplier, but multiple suppliers -- who would meet the biodegradability requirements, which I can tell

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you is pretty aggressive to me, which is now embodied in the NOSB requirements. Absolutely it will. The part which is holding it back is biobased content, and that I don't think has anything to do with the end of life. Sorry. You told me to say yes or no. When you ask a professor a question, you can't answer in one word, so...

MR. ELA: So you're just --

DR. NARAYAN: That was remarkable. I'll have to record it in my library.

MR. ELA: So you're saying there are not products available now that have the 80 percent biobased content?

DR. NARAYAN: Yes. That would be difficult to meet, and have the soil biodegradability requirements, yes.

MR. ELA: Okay. Great. Thank you so much. Appreciate your thoughts.

DR. NARAYAN: Thank you.

MR. ELA: We are gonna take a break now for 10 minutes. So after break, we will have Denae Ranucci, and then Barbara Wingler and Sam Welch

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

after the break. So we will start at nine minutes after the hour.

(Whereupon, the above-entitled matter went off the record at 3:59 p.m. and resumed at 4:09 p.m.)

MR. ELA: All right. We're going to start with Denae Ranucci. Denae, I'm sorry. I'm going to kill your last name here. Ranucci followed by Barbara Wingler and then Sam Welsch. So, go ahead, Denae.

MS. RANUCCI: My name is Denae Ranucci and I am the audit team leader at QAI. I came to talk to you folks today about the issue of human capital and wanted to state that I am in agreement in regards to the lack of qualified inspectors in the industry. I wanted to say that I believe that it's only going to get worse with the implementation of the strengthening organic enforcement rules. We are completely behind the enforcements and improvements that the SOE has created as far as the standard qualifications and the overall improvements that it will make for the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

industry.

However, I have really big concerns that this strengthening of qualifications and enforcement of it is happening at the same time that we're seeing increased strain upon our inspector group. Increased experience, the increased experience requirement, allotting to the year of apprenticeship required per scope and scale will be a large barrier to the entry for any new inspectors. And I feel that the time restraint on the experience is not as telling as other quantifiable measures. The amount of work that an individual puts in over the course of a year could be varying and may not be the best teller of actual experience and ready for inspection credentials.

I think that the implementation of this as written will create large differences in how certifiers consider someone qualified and additional certified operations that will be included in the SOE will mean increased inspections, increased inspections with the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

dwindling workforce will create overworked inspectors that will not be able to accurately identify issues when expectations are high without enough time for them to accurately address things.

I appreciated the LSP's analysis remarks and why inspectors are leaving and have communicated a lot of this and work with some of my inspector pools as well. Travel time, unfortunately, is a big issue and something that we can't get away with any inspector industry, but we currently encourage the NOP to approve of the hybrid inspection types that are currently being used to do to COVID regulations; and believe that this additional flexibility regarding audit format for certain inspections will allow for reduced travel and hopefully help with some of this travel burden. I have had communications with many of my inspectors regarding the professionalism that is seen in the industry and the lack of the respect that they continue to get as organic inspectors as opposed to other food safety or other certification auditors.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

We believe that the NOP should re-enforce the certifier's responsibility to create non-compliances when clients are unwilling to commit to an inspection date or an inspection, as well as come up with additional guidance on how to address inspection refusals. This way that we can really help back our inspectors and make sure that they're given the respect that they do deserve. Additional education provided to the public and the client would also help with these inspectors and reviewers to make sure that the guidance and the regulations are actually understood.

As far as ensuring qualified auditors, we work to really open communication between inspectors. and will continue communications with other ACAs and industries and work to help include inspectors in these talks going forward.

MR. ELA: Great. Thank you so much for those thoughts. Are there questions? I am not seeing any, so thank you so much, so much, Denae, and giving me the proper pronunciation of your last

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

name. Next, we're going to move on to Barbara Wingler, followed by Sam Welsch, and then Ib Hagsten. Barbara, please go ahead.

MS. WINGLER: Hi, I'm Barbara Wingler.

Thank you for the opportunity to share with all of you and I'm with Nu Organics. And I'm an environmental engineer and spent most of my career working in the field of water and wastewater treatment and environmental protection.

I'm addressing the current concerns of fraud and liquid organic fertilizer products by proposing the use of spectroscopy as a method to identify fraud and in these products. I was glad to hear this topic introduced by few people during Tuesday's session and I want to let you know that Nu Organics does not sell spectroscopy equipment or services. We're in the business of recovering nutrients from manure for environmental benefit and production of organic fertilizers.

We are, however, using currently spectroscopy on raw manure and dry process manure as a way to measure moisture and nutrients and we've

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

had a lot of success. It came to mind that we can also use this technique for fraud detection on these materials and also on liquid fertilizer products. We're now developing the process to use on our liquid. Next slide, please.

What are liquid organic fertilizers?

The sources of these organic fertilizers could be fish, beef, different types of manures, soy products among others. These products in general have nitrogen that is made immediately available to plants and are meant to be applied in seasons by plant-available nitrogen. Next slide, please.

Liquid organic fertilizers are derived from plant and animal matter and as such, all have carbon compounds that are unique and characteristic of the plant and animal material that they come from. Could you roll through the next slide, please?

Near-infrared spectroscopy is widely used in the food industry and has the following advantages: It's fast and that results can be obtained in minutes; it's relatively inexpensive,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

reproducible, and precise. Minimal operator training is required. For example, the slide shows some spectra that we produced and they're the first ones to be produced in our lab with right minimal operator training. For example, the spectra shown on the top graph is two examples of our product at different stages of concentration.

As you can see, there's a distinct fingerprint produced. The shape is maintained through the concentration process. The bottom slide shows comparison organic liquid fertilizer with a synthetic fertilizer or the same concentration. You can see on the top, the synthetic fertilizer produces a very flat line, whereas the organic fertilizer, it shows a distinct shape. Next slide, please.

We propose to use this technology in the following manner: to sample and perform a scan of the liquid that represents the batch of products sold; store the sample and the scan as the original fingerprint of the product; provide a chain of custody for manufacturer to distributor to farmer;

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

sample liquid product at any point in this distribution chain; and compare that scan to the original fingerprint. Thank you for your time.

Any questions?

MR. ELA: Well done on your timing. Are there any questions from the board? I am not seeing any, Barbara, so thank you very much for your presentation. We do appreciate your comments.

MS. WINGLER: Thank you.

MR. ELA: We're going to move on to Sam Welsch, followed by Ib Hagsten, and Yesenia Fuentes. Go ahead, Sam.

MR. WELSCH: Thank you. I'm Sam Welsch with OneCert. The final rule was published with an effective date of April 21 of 2001. That was exactly 20 years ago yesterday.

The preamble to the rule includes the statement during the 18 month implementation period. The NOP intends to publish for comment certification standards for agriculture, mushrooms, greenhouses, and aquatic animals. The

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

absence of those missing standards has resulted in huge inconsistencies among certifiers.

The certification of soil-less systems is one of the most egregious. Such systems can only be certified by designating all the soil-related provisions in off EPA and the regulations as not applicable. Designating soil provisions is not applicable to soil-less systems. That resulted in the three-year transition requirement also being considered non-applicable by some certifiers. That was the logical result because the soil on that land was not part of the production system.

In response, the NOP issued a memo titled Certification of Organic CROP Container Systems in June 2019, clarifying that the three-year transition period applies to all container systems built and maintained on land.

That memo created more confusion and inconsistency amongst certifiers. The ACA formed a working group, to address the inconsistent interpretation of the memo.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The working group concluded that the memo only clarified that it is prohibited to spray synthetic herbicide to the land, apply a layer of plastic, put containers on the plastic and certify the production system as organic. The working group also identified many areas of inconsistency for certification of greenhouse and container production. Clear and specific standards are needed.

The group wrote: This needed clarity and specificity cannot adequately be achieved through certifier consensus or additional NOP guidance. We need the NOP to draft regulations based on the NOSB recommendations on greenhouse and container production from 20 and ten years ago, respectively. The group wrote: These are areas of inconsistency, and related concerns need to be addressed through formal rulemaking and the publication of greenhouse and container production standards.

I want to comment briefly that ion exchange is a method that creates chemical change.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

That's why it's called ion exchange. Regarding so-called biodegradable plastic mulch, remember that OFPA clearly states for a farm to be certified under this chapter, producers on such farm shall not use plastic mulches unless such mulches are removed at the end of each growing or harvest season. Finally, please review my written comments on clear legal writing and the rules of textual interpretation.

MR. ELA: Well done, Sam. Right on the money there. So other questions from the board for Sam? I am not seeing any. Sam, thank you for much for your comments as always. We're going to move on to Ib Hagsten, followed by Yesenia Fuentes, and then Margaret Scoles. So, Ib, please go ahead.

MR. HAGSTEN: Thank you. Good afternoon. NOSB members who work exceedingly hard on our behalf and to Michelle who has kept us and you on track for many years. I, Ib Hagsten, have three issues that all fall under the category of human capital which Dr. Tucker so eloquently championed.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I recognize the credential system for inspectors. Having been an organic inspector for 16 years, conducted an excess of 4,000 inspections, I, as a seasoned accredited independent organic inspector, deserve to be well-paid; yet I'm not paid adequately for the continual expanded training I've invested in.

I have never expected to make a killing as an organic inspector, yet I do expect to be treated with courtesy by the certifiers, to have life uplifting events in the Elms Buggy or around the corporate boardroom. Provide professional quality data of review and audits into visit operations studying to assure NOP organic integrity will be maintained. Thus I do encourage the NOSB, the NOP, and IOIA to help develop a recognized credentials program that gives credit to inspectors who raise the bar on behalf of USDA NOP organic logo, the NOP reputation and the organic integrity.

Secondly, formalized apprenticeship for new inspectors. Having mentored two dozen

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

IOIA-trained inspectors, I've never asked for payment. My life followed the initial crop training, has been such that human enriching, professionally expanding, and exponentially fulfilling journey that I'm happy to pay forward to inspectors. In anticipation that they may find the profession of organic inspector meaningful and reasonably profitable. Thus, as there are insufficient numbers of qualified mentoring inspectors, we must recognize or encourage NOSB and NOP to formalize an effective organic inspector program apprentice program.

Thirdly, an encouraging comment about the three pending laws to guide livestock and poultry management practices as met the NOP preamble and guidelines. For someone who has been known by the NOP preamble and initial industry standards from the beginning, and I visited thousands of small family farms who raise the dairy herd and poultry flocks according to the regulations, it has been disheartening to see the deviation from the NOP standards by a small to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

number of farms of a very large size, thus make the topsy-turvy the national product production penalties. This debate has gone on too long in my perception, and therefore I have a put on the table a clean manner a recommendation: get off the receptacle and dedicate. Thank you for listening.

Thank you for your work and thank you for serving on NOSB.

MR. ELA: Thank you so much for your comments. Sue has a question for you.

MR. HAGSTEN: Yes.

MR. ELA: Go ahead, Sue. You need to unmute.

MS. BAIRD: Oh, I'm sorry. I'm sorry.

Hi, Ib. Thank you for your comments on this, and I recognize your work and being President of IOIA for many years. You've been an inspiration to a lot of people. And I agree you couldn't be conducting apprenticeship trainings and you need to be paid for. And you've done it for free for all these years now. I've done it for free in the past.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

My question, though: You said that you urge NOP and NOSB to develop the criteria, -- and what we have heard and will hear from Margaret next is that IOIA should be doing that -- how do you respond to that or did I misunderstand what you said?

MR. HAGSTEN: No. No. I just said everybody needs to work together on this because IOIA can only do so much and we need a buy-in from the other guiding regulatory segment. That's all.

MS. BAIRD: Okay. Thank you.

MR. ELA: I don't see any other questions. Thank you so much for your thoughts and comments on this.

MR. HAGSTEN: Thank you.

MR. ELA: We were going to move on to Yesenia Fuentes, then Margaret Scoles and Melody Morrell. Yesenia, please go ahead.

MS. FUENTES: My name is Yesenia Fuentes, working with BioSafe Systems. Thank you for your service and your consideration for the needs of all stakeholders. Please review my

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

written comment on behalf of BioSafe Systems for more information. BioSafe Systems is a family-owned manufacturer of biodegradable disease control products since 1996.

The mission of BioSafe is to provide disease control solutions utilizing reduce risk chemistries that do not negatively impact the health and safety of people and the environment.

Peracetic acid, PAA, is an important tool in the prevention of food-borne illness through its use in crop production, water treatment, food processing, and as a hard surface sanitizer and disinfectant. It has been approved both as a food contact and surface contact material.

PAA is critical in increasing food safety and the implementation of the Food Safety Modernization Act, FSMA. We strongly support continued use of peracetic acid on the National List as listed for use in disinfecting equipment, seed asexually propagated planting material, and to control fire blight bacteria. PAA is not manufactured; it is formed in suit between hydrogen

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

peroxide and acetic acid. PAA formulations are fast-acting, oxidizing, broad-spectrum microbicides that are effective against broad-spectrum of microorganisms including bacteria, yeast, animals, protozoa, algae, and viruses. It should be noted that as a strong broad-spectrum microbicide, PAA has been found to be affected when it apply it as a standalone product, especially under low to moderate disease pressures situation.

PAA has a long history of use in organic production. The uses that are listed in the sunset review have been allowed since the first amendment in the National List in 2003 and have consistently had the overwhelming support of organic grower ever since. We appreciate your consideration for our position. Thank you for the opportunity of commenting during this phase of sunset process. Thank you.

MR. ELA: Thank you so much, Yesenia. Are there questions? I'm not seeing them. We really appreciate your comments and taking the time

to talk to us.

MS. FUENTES: Thank you.

MR. ELA: We're going to move onto Margaret Scoles, followed by Melody Morrell, and then Kelly Taveras. Go ahead, Margaret.

MS. SCOLES: Margaret Scoles, Executive Director International Organic Inspectors Association. Members of the Board, NOP colleagues: I will comment on the human capital proposal. Thank you to the board and the NOP for bringing this to the forefront. We submitted extensive written comments including the outcomes of an inspector survey conducted by our policy committee.

We listed the challenges we see and suggested robust solutions. We are the leading worldwide training and networking organization for organic inspectors. In 2020, IOIA trained 867 participants in 60 separate events, representing 28 distinct courses with 13 partners, universities, non-profits, certifiers for profits.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The lack of a strategy to recruit and maintain enough well-qualified Inspectors and Certification staff creates great risk for Organic Integrity. The time to correct this is short. The main problem is not that we're training too few people, but that too few are successfully becoming inspectors and staying in the field.

Our survey supports this. A significant number of those completing IOIA basic training stated that they were unable to obtain work because they couldn't obtain mentorship. We urge the NOSB to urge the NOP to invest in inspectors. People and institutions invest in the things that they value. Inspectors are the gatekeepers of the industry. Without quality inspectors, you can't have a good certification process. IOIA urges NOP funding for, first, a state of the industry study that captures and publishes the data for contractors and staff. How many inspectors/reviewers are there? Their demographics: how many inspections/reviews did they do? Why do they stay in the profession?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Second, feasibility studies for apprenticeship and credentialing programs. Apprenticeship: onboarding inspectors has been identified as a key bottleneck due to lack of widely available, consistent quality mentorship. Apprentices must have an affordable opportunity and mentors must be compensated appropriately. Credentialing: creating universal standardized, measurable metrics for determining inspector competencies to ensure that inspectors are assigned appropriately as critical.

Third, support for exploring pilot programs with universities or colleges to increase awareness of inspection as a career, access, broader funding and varied training formats. Also, reduce duplicate annual training and increase consistency with widely accepted annual update trainings. Diversity, equity and inclusion must be part of any solutions. Our industry is not training too few inspectors. In the past four years, IOA trained 653 entry-level participants in the US alone. Lots of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

inexperienced inspectors and high inspector turnover all contribute to the risk. Our industry needs to come together.

Unreasonable solutions: with growth in the organic market and SOE, we face an imminent shortage of competent inspectors. Attracting more and better candidates is an oversimplification that will not solve the problem. Thank you again for your work.

MR. ELA: Well done, Margaret. You're in an elite group of ending exactly at the right time. We will open it up for questions from the board. Sue has a question. Sue, that little unmute button is going to be your undoing.

MS. BAIRD: Every time. Not last -- I said I read with great interest your lengthy and very in-depth comments, and I really appreciate it -- you doing the survey and getting the responses back. I guess my question is: -- and it sounds like you've already moved forward on apprenticeships and receiving funding. I heard yesterday from Organic Valley may be willing to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

put the monies towards that apprenticeship program -- can you elaborate on where you're at on that program?

MS. SCOLES: Very much in the early stages. We have been working for about six months on developing a pilot program, mentorship, qualifications, application process. And the funding is proving a little bit trickier than we expected, but we have started and Organic Valley actually was our first donor for the program. But what we're trying to do is fund as a pilot program where the participants might even not pay anything.

They would pay a low fee. And the reason for this is it allows us -- it's kind of like a scholarship program. People would apply.

We can pick the really -- candidates that look very promising, and they, and require that they give us feedback over time and how useful the training was. In other words, participate in the process. They won't just be getting free training.

MS. BAIRD: To follow up -- and so I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

appreciate that for the participants -- but what about the trainers?

MS. SCOLES: I'm sorry? More about the training?

MS. BAIRD: What about the trainers? You're saying that your participants won't pay anything but is there built into your pilot a way to pay the trainers for doing the --

MS. SCOLES: Yes. Well, yes. That's the scholarship. The funding will come through the scholarship program. The participants will apply and may or may not pay. We don't know that yet. But the training itself definitely the mentors will be paid appropriately, the same rate as what we pay our lead trainers is currently the plan.

MS. BAIRD: Thank you.

MR. ELA: Nate, you lowered your hand. You had it raised. Do you want to ask anything?

MR. POWELL-PALM: I think Sue kind of covered it. I'm really excited about this mentorship program. I think it highlights this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

bottleneck. I just wanted to thank Margaret for emphasizing how -- it's sort of rare to have so much consensus in a global organic community about who the best treating organization is.

And so the fact that Hong Kong and Korea and America all go to IOIA for training for organic inspectors is, I think it's something to acknowledge and celebrate that we've got the organization here domestically. And new inspector creation isn't the problem is what I'm hearing, but more, how do we get them through that mentorship program into work?

MS. SCOLES: The latter it has to -- the runs are too far apart.

MR. POWELL-PALM: Yes. Thank you so much for your comments.

MS. SCOLES: Thank you.

MR. ELA: Thank you, Margaret. We do appreciate it is always. We're going to move on to Melody Morrell, then Kelly Tavaris, and then Joanna Miranda. Let's go with Melody here. You're on the floor.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. MORRELL: Thanks. My name is Melody Morrell and I am the Executive Director of the Cornucopia Institute. Thank you, NOSB members, for your important efforts. Cornucopia is steered by numerous organic farmers, all of whom take careful pains to feed the soil biota, which feeds the plants via an array of complex and independent relationships. Authentic organic green farmers may choreograph more than a dozen crops in a rotation, interrupting pest and disease cycles, helping prepare nutrients for each succeeding crop right there in the soil. Building humus and life below the surface and holding water rather than allowing it to run off.

But Cornucopia also hears reports of grain farmers attracted to organic production for the higher-price-point, short-circuiting their organic rotations to include only two or three crops. Without thoughtful crop rotation, off-farm inputs become crucial from fertilizer to pest control. The availability of ammonia extracts discourages continued improvement in soil

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

biological activity, biodiversity and farm management practices. Conferring nitrogen directly to the plant roots is the quick fix. Ammonia extracts and other highly soluble nitrogen fertilizers are not compatible with organic agriculture. Cornucopia supports the petition to add non-synthetic ammonia extracts to 205.602.

Cornucopia is equally interested in protecting the microbiome inside the body. We have been in touch with hundreds of individuals who have suffered colitis and incapacitating gut pain from ingesting carrageenan. With this handling material up for sunset review in 2023, industry continues to insist that this ingredient is safe. Can we trust this assertion when it's rooted in the same studies that these companies fund? Independent research, including several studies published after the 2016 TR, suggests carrageenan is harmful to human health.

We request that the board watches for potential conflicts of interest in studies published by industry. Despite its reputation as

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a safe and natural product of seaweed, commercially available carrageenan is extracted via volatile synthetic solvents. The NOSB would've reclassified carrageenan as a synthetic substance in 2016 had they not recommended its removal from the National List. But despite the NOSB recommendation, the NOP reenlisted carrageenan in 2018. Industry claims it is necessary.

Meanwhile, more than a dozen companies including Organic Valley, Orgain, Horizon, Silk, and Eden Foods, have reformulated their products in order to remove carrageenan. Some have suggested that carrageenan is easily avoided by reading the label ingredients statement. Consumers contacting Cornucopia disagree. Unfortunately, when used as a processing aid, as in beer, or when used in cream, that is itself an ingredient in another product such as ice cream, carrageenan will not be listed on the label. Cornucopia requests the NOSB removed carrageenan from the National List. Chemical fixes are endemic to the food system, but they have no

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

business in organic. Thank you.

MR. ELA: Gold star for you as well, Melody, on timing. Are there questions from the board? I am not seeing any, so thank you so much for your time and presentation. We appreciate it.

We have Kelly Taveras, then Joanna Miranda, and then Gwendolyn Wyard. Go ahead, Kelly.

MS. TAVARES: Thank you. Good afternoon. My name is Kelly Taveras, 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 for beginning a five-year journey of critical and greatly appreciated service to the organic sector. My colleagues will speak on specific agenda topics and you have our detailed written comments. So my remarks will focus on OTA's membership, our NOSB comment process, and the work that we continue to do as it relates to sunset material review.

To begin, I'd like to thank NOSB and the National Organic Program for continuing to offer virtual opportunities for not only public

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

comment but for the NOSB meeting itself. This is a great service and opportunity for the entire organic sector, and ultimately it's increased accessibility to the NOSB public process. We certainly have a strong preference for in-person meetings and hope to see everyone in Sacramento in the fall. But it's great to know that we also have this virtual option if we need it.

A bit about the Organic Trade Association to start. So one of our biggest, one of our strongest assets are the diversity and breadth of our membership. Unlike many trade associations, we're uniquely structured to include the full value chain for the organic industry, ensuring that all segments from farm to marketplace have a strong voice within our organization. OTA brings farmers and growers, ingredient suppliers, processors, manufacturers, distributors, certifiers, retailers and others together so that we can promote and protect the growing organic sector.

We represent over 9500 businesses in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

all 50 states. Half of our members are small businesses reporting less than 1,000,000 in organic sales per year. Our members are represented either through direct membership or through strategic partnerships with the regional organic farmer organizations across the US through our Farmers Advisory Council, which we call FAC.

Smaller or organic farmers who have current membership of the participating organizations belonging to FAC are able to obtain full OTA membership with all the associated benefits 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, who you'll hear from soon, 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. All members are provided with an opportunity to weigh in and inform all of our final comments. They'll help

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

facilitate a thorough comment and review process for sunset materials.

OTA created an electronic survey for each individual input under review. The surveys are confidential, user-friendly, and they're available to every NOP certificate holder. They include about ten questions addressing the necessity or essentially of the National List input that's 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 57 unique responses from organic businesses across the US and we will continue to collect responses to inform the vote that will take place in June. Thank you.

MR. ELA: Perfect. My bag of gold stars is getting low today. This is impressive. Other questions for Kelly? Thank you so much, Kelly. I'm not seeing any. Appreciate your comments. We are going to move next to Joanna Miranda, then Gwendolyn Wyard, and then Zen Honeycut. So, Joanna.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. MIRANDA: Okay. Hi everyone. I'm Joanna Miranda, the Farm Policy Director for the Organic Trade Association. Today I'll be commenting on three topics from the crops subcommittee. On paper, we support the continued allowance of paper-based crop planting aids. Our written comments identify a few minor technical clarifications still needed and the proposed regulatory language, but we see these as non-substantive. Therefore support the Board in passing this proposal at this meeting.

On biodegradable mulch, it's unclear whether or when the regulatory solution presented at this meeting will achieve the intended goal of allowing biodegradable alternatives to plastic mulch. We'd like to better understand the viability of the proposal to bring practical solutions to farmers. And we support continued research and regulatory efforts to create opportunities for organic farmers to reduce the reliance on plastic mulch.

On ammonia extract, OTA submitted our

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

first set of comments on ammonia extract at this meeting. Our comments reflect our initial outreach and information collection efforts with the goal of ensuring that the NOSB has a thorough understanding of the technical detail and scope of substances implicated by the petition and a solid grounding in the legal evaluation framework to effectively carry out a sound decision-making process. On this topic, there's clearly a range of manufacturing processes and products that are identified across the petition and the technical report and in the public comments.

NOSB needs a firm grasp on which products are synthetic and already prohibited, which products are not synthetic and subject to evaluation under the scope of the petition, and which technical components of these different types of ammonia extracts are contributing to how you will review the accessibility of those products under the author criteria for the National List.

Part of that criteria is evaluating whether this substance is consistent with organic

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and its compatibility with a system of sustainable agriculture. This can be subjective. So we encourage the board to be transparent and communicative in your deliberation and rely on the existing guideposts in your policy and procedures manual. Our comment development process revealed several concerns about the compatibility of the petition substance with organic.

And in our comments, we've tied these concerns to specific references in the policy and procedures manual and two historical precedent of past NOSB decisions. Having a robust deliberation on this topic means addressing these concerns head-on, so we flagged them in our comments for your attention so you can take them into account during your evaluation. Thank you for considering our comments and for your continued dedication to these issues.

MR. ELA: Thanks, Joanna. Another gold star. Are there questions from the board?

Joanna, I'll just ask, you know, obviously touched for a moment on extracts, wide range synthetic,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

versus non-synthetic, versus criteria with OFPA.

You said you flagged points and policies and procedures and such for us to rely on. Is there anything that jumps out at you that -- I mean, obviously, you've got your written comments -- but in terms of those policies, I don't often hear you reference those particularly; So it kind of raises my antennae on this topic. What jumps out at you that we need to follow up?

MS. MIRANDA: So in terms of the policy and procedures manual, I'm referring to the appendix that references NOSB recommendations from 2001 and 2004 on the compatibility of organics with, sorry, the compatibility of substances with organic principles and consistency with organic farming. So these are your predecessors who have tried to give you insight on questions to ask yourselves as you're evaluating the compatibility.

This is one of the most objective criteria in OFPA but it's really important.

So as you bring your experiences and expertise to this deliberation, use these

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

foundational guideposts to help in your determination and it will ultimately lead to a stronger deliberation process, because stakeholders can see how you've taken a subjective question but applied a rigorous evaluation framework.

MR. ELA: Great. Amy has another question, please. Amy, you have the floor.

MS. BRUCH: Thank you so much for your written comments as well as your current oral ones.

I had a question. You kind of indicated in the comments about being consistent with international organic regulations and guidelines, and you referenced, you know, sodium nitrate and some of the challenges externally when those products -- we canceled anything that had sodium nitrate applied to Canada, for example: Do you have any concerns about some of these ammonia extract products and just exports that we might have as farmers?

MS. MIRANDA: At this point, the concerns are speculative. I'm drawing

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

comparisons between shared characteristics that sodium nitrate, which has proven to be a trade barrier, shares with ammonia extract in terms of being highly soluble. So as you proceed into your deliberation, you know, think about that past precedent and balance it in accordance with your other evaluation criteria. But at this point, it's simply speculative and certainly significant point for considering whether the substances compatible with organic and consistent, because your policy and procedures manual asks for you to consider whether the substance would be consistent with international organic standards.

MS. BRUCH: Thank you, Joanna.

MR. ELA: Thank you, Joanna, we appreciate your comments and thoughts on that. We are going to move on to Gwendolyn Wyard, followed by Zen Honeycut, and Evan Axelbaum. And I'll just make a note: we're running about 20 minutes behind.

So I expect will go a little bit longer than five o'clock and then we'll make a decision on the waitlist depending on where we end up. So go

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

ahead, Gwen.

MS. WYARD: All right. Can you hear me?

MR. ELA: We can.

MS. WYARD: Okay. Excellent. Well, good afternoon, and Happy Earth Day. I'm Gwendolyn Wyard, the Vice President of Regulatory for the Organic Produce Association and I'll be highlighting off-line messages from -- for the topics that we submitted written comments on starting with excluded methods terminology.

Given the complexity of the topic and the turnover of NOSB members, we appreciate your thoughtful approach to re-establishing the topic.

We support the recommendations that have passed to date and we maintain that the technologies listed as excluded methods and the terminology chart are consistent with our existing regulatory definition that we need to stay tethered to and therefore prohibited.

We also remain supportive of moving recommendations for to NOP that will not only keep

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

GMOs out of organic seed, feed, and crops, but also clarify the standards and definitions used for making clear and consistent compliance determinations. With this in mind, our written comments highlight the substantial number of NOSB recommendations for practice standards and guidance that USDA has not acted upon, this being one of them and the need to prioritize rulemaking to clarify and update the organic standards.

We also call into question whether the continuous work on the terminology chart is helping or hindering NOP adoption. We certainly understand that evaluating new and emerging technologies will be ongoing, but for the Fall 2021 meeting, it may be time to put a period at the end of the sentence and tie a bow around the 2016 and subsequent recommendations and deliver a package, so to speak, to USDA with a call for action.

Next on the petition to add Zein 606 as an agricultural ingredient. Were not taken a position on whether or not it should be added to the National List, but I will say that we haven't

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

heard from any OTA members that are asking for or need of it, and in our written Comments, we responded to the NOSB questions and we explore several evaluation considerations about the agricultural or non-agricultural status of Zein and the implications of adding or not adding it to either 605 or 606 of the National List. It's an educational and hopefully helpful read and I highly encourage each NOSB member to spend some time with it if you haven't already.

Finally, in exchange, we support the continued allowance of ion exchange filtration as an organic processing method. And we maintain our position that the recharge materials must be on the National List and consistent with the 2002 NOP policy on food contacts, substances, the use of ion exchange, including the recharge materials and the resins, must be documented and approved in the certified operators organic systems plan.

With respect to the resins, we can appreciate the subcommittee's quandary around the interactions of offload, the FDA regulations and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the food contact policy. This is always been the crux of the issue. And as we pointed out in our comments on Supporting the Work of NOSB ion exchange is a perfect example of where regulatory and legal support from USDA is appropriate and needed to inform workable recommendation. Above all, we support a sound and fair process of transparency, and time of action to ensure consistent certification decisions. Thank you.

MR. ELA: Thanks, Gwen. Your colleagues were a little more exact on time. But you still are right on the money.

MS. WYARD: I still have a few seconds you left up.

MR. ELA: Questions for Gwen. I'm not seeing any, Gwen, so thank you so much for your comments. All right. We are going to move on to Zen Honeycut, followed by Evan Axelbaum, and then Veronica Borne.

MS. MILLER: Wait, did you miss Kyla?

MR. ELA: Please, go ahead, Zen.

MS. ARSENAULT: Wait.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Did I miss Kyla?

MS. ARSENAULT: Yeah.

MR. ELA: Oh, I'm sorry everyone.

MS. SMITH: It was just a thank you for the correct pronunciation of zein because we've been struggling with that for months. So anyway, thank you, Gwendolyn.

MS. WYARD: Absolutely. Zea as in the corn. Zea. Zein.

MR. ELA: Perfect. Thanks, Kyla, for catching me. I'm sorry I missed it. So, Zen, please take it away.

MS. HONEYCUT: Great. Thank you, everybody. Hi, my name is Zen Honeycut and I'm the Director of Moms Across America, a nationwide network of unstoppable moms.

And rather than repeating many of the things you've already heard, I'd like it noted that we agree with all of the statements made by Beyond Pesticides on Tuesday. In addition, we suspect a connection between the heavy metals in baby food and glyphosate acting as a key leader in irrigation

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

water or manure, drawing heavy metals from pipes, pesticides and industrial pollution and transferring it into food. So we ask that the organic industry increases testing for glyphosate and heavy metals to identify the source and remedy this serious problem.

We also ask that fracking water and CAFO manure be banned from organic production, for any fish oils used to be tested for heavy metals and contamination before use, and for the Organic Standards to phase in regenerative practices to maintain the integrity of the soil.

I also want to share with you some experiences from our moms, a single mom in Rhode Island told me that her teen was severely autistic.

She switched to all organic food in the spring and when he entered high school in the fall, not one of his teachers could tell that he was ever autistic. Another mom from California told us that her child had numerous health issues, with the risk of being held back in school. When he went all organic, his eyesight, asthma, and rashes

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

cleared up within weeks, and his grades are now at the top of his class.

A father told me that when his mother treated his son to ice cream with red food dyes from the ice cream truck, every time he would be punching holes in the wall. They went organic and his violent behavior stopped.

A Hispanic mom from an under-served area told me that her son had mental health issues and threatened to blow up the school when he was nine. The school psychiatrist asked her if she knew about toxins in conventional food. She didn't, but she went all organic. And within two weeks, his teacher said that he was a new person.

Recently he turned 16 and she said that she knows he would have been one of those kids that bought a gun and killed his classmates and teachers. But he won't, because he's mentally healthy now.

He has a new future. His classmates have a new future because he eats organic and avoids synthetic chemicals. They get to live and they will go on to invent new things, run for office,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

create community and relationships that will change the world.

So essentially we all have new futures because of what you do. So no matter what is before you, I ask you to keep these children in mind and exercise the precautionary principle. Vote according to what is best for the health of the child and the future of our country not what is best for the convenience of the farmer or the profit of the food company.

Please have faith in our farmers. They are ingenious. Farmers have farmed and people have eaten food without synthetic chemicals for thousands of years. They do not need them. Every parent in America struggling with a child with behavioral and learning issues needs you to make decisions on their behalf. Thank you so much.

MR. ELA: Thank you. I appreciate your comments. Are there questions for Zen? I'm not seeing any. I have not seen any. Thank you so much for your comments.

MS. HONEYCUT: Thank you for your time.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: And I apologize that your name and the word Zein were coming up at the same time.

MR. ELA: It's okay. Thank you very much.

MS. HONEYCUT: Thanks for what you do. I appreciate it so much.

MR. ELA: We're going to move on next to Evan Axelbaum, then Veronica Borne, and then Jessica Knutzon. So, Evan, please go ahead.

MR. AXELBAUM: Thank you. Hello, board members and guests. I'm glad to have the opportunity to address you today. I own and manage the Certified Organic Festival operation, Front Axle Farm, located in central Ohio. We sell to grocery stores, restaurants, and through our CSA.

In addition, I'm a member of the Ohio Ecological Food and Farm Association.

Today I have concerns about the direction of the organic food movement. I believe that the consumer is more confused than ever about what they are buying and eating and what practices

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

they're supporting.

Organic products line the shelves of their grocery stores and supermarkets, yet almost no one knows what any of it means. In addition, I see more and more small producers forgoing certification, in part due to the perception that the organic label means less and less. I'm concerned about the board's failure to follow a formal process regarding container production.

We, as a community of stakeholders, must work together to establish what the guidelines are and which practices fall inside and outside of those lines. In this vein, I urge you to ensure that the NOSB has control of its work agenda. Put the question of the permit stability of container production systems and various kinds back on the NOSB's agenda so that confusion on this topic can be addressed and clarity reestablished. Thank you for your time.

MR. ELA: Thank you so much, Evan. Other questions for Evan? I'm not seeing any, but thank you for taking the time to present to us,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Evan. We very much greatly appreciate that.

We're going to move on to Veronica Borne and then Jessica Knutzon. And then I'll just quickly go back through-- just looking here, if Peter Johnson, Jodi Rodar, or Linda Lake are on phone, could you please let us know we skipped over you earlier? If they're not, we are going to go down to our waitlist.

We know we're going to go overtime, so, but the board seems to be okay with going 30 to 45 minutes overtime. Which is a lot, but we're going to try and get to as many people on our waitlist as we can. It's a lot for the board, but I think we appreciate all the stakeholders' comments so much that they're willing to take that extra time. So, Veronica, go ahead.

MS. BORNE: Hello. I'm Veronica Borne, Manager of Technical Service at America's distribution at CP Kelco. And I'm here today to review on why carrageenan is essential to the organic industry and I appreciate all of your time. As you can see from my image on the slide,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

carrageenan is a naturally occurring hydrocolloid that is extracted from red seaweed. It's valuable for its gelling, thickening, and stabilizing properties. Next slide, please.

There are references of carrageenan being used in food that date back as far as 600 BC. It was traditionally used to prepare jellies and milk puddings. At the turn of the century and the twenties, it was optimized for use in ice cream and chocolate milk. And then 20 years from there, got used in condensed milk, gelled water desserts were added. By the 1950s, applications included some air fresheners, toothpaste, instant puddings, and then by the seventies, you know, pet food really relied heavily on this ingredient and so did refrigerated ready-to-consume dairy desserts.

The last major breakthrough that we had was in the eighties with processed meat and poultry products. And then today all of these applications still rely heavily on carrageenan.

My point being, carrageenan is widely used in the food industry. It offers organic formulators an

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

abundance of options in systems that would be very limited or deprived of any. And that's due to its unique properties that are not available from alternative ingredients. Next slide.

Because carrageenan is a large molecule of thousands of galactose units, it allows for countless possibilities, instructional variations, and the ability to work synergistically with many other gums. It works across a wide range of applications, providing texture viscosity or mouthfeel, and it has the ability to be cold soluble. This is very, very unique in the food industry.

Lambda iota and kappa carrageenan have different attributes and uses. From left to right on this image you can see the left one being for viscosity, the middle one being a soft elastic gel, and the right one being a firm brittle gel. These can be combined in different amounts for different textures and just gives you a wide variety of product. De-listing this ingredient would have detrimental effects to products that rely on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

stability and texture because of the uniqueness of carrageenan. Next slide, please.

Carrageenan has the ability to form gels in the presence of cations. This allows us unique functionality, particularly in meat and plant-based applications. So a formulator can achieve many different textures by controlling these ions. And this is detrimental to protein-based products. And this attribute is becoming very quickly invaluable to the plant-based meat market. Another attribute is this tri-dimensional network that entraps the casein micelles, fat globules, and minerals, and it makes it an ideal hydrocolloid for natural PH pro-dairy protein drinks. This also supports stability and mouthfeel in alternative dairy products.

So my point here being as carrageenan is very detrimental to the organic industry and we would very much so like for it to remain listed.

Thank you.

MR. ELA: Thank you so much, Veronica.

Are there questions? Amy has a question for you.

MS. BRUCH: I -- Veronica. Sorry, just a quick one. Yesterday we touched a little bit on Irish moss. Could you elaborate on your comments and how maybe that's related or not related to the composition of carrageenan that you just discussed?

MS. BORNE: So Irish moss is one of the different products that carrageenan is actually extracted from. It's just one of the seaweeds that it's made from.

MS. BRUCH: Okay. Could it be used as a substitute instead directly or not necessarily?

MS. BORNE: I'm not too sure about that and I can definitely ask some of our carrageenan experts. Are you meaning can you just use Irish moss instead of extracting the carrageenan from it?

MS. BRUCH: Yes.

MS. BORNE: I would think initially -- just thinking about this -- you would have a really strong seaweed taste that would be very alarming

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to your products, and it probably wouldn't be a good substitution. But like I said, I can go and inquire further if that's something of interest to the board.

MS. BRUCH: Okay. Yeah. Sure. That would be great, Veronica. Thank you.

MR. ELA: Brian has a question.

MR. CALDWELL: Thanks, Veronica. I think in the written comments there was a mentioned that of the three different types of carrageenan that some might be more might cause more human health problems than others. And could you address that?

MS. BORNE: I actually cannot address that. I have no knowledge of that information.

And if that's something you want further comments on from CP Kelco, I certainly can try to get that.

MR. CALDWELL: Well, that'd be great if there could be some clarification on that.

MS. BORNE: Sure. I'll get that taken care of.

MR. ELA: Yes. If you get that, just

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

send it on to Michelle and she can send it up to the rest of us. Any other questions? All right.

Thank you so much, Veronica. We appreciate your comments to us. We're going to move on to Jessica Knutzon and then on the waitlist. Let me shuffle through my waitlist here. We'll have Jennifer Taylor and then Sandy Mays coming up. So, Jessica, please go ahead.

MS. KNUTZON: Thank you. Hi. I'm Jessica Knutzon from CP Kelco. Thank you-all for your time and attention today, As my colleague, Veronica, kicked off, we are submitting comments for the carrageenan sunset review. Next slide, please.

Companies that produce carrageenan have created seaweed farming around the world like CP Kelco has in Zanzibar. Since 1990, CP Kelco has been working with communities in Zanzibar to create seaweed beds in the ocean, where seaweed is harvested to produce carrageenan. This collaboration includes educating locals in how to create, cultivate, and harvest seaweed beds.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

This has provided women in Zanzibar who previously had limited or no opportunity for employment, the ability to enter the workforce.

Additionally, there are peripheral benefits, to these opportunities such as improving school conditions in these communities. Today, approximately 12,000 people in Zanzibar, 70 percent of whom are women, are seaweed farmers.

The anti-carrageenan movement based around consumer sentiment and not on facts has tremendously affected seaweed farmers around the world. Next slide, please.

In 2012, the NOSB was presented a study claiming carrageenan causes inflammation of the gut, or in the gut and is unsafe for use in human food. The study used a degraded form of carrageenan called poligeenan. Poligeenan cannot be replicated in any known manufacturing process and poligeenan is not allowed food additive. The study has been refuted and that presentation was brought to the NOSB in 2016, I believe. And at the time of the previous sunset review, both IFAC

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and Marinalg in support of CP Kelco, issued statements refuting the bad science, encouraging consumers to read all the research.

Any negative press on carrageenan came from claims that were refuted and decisions made to formulate carrageenan out of consumer products, promoting anti-carrageenan claims and to delist from around consumer perception and not facts.

Removing carrageenan from many food applications means it will be replaced with multiple additives without a one-for-one replacement and no guarantee to have exact same functionality. Carrageenan affects the sustainable work throughout the supply chain, and is a key to moving forward with the plant-based food industry and its mission to create sustainable plant-based foods for consumers around the world.

Carrageenan's properties, used in a variety of food applications, and its positive influence throughout the supply chain are some of the many reasons to be cautious of the claims to de-list carrageenan. Thank you.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Thank you so much. Are there questions? I am not seeing any, so thank you so much for your comments. We appreciate it.

MS. KNUTZON: Thank you for your time.

MR. ELA: We're going to move on now to the waitlist and I need to apologize to our sign language interpreters. We know we went long on Tuesday, which you didn't expect, and we're going long today. So we hope we don't wear you out. Thank you again for what you do. We're going to go onto Jennifer Taylor, followed by Sandy Mays, and then John Hendrickson. So, Jennifer, please go ahead.

MS. TAYLOR: Good afternoon. Thank you. I'm Jennifer Taylor, IFOAM, North America.

And I'm here today as a past National Organic Standards Board member. And speaking today also in my role as Co-President of IFOAM North America.

IFOAM North America is a regional body of the IFOAM Organics International. IFOAM has members and over 100 countries and territories. Our work builds capacity to facilitate the transition of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

farmers to organic agriculture, and advocates for a policy environment conducive to agro Ecological Farm Practices, organic farming systems, and sustainable development while addressing the broader mission of Organic 3.0.

The goal of Organic 3.0 is to enable a widespread uptake of truly sustainable farming systems and markets based on organic principles that facilitate a culture of innovation, of progressive improvement towards best practices, diverse ways to ensure transparent integrity of holistic systems, inclusive collaborations, and of true value pricings.

A number of North American organizations are working towards similar goals, and is helpful as it is, the National Organic Program only touches on a few of these indicators or principles in scope in its work. Change slides, please.

We in North America are experiencing an opportunity to build back better. Now let us work together to promote: social justice,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

inclusion, participatory community engagement, participatory capacity building. Let us work together to support black and indigenous farmers; and farmers of color and their communities; and under-served small farm populations and their communities, in their active and equal participation in building back better with inclusive networks of organic farming systems and organic agro-ecology, farm strategies, participatory education, participatory hands-on trainings, and technical assistance that supports resilient, healthy, organic food systems. Local, black, and indigenous community foodways access to land, access to viable alternative markets and safe working conditions.

Let us work together to proactively support organic farmers and under-served small farm populations and their communities; and the principles and benefits of organic agriculture, building healthy soils, healthy environments, healthy foods, and healthy communities. And enabling thriving, organic, livelihoods and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

well-being for all. Thank you so much.

MR. ELA: Thank you, Jennifer. Are there questions? I am not seeing any, so Jennifer, thank you so much for your comments.

MS. TAYLOR: Thank you for what you are doing.

MR. ELA: We're going to go on to Sandy Mays, then John Hendrickson. John, we're not seeing you; if you were out there, please let Michelle know. And then Lee Frankel and Bryce Lundberg. So, Sandy, please go ahead.

MS. MAYS: Thank you. Good afternoon, everyone. I'm Sandy Mays, Partner and Certification Specialist, Wolf and Associates. For the past 14 or 15 years or longer, I've observed the inspection of farms and processing facilities by independent and certification staff inspectors.

I'm sure you're aware there's a vast difference in the quality of inspectors from inadequate to highly trained and professional. Believe me, if you could be a fly on the wall and experience some of the inspections that I've attended, it would

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

make you wonder.

Those that have had a history in professional training and other types of inspections like SQF know how to conduct themselves and they can explain the process and reason for the inspection. They're prepared for the type of operation to be inspected, treat the operators with respect and empathy, and have the ability to answer questions that are within the scope under the NOP rule. It's past the time for a unified strategy and a plan to address this critical issue. The assurance that the organic seal and the organic certificate provide to purchasers of organic products anywhere in the supply chain, depends on the quality and integrity of the inspection and is dependent on qualified, trained, and professional inspectors that are adequately compensated.

Certification agencies are considering or have already hired staff inspectors, and this may address both the training and the compensation obstacles to achieving a pool of professional

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

inspectors; however, this approach will not be unified, consistent, or impartial.

Staff inspectors may be a competitive advantage for some certifiers, but maybe not clearly for others and will more than likely increase certification fees. Certification costs are already out of reach for many operations and can't continually be passed on through higher prices for organic certification of organic ingredients and products.

In addition, as we all know, certifiers do interpret the NOP rules and these interpretations will be passed onto their inspectors, continuing the confusion and inconsistency that exist today for organic operations.

Although it was intended to create a level playing field for farmers and processors which cannot be accomplished using this approach, there are trade or private organizations that train and credential technical specialists such as inspectors and certification reviewers.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

There are ANSI, ISO, IEC 17024 standards for personnel of certification bodies, so we don't need to reinvent the wheel; but we do need to work with those who have the expertise to develop what's appropriate for organic inspectors and certification reviewers. We would suggest exploring the establishment of professional standards and training within the NOP or within cooperation with other USDA Agency. We're aware that this would be disruptive to the existing system; however, we do believe that the disruption would be for the better. Thank you.

MR. ELA: Thank you, Sandy. Are there any questions? Kyla has a question.

MS. SMITH: Hi, Sandy, thanks for the comment.

MS. MAYS: Yes.

MS. SMITH: I just wanted to clarify that last point that you made. In regards to the standards for inspectors to follow, are you -- were you suggesting that those be overseen by the NOP?

MS. MAYS: Absolutely.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. SMITH: Okay. Thanks for the clarification.

MR. ELA: Any other questions? Thank you so much, Sandy.

MS. MAYS: Thank you.

MR. ELA: We appreciate your thoughts and comments.

MS. MAYS: Yes, thank you.

MR. ELA: Were going to move on down. Michelle, you didn't see John Hendrickson, did you?

MS. ARSENAULT: No, I don't.

MR. ELA: Okay. We're going to move on to Lee Frankel, then Bryce Lundberg, and then Bill Wolf. Lee, please go ahead.

MR. FRANKEL: Okay. Thanks. Good afternoon. Thank you for your contributions to the organic community by serving on the NOSB. My name is Lee Frankel and I'm speaking today as the Executive Director for the Coalition for Sustainable Organics.

We believe that everyone deserves

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Organics. We support the USDA policy recently affirmed by the US Federal Court to continue to certify container production systems, including hydroponic and aquaponic systems. The Court in its written opinions state that quote: USDA's ongoing certification of hydroponic systems, that comply with all eligible, all applicable regulations, is firmly planted, in the OFPA, unquote. In addition, the ruling also confirmed that USDA was fully within its rights to reject the petition to demand the Certification of Organic Operations that use containers incorrectly following procedures in its handling of the petition.

We continue to support the USDA definition of organic production and states the following: Organic production. Production system is managed in accordance with the Act and regulations and it's part to respond to site-specific conditions by integrating cultural, biological, and mechanical practices that fosters cycling of resources, promote ecological balance, and conserve biodiversity.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

We believe that the organic program should remain open and inclusive of a variety of approaches for growers to respond to their site-specific conditions. If there are ways to conserve habitat by increasing productivity, preserve scarce water supplies by reducing water use, and eliminating organic pesticides by using containers, we should embrace those efforts.

Growers should be pursuing continuous improvement in their operations to minimize the use of natural resources and keep organics affordable for consumers. I'm happy to help coordinate visits with growers in your area that do incorporate containers for protection, hydroponic production tools. So you can see firsthand what it is and what is not happening in those farms and operations.

Now is the time for the industry to move forward instead of re-litigating the legitimacy of containers over and over again. Industry needs to come together rather than continuing to disparage fellow organic growers. I look forward

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to supporting the NOSB to provide information you need to make informed decisions and recommendations in the future. Feel free to reach out to me with any of your questions and concerns.

Thanks.

MR. ELA: Thanks, Lee. There's a question from Brian.

MR. CALDWELL: Thanks, Lee, and I've asked this a couple of times before, but the Organic community has really promoted its value in terms of increasing biodiversity and improving soil health and in sequestering carbon in the soil. How do container and hydroponic operations achieve that? Or would they help with that?

MR. FRANKEL: Yes. You know, each operation is unique and a little bit different in response to its site-specific conditions, but the first and general one is that wetlands and grasslands that, you know, are not producing crops and that, you know, we can leave untouched, capture and absorb even more carbon and even the best organic production crop yields.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The second portion is that, you know, many of these systems including the ones that use the larger paths that substrate is composted and recycled oftentimes into kind of outer crust of the earth production systems right there on that same farm site. And then in general, kind of with all organic systems, including those using containers that, you know, it's taking the carbon from that previous cycle of fluid production on the form of fish meal, compost or kind of other kind of clippings and crop waste and that's composted down or kind of a made into organic teas that's then applied to the new food crop. So those cycling of the resources prevents, kind of those sources of carbon, nitrogen from just wasting back into the atmosphere.

MR. CALDWELL: Just a quick follow-up here. And do you know if there are any, like, life-cycle analyses that look at the energy inputs and the environmental costs of producing a lot of plastic and stuff and using in these systems?

MR. FRANKEL: I guess I once -- I have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

not seen it for an Organic -- a certified greenhouse production system. I have seen it for some other ones. So we're a little bit more theoretical, you know, in terms of plastic use that -- Again, I think it's fairly standard practice across all the creditors that plastics are kind of recyclable and recycled. And, you know, use multiple patterns and then kind of recycle at the end of the life-cycle.

The biggest one may be in terms of kind of energy use where there's, you know, some producers, you know, maybe culling their greenhouses or their facilities, but that's also kind of balanced with oftentimes these production facilities can be located much closer to the markets and reduce kind of the carbon footprint of transportation leg of getting product to consumers. But I guess the short answer is I haven't seen a good study, a organic hydroponic operation just yet.

MR. CALDWELL: Thanks very much, Lee.

MR. ELA: Thanks, Lee, we appreciate

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

your thoughts and comments.

MR. FRANKEL: Thank you.

MR. ELA: We're going to move onto Bryce Lundberg and then Bill Wolf and then DD -- DeEtta Bilek, excuse me. And we'll see where we get with. We're thinking we're going to go to no longer than 45 minutes after the hour. So I will see how far down the list we get. Bryce, please go ahead.

MR. LUNDBURG: Hi, Steve. Is my mic working all right?

MR. ELA: It is working fine. Go ahead.

MR. LUNDBERG: Thank you so much. My name is Bryce Lundberg with Lundberg Family Farms, a multi-generation farm in Northern California. Our family started growing organic rice in 1969. We've worked hard to improve organic rice farming practices.

We seek alternatives to copper sulfate, but at this time, we still need it. Copper sulfate use is consistent with organic standards in the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

US and internationally. When our farm was Certified Organic by OMIC in Japan, OMIC allowed the use of Bordeaux mix our rice fields. The EU and other countries allow copper sulfate as Bordeaux mix and do not prohibit it for rice. With this in mind, we request renewal of copper sulfate to control algae and invertebrate pests. We prefer not to use copper, using it only as needed to save the newly planted rice crop.

If newly seeded rice needs protection from algae or shrimp, copper sulfate is essential input. Our experience leaves us to believe copper sulfate is safe. I have never seen an impact to birds, fish, frogs, or snakes. If required, it is applied in small amounts and is only active for a short period of time. We've tried drill seeding and transplanting. Neither system worked as an alternative to planting rice in water. When we drill seeded, weed pressure was insurmountable.

We spent years trying to control the weeds, but the remaining weeds intermingled with the rice were so thick, the rice could not compete. We tried

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

mechanized transplanting. The rice plants did not establish before weeds overtook the rice.

Most rice-growing regions that transplant do so in shallow water and rely on hand weeding or herbicides. Weeds are our biggest challenge. We manage grass weeds by drowning grass during the first three weeks. Rice can survive underwater for about 40 hours longer than grass.

If rice seed develops chlorophyll before shrimp hatch, the rice is safe. However, shrimp appear before seedling turns green, the crop can be destroyed. Algae does not form in windy or cool weather. If algae grows across the top of the water, young rice plants cannot push through, causing the rice to die.

When copper is used properly, algae and shrimp can be controlled without adverse environmental impact. Copper sulfate is allowed in organic around the world. The EU and other countries listed has allowed as a Bordeaux mix, and do not prohibit it for rice. The NOP allows

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

copper use in row crops and orchard for disease.

Every organic farm and region face different conditions and need tools that enabled them to carefully respond to challenges. Therefore, we request the NOSB approve copper sulfate as an algicide and to control invertebrate pests. Have a great day.

MR. ELA: Thanks, Bryce. Well done on the time. Are there questions? Bryce, I just want to ask: I mean, part, you know, in looking at the topic, you know, we didn't see that there were alternatives. You've pretty well addressed that in your comments. So basically sounds like you just really can't get away from copper sulfate, well, you know, in certain situations.

MR. LUNDBERG: Yeah. I think in certain situations, you're exactly right, Steve. We continue to work on this issue. Maybe many of you know my dad and uncles. They worked at drill seeding rice for decades, believing that they needed to have alternative methods, that water seeding would not be the only method.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And I think nature would indicate that having multiple methods to work with weeds and pesticides are very important tool. But so far, drill seeding hasn't been the result or the hope that we've looked for. The areas that were working in, I think are quicking -- flooding quicker. Right? The quicker you can flood, the quicker you can get the rice seed on, the less time there is for shrimp and algae to develop. And I think those things are really important.

We have worked at subsurface irrigation in rice. It's expensive and I think it is, has potential of irrigating rice from below, but so far the experiments we've done with subsurface irrigation haven't been successful either. But it doesn't mean we are going to stop working or trying.

MR. ELA: Great. So appreciate it. Thank you for making the comments on this topic. It's one we haven't heard a lot about and you currently have lots of experience.

MR. LUNDBERG: Thank you so much.

MR. ELA: We're going to move on to Bill Wolf, DeEtta Bilek, and then Angela Schriver. And I am guessing Angela might be our last speaker. We'll see where we come out here. So, Wolf, you're on.

MR. WOLF: Hey, I'm trying to turn my screen on. I mean, my, there it is. Oops. Here we go. Okay. So, I'm Bill Wolf from Wolf and Associate, and Second Star Farm. I work with many Organic Growers and companies, but I'm speaking for myself today. My clients are listed on our website at organicspecialists.com.

This is my 50th year working on improving organic farming methods. I was a presenter at the first NOSB meeting nearly two years ago, nearly two decades ago. And have been bringing earthworms to many meetings since then as mascots of our organic agriculture.

It's really quite amazing to see organic coming of age. I hope that you'll consider our written comments on various subjects. I'd like to discuss two of those today. One, the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

importance of you, the NOSB, receiving more support; and my perspective on the purpose of the National List.

First, I want to thank you for your time as volunteers serving our community. You face more complex and more diverse issues than almost any advisory board. I really salute you and encourage the USDA to provide more support.

PARAGRAPHS: In prior comments for over five years, we've advocated for professional support for the National Organic Standards Board. Two important areas where professional specialists would expedite your work are, one, organizing, collating, and reporting on the content of oral and written public comments; and, two, drafting the NOSB's proposed regulatory language and recommendations, so they are truly ready for implementation.

My second topic: about the National List and the sunset process. It was never the goal to whittle down these lists, but it's rather important to ensure that farmers have access to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a complete set of materials that meet the evaluation criteria. Sunset reviews should focus on new information about materials and not act as a popularity contest for what materials are en vogue now. Materials that are not being widely used now may be needed again in the future. And organic Farmers deserve a robust toolbox to do their jobs effectively.

Nor should the review process rely on public comment for technical information necessary for a sound decision. That information is better presented in a technical report, which could be facilitated by additional professional support for the board.

The National Organic Program is one of the most robust and transparent organic standards-setting systems in the world. So I strongly advocate that you carefully balance all the variables. And as I've said in the past, consider thinking like an earthworm. Thank you for this opportunity. I'm available for questions.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Thanks, Bill. You kind of went into slow motion there at the end, but yet your exact time. We'll still give you credit.

MR. WOLF: Actually, I must confess, Steve, I dropped a whole paragraph.

MR. ELA: Okay. Fair enough. Are there questions for Bill? Thank you so much, Bill.

I'm not seeing any questions. We appreciate your comments.

MR. WOLF: I just want to say I've got my earthworms ready. They're talking. Thank you.

MR. ELA: Sounds great. We are going to move into DeEtta Bilek. Then Angela Schriver. Go ahead, DeEtta. I probably mispronounce your name.

MS. BILEK: Could be. It's pronounced DeEtta and last name is Bilek. But I appreciate your efforts. It's a difficult name. I am DeEtta Bilek and I'm representing OFARM today. In early 2019 when the Executive Director of OFARM retired, they brought me on as an office manager part-time.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And much of the activity or responsibilities that were covered under the Executive Director, the officers or executive committee are accomplishing those activities.

So the mission of OFARM, Organic Farmers Agency for Relationship Marketing, is to coordinate efforts of producer marketing groups to benefit and sustain organic producers with a strong emphasis on opportunities, to educate and engage producers in the benefit of Cooperative Marketing.

The activities of OFARM have focused on that, and one of the concerns for many years has been fraud in the organic green area. They do feel that once the SOE is in place, they believe that it will address much of that concern with fraud.

So I'm going to make this really short.

The one thing that also is brought out is that they would request that any recommendation has a restriction on the use of highly soluble sources of nitrogen in Organic Agriculture. Members have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

expressed concern about that with leeching and into the environment.

So I would just stress that it's appreciated and encouraged that the NOSB were -- continues to work hard to, you know, give strength to the Organic Program. That it'd be strong and continue. So that's as much as I would have to say.

MR. ELA: Thank you so much and thank you for your patience with my name pronunciation. I really apologize.

MS. BILEK: I'm used to it.

MR. ELA: Any questions? I don't see any questions, and I know that the name like Ela, I'm used to that same issue. So, thank you, and have a great day.

MS. BILEK: Thank you.

MR. ELA: We're going to move on to Angela Schriver. Actually, it looks like we might be able to get to Beth Dominick before we end. So, Angela, please go ahead.

MS. SCHRIVER: Yes. Hi, my name is

Angela Schriver of Schriver Organics. We're a row crop farm located in North Central Ohio and we are members of OEFFA and the OEFFA Green Growers Chapter. I would like to start by acknowledging the time and effort the NOSB members put into the research when developing the recommendations. I appreciate it wholeheartedly. Thank you for all that you do.

My comments center around a USDA organic insider e-mail I received with a subject of NOP update memo to the NOSB. Under the heading of proposed changes to the National List for organic crops and handling, the very first sentence was, continuous improvement is a priority for the National Organic Program. Definition of continuous: forming an unbroken whole without interruption. Improvement: action of improving. Priority: the fact of being regarded as more important.

I would like to request the NOSB to reflect on that and habitually take the time now and in the future to weigh all requests, petitions,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

reviews, work agenda items, et cetera, and question if they are serving that statement of continuous improvement, or if it's furthering something stagnant, showing no activity, dull and sluggish.

Origin of livestock and strengthening Organic Enforcement come to mind, or worse yet, regressive, becoming less advanced, such as hydroponics and aquaponics.

Although I cannot comment specifically on the materials and issues up for review, I am confident and adamant that providing clarity and consistency between certifiers concerning container production systems, which needs to be back on the work agenda; that establishing organic agriculture as a solution to climate change; that finalizing the origin of livestock and strengthening organic enforcement as quickly as possible; and that if supplements and inputs cannot be harvested in a sustainable manner, they cannot be organic.

That all of these would support the statement of the USDA's expectations of NOP, of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

continuous improvement being a priority. Perhaps the USDA NOP would benefit from a reminder of their own expectations and intentions of the NOSB to be an independent advisory board that establishes their own work agenda. If we don't strive to continuously improve, we're doing a disservice to every farmer and consumer that still believes in the integrity of organics.

I request your continual reflection on continuous improvement because as a farmer, I want to ensure we are held to the same standards as other organic producers and those standards are continuously improving. And as a consumer, I don't want to be misled or felt lied to in purchasing organic products: I want true organic products. Thank you again for your time and an opportunity to speak.

MR. ELA: Thank you so much, Angela.

Any questions from the board? I am not seeing any. We're going to do one last speaker here hopefully our ASL interpreter can hang on here. So let's go to Beth Dominick.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I'm going to apologize to Meredith Stevenson, Colehour Bondera, and Dan Giacomini. We tried to get to you, but it's just a long day. But if you would like to submit your comments to Michelle, she will pass them around to us. So thanks for being on the waitlist. Plus, even if we don't get to you, we would have loved to hear your comments. So Beth, please finish out the day for us.

MS. DOMINICK: Hello. Thank you for allowing time for my comments. My name is Beth Dominick. I am the senior inspector with QAI. I'm also an inspector member and serve on the Board of Directors of IOIA, the International Organic Inspectors Association.

MR. ELA: Beth, we just lost your audio.

MS. DOMINICK: I'm sorry. Can you hear me okay?

MR. ELA: I still don't have it. You were on and then it turned off.

MS. ARSENAULT: I can hear her.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

UNIDENTIFIED SPEAKER: Steve, I can hear her as well.

MS. DOMINICK: Okay.

MR. GREENWOOD: No problem here either, Steve.

MR. ELA: Michelle, any idea what happened?

MS. DOMINICK: Well, other folks can hear me, Steve, so I'm going to keep going unless you tell me to stop. But I'm an inspector and serve on the Board of Directors with IOIA.

MR. ELA: Still not getting you, Beth.

MS. DOMINICK: Everyone else can hear me.

MR. POWELL-PALM: Steve, I think it's you.

INTERPRETER: This is the interpreter. I can hear her, too.

MS. DOMINICK: And I would encourage you to visit with the --

MR. ELA: Any guesses from the staff?

MS. DOMINICK: -- and review the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

mission statement of IOIA. Our mission is to address issues and concerns relevant to Organic Inspectors and to provide quality inspector training to promote consistency and integrity in the organic certification process.

So I'm here to your comment on the Human Capital proposal. And again, really want to thank the board and the NOP for bringing these issues forward for our discussion today. Overall, I support the comments that you've heard from IOIA and the ACA. I support the developments and funding of one-on-one mentor program grants to fund our special projects, including a state of the industry study, a credentialing study, workshops, conferences, trainings, online study groups, field trips, job fairs, and career days.

I could speak specifically to the questions in capital proposal. What have I experienced that would contribute to a shortage of inspectors and reviewers. In my feeling, we would need to recruit more from outside of the industry, to plan for the continued growth of the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

organic industry and ways to benefit from the knowledge of our seasoned inspectors. So again, as far as strategies to recruit, there's some excellent ideas in IOIA's comments. So just funding for education, and supporting in comments from IOIA.

There are ways the NOP can provide financial assistance with these projects. Expanding cost share. Ways to partner apprentice inspectors with seasoned inspectors. Grants to help develop tests and calibrate inspectors. Grants for lecture series, for IOIA to buy materials, provide honorariums and travel for speakers. Costs of printing data and software costs. Again, I greatly appreciate your time today and hearing our comments.

MR. ELA: Thank you so much. Sorry my audio died there, so, and I didn't realize my headset didn't give me any warning. Thank you.

Are there any questions? All right. Thank you so much. You were the last speaker of the day. You get to close us off.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

We really appreciate everybody's comments and being so patient with us. We're going overtime with, you know, the stakeholder input, but it's just truly one of the things that we so value and that really helps the board make so many important decisions. There are obviously some controversial topics on our agenda for this coming meeting.

So with that, we are going to end right now. We'll reconvene the meeting on Wednesday at noon Eastern Time. That will be for the board deliberations. So, at that point, we won't be accepting public comment or public input, but the board will be in a public format making discussion and things on the topics we've been discussing on these public comments. So thank you so much, everybody, and we will see you next Wednesday.

MS. ARSENAULT: Thanks, everybody.
Have a great night.

(Whereupon, the above-entitled matter went off the record at 5:43 p.m.)

UNITED STATES DEPARTMENT OF AGRICULTURE

+ + + + +

NATIONAL ORGANIC STANDARDS BOARD

+ + + + +

SPRING 2021 MEETING

+ + + + +

WEDNESDAY
APRIL 28, 2021

+ + + + +

The Board met via Videoconference at
12:00 p.m. Eastern Time, Steve Ela, Chair,
presiding.

PRESENT:

STEVE ELA, Chair
NATE POWELL-PALM, Vice Chair
MINDEE JEFFERY, Secretary
SUE BAIRD
ASA BRADMAN
AMY BRUCH
BRIAN CALDWELL
JERRY D'AMORE
CAROLYN DIMITRI
RICK GREENWOOD
KIM HUSEMAN
LOGAN PETREY
KYL A SMITH
WOOD TURNER

STAFF PRESENT:

MICHELLE ARSENAULT, Advisory Committee
Specialist, Standards Division
JARED CLARK, National List Manager, Standards
Division
DAVID GLASGOW, Associate Deputy Administrator,
National Organic Program
ERIN HEALY, Acting Director, Standards Division
DEVON PATTILLO, Agricultural Marketing
Specialist, Standards Division
DR. JENNIFER TUCKER, Ph.D., Deputy
Administrator, National Organic Program;
Designated Federal Official

ALSO PRESENT:

MAT NGOUAJIO, National Science Liaison,
Institute of Food Production and
Sustainability, National Institute of Food
and Agriculture (NIFA)
STEVE SMITH, National Program Leader, Division
of Animal Systems, NIFA
NEERJA TYAGI, Program Specialist, Division of
Plant Systems Production, NIFA
MAE WU, Deputy Under Secretary for Marketing and
Regulatory Programs, USDA

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CONTENTS

Call to Order 4

Agenda Overview 18

Introductions 19

Secretary's Report 31

Chairman's Report 32

NOSB Report 43

USDA/NOP Update 43

NIFA Update 120

Livestock Subcommittee

2023 Sunset substances reviews:

Activated charcoal 174

Calcium borogluconate 168

Calcium propionate 172

Chlorine materials (Calcium
hypochlorite, Chlorine dioxide,
hypochlorous acid, sodium
hypochlorite) 180

Kaolin pectin 193

Mineral Oil 200

Nutritive supplements 208

Propylene glycol 210

Sodium chlorite, acidified 212

Zinc sulfate 224

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

12:00 p.m.

MS. ARSENAULT: Welcome, folks, to the first day of the National Organic Standards Board meeting for the spring meeting. If you're having audio issues, you can dial in on the phone. You don't need to necessarily use your computer. The numbers are on the screen, and I just chatted them in. So if you have access to the chat, you can find them there.

The attendees are in listen-only mode, so you won't have access to your mic or your camera.

If you -- you should have available to you chat, so feel free to chat to your -- to each other and you can chat to us as the hosts. If you're having any issues, the Board doesn't take questions during the meeting from the audience. You are in observation mode only.

We are recording, so just so you're aware of that. You should see a recording button in the upper left of your screen just so you know it's active. After the meeting is done on Friday,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

we will have complete transcripts that will include the comment webinars that we had last week as well, and those will be posted on the NOSB website in a couple of weeks. I'm going to turn the meeting over to Jenny Tucker to get us officially started for the day. Welcome.

DR. TUCKER: Thanks so much, Michelle.

Hello, everyone, and thank you so much for joining us today. I am Jennifer Tucker, Deputy Administrator of the National Organic Program, which is part of USDA's Agricultural Marketing Service or AMS. This session continues our Spring 2021 National Organic Standards Board meeting, which started last week with two online public comment sessions.

Meeting access information for all meeting segments is posted on the NOSB meeting page on the USDA website. Transcripts for all segments will be posted once completed. I'm serving as USDA's Designated Federal Officer for this meeting. This meeting, like all other meetings of the National Organic Standards Board, will be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

run based on the Federal Advisory Committee Act and the Forbes policy and procedures manual.

Steve Ela, the Board Chair, will be introducing Board members after we complete some welcoming remarks here. Before we get started, I want to thank all of the Board members, including our five new Board members, Amy Bruch, Logan Petrey, Dr. Carolyn Dimitri, Brian Caldwell and Kyla Smith.

All of these representatives devote hours and hours of volunteer time to serve the organic community, and many have not even met each other yet face to face. Let's all give the full Board a big round of thanks and appreciation with a Zoom applause. Now I know your cameras aren't on, but I want you all to applaud and this is how we practice the Zoom applause. So waving two hands in front of the camera signifies your applause.

So I want to thank and applaud the Board for all the work that you do.

Next, I'm going to introduce our new Deputy Undersecretary Mae Wu, and she will share

some words of welcome. Then I'm going to come back and introduce the NOP team and run through the meeting agenda.

So Mae Wu was announced as Deputy Undersecretary of Marketing and Regulatory Programs in January. Prior to joining USDA, she served as a senior director at the Natural Resources Defense Council, helping to lead the organization's health and food work. She also worked for the federal government to revise the Total Coliform rule, and served on the Environmental Protection Agency's Pesticide Program Dialogue Committee, and its National Drinking Water Advisory Council.

Deputy Undersecretary Wu holds a bachelor's degree in Chemical Engineering from Rice University, a master's degree in Environmental Policy from the University of Cambridge, and a juris doctorate from Duke University. So Mae, welcome, and I turn the floor over to you.

MS. WU: Thank you for the introduction

Jenny, and I am really happy to be joining the members of the National Organic Standards Board, the program team, and all of you in the organic community to kick off the Board's spring meeting.

The volunteers who make up this Board and all of you who have come, all the ones that have come before you are really amazing. I myself, as you've heard, have served on several FACAs myself and so I know about the countless hours that you have to put in, aside from doing your day job.

And so the professionalism and the experience and all of the time that you've spent into reviewing public comments and petitions and the National List is a tremendous lift on top of your already very busy lives. So it makes a huge difference to the organic farmers and to the businesses around the country and around the world.

So thank you very much for your service.

But it's a really exciting time to be in organic production. I think what started as a niche market, which was selling to farmers markets and specialty coops has grown into a \$55

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

billion agricultural sector, more than 45,000 certified organic farms and businesses selling products at nearly every grocery store and market across the country.

Today, the USDA organic seal is recognized as the gold standard around the world, thanks to the ongoing work of this community and the passionate team at USDA who are committed to protecting the integrity of the organic seal for farmers, for businesses and for consumers.

Continuous improvement is built into the organic standards and this Board. These meetings play such an important role in identifying opportunities and building consensus. Our administration is committed to finishing the historic strengthening organic enforcement rule and the origin of livestock rule.

We are committed to tackling the complicated rule of inert ingredients. It's going to be hard but it's important, and we support the work of the Board and the program to keep the National List rules moving to meet the needs of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the market.

So of course the administration right now continues to prioritize combating the COVID pandemic, and USDA is doing what we can to provide assistance. We have some folks of our -- some employees of ours are deployed to help put vaccines in arms and to also provide other support.

But we're also looking forward to the end of the pandemic and our recovery from this crisis. So some of the things we've done is quickly get assistance out, and have incorporated the updates that were passed in the COVID-19 stimulus package back in December. So a couple of weeks ago, we announced \$169.9 million in the specialty crop block grants, and we are very close to announcing the request for applications for the local agricultural market programs grants soon.

So those are the farmers market and local food promotion program, and the regional food system partnerships. But all told, AMS is shepherding almost \$230 million into our existing grant programs. But we're also looking at some

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

new programs through some of the funding, again with the COVID stimulus package as well as the American Rescue Plan.

So one of the things we're looking at and trying to develop is a pandemic response and safety grant, something that could bring resources to, especially small and mid-sized entities, to cover the costs that they incurred say for purchasing PPE or expanded safety equipment, any costs associated with transitioning to virtual or online sales or retrofitting their facilities to improve worker safety and consumer safety.

But with the American Rescue Plan, we actually have a bigger moment to not just rebuild our old economy, but to reimagine and rebuild a new economy. So we have this chance to provide millions of households with immediate relief, but also rebuild our food system into one that is stronger. It's healthier, more sustainable and more resilient.

As we all know, the pandemic really highlighted how brittle our food system is or was,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

and now we have this unique chance to create a better one that actually can withstand the next crisis. The extra work that organic producers do is a critical component of this rebuilding. Organic production can contribute to new income sources as we build more robust local and regional food systems.

It can open competition and more equitable markets for producers of all sizes and backgrounds, including Black, Hispanic, indigenous and other farmers of color. And the organic community's longstanding efforts in environmental conservation and biodiversity are at the heart of solutions for climate change.

Organic production helps put American farmers in the lead in climate solutions, and helps create new streams of income while leading the world in sustainably produced food. It helps us prioritize economic development and growth in rural America, and put the U.S. in a leadership position on climate change. So this is why I am particularly excited about the White House's

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

nomination yesterday for the Under Secretary of the Marketing and Regulatory Programs.

Jenny Lester Moffitt currently serves as the Under Secretary of the California Department of Food and Agriculture, and was previously the deputy secretary. Before she was at CDFA, Jenny spent -- not this Jenny, the other Jenny, Jenny Moffitt, spent ten years as managing director at Dixon Ridge Farms, which is her family's organic walnut farm and processing operation in Solano County in California.

So of course she still needs to go through the whole Senate confirmation process, but I am just really excited about the possibility of her joining our work towards building a more robust and resilient local and regional food system that support new fair market opportunities for American producers and food companies.

And another important part of building fair and competitive markets is making sure the organic community has a diverse pool of qualified inspectors and certification staff. So to address

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the current shortage in qualified organic professionals, AMS has launched a human capital initiative with input from the Board and the community.

Jenny Tucker, who will talk more about this a little bit later, and how the Department will be supporting projects that increase training and support for organic oversight personnel and emphasize racial equity. We are also currently inviting nominations to serve on this Board starting next January. We hope that you will all help spread the word to build a qualified and diverse candidate pool.

The Secretary has talked about his commitment towards advancing racial justice and equity, about removing barriers to access for underserved populations, and about building inclusive programs. In the Marketing Regulatory Programs mission area, we have that same commitment when it comes to all of the programs we have, including representation on these federal advisory boards and commissions.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

In addition to the staff in the National Organic Program, USDA has thousands of people who are working to support the organic community every day, from farm loans, crop insurance, extension services to crop research and promotion, market promotion.

So we want to make sure that AMS and the National Organic Program have the resources to help smaller farms and ranches, new and beginning farmers and ranchers, socially disadvantaged producers, veteran producers and underserved communities.

I want to thank all of you who took the opportunity to make live comments to the Board last week, and also to those who have sent in written comments on a range of issues important to the success of organic producers and handlers and processors. And again, just a huge thank you to the members of this Board for your good work and for the invitation to join you today. I have a special place in my heart for organic, so I really do look forward to working with you as we move

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

forward together. Thank you.

DR. TUCKER: And let's give Mae a big round of applause. Mae, it's been a true pleasure and honor working with you over the past few months.

So welcome from all of us to USDA. We're really, really happy that you could be with us today. So thank you for taking the time to join us in this rather unique forum.

MS. WU: Thanks so much.

DR. TUCKER: And now I would like to briefly introduce and thank our key National Organic Standards or National Organic Program team members. First, let's all give a huge round of applause to Michelle Arsenault. We would never make it to these meetings without Michelle. She very much runs the place for these meetings.

I consider Michelle to not only be an outstanding and devoted employee, but a very, very good friend. She has touched each one of us in any number of ways with her really helpful spirit and very strong command of processes. She adds a layer of comfort to all of us. So we're lucky

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to have her here. Michelle, again thank you so much.

Next I am pleased to introduce our new Standards Division director, Erin Healy. Erin has been with us since January. Can we spotlight her, and if she's not I don't -- she doesn't have a pin next to her name. So just to make sure people can see Erin. Erin's been with us since January. Before coming to NOP, she was a division director in the AMS Fair Trade Practices Program leading the Food Disclosure and Labeling Division.

Before that, she was the director of the Office of Community Food Systems in USDA's Food and Nutrition Services between 2017 and 2019, and before coming to USDA she was the director of the Healthy Eating Initiative at the Health Trust in California. She holds a B.A. in Anthropology and a master's in Public Health. And so welcome, Erin.

It's great to have you as part of the program.

And then next I want to introduce and thank Jared Clark, also one of our newer folks.

Actually, I introduced him last meeting. We've

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

never actually met in person, but I've loved getting to know Jared as our new National List manager. We're lucky to have him.

So Devon, welcome. Devon Pattillo, our Agricultural Marketing Service, wears many, many hats in the Standards Division, including some top notch work on origin of livestock, which I will be updating you on in a bit. So thank you so much, Devon.

It takes a lot of hands to pull these meetings together, so I want to particularly highlight that team for their very, very focused work.

DR. TUCKER: Now let's take a quick look at the agenda. We're going to be meeting from 12:00 to 5:00 Eastern today, tomorrow and Friday, with an hour break in the middle of each day. The Board Chair will get us started. Then we'll have a bit of time for an NOP Update. After a break, we'll hear a Research Priorities Update for NIFA, the National Institute of Food and Agriculture, and then we will move into the Subcommittee's work.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

To close, I want to give a particularly strong special thank you to Steve Ela, the Chair of the Board and of this meeting. Signal a round of applause in advance of a great meeting.

And now Steve, I hand it over to you.

MR. ELA: Thank you so much, Jenny, and it really was a pleasure to hear from Mae. Thank you for making that time slot available. Some of these initiatives coming out of this administration are very exciting for me. Not that I wish I would stay on the Board longer, as Rick often says, but it's great to see some of the possibilities that are before us.

With that, I would like to introduce the Board members. Jenny already mentioned our five new Board members, so welcome to them. You'll find that these meetings are both stimulating and sometimes long, but I always find them to be such a great process for engaging our stakeholders and these other great Board members that we have before us.

So I'm just going to go alphabetically

down and let each of you introduce yourselves with a short introduction, so our stakeholders know who's who. So we'll start with Sue, Sue Baird.

MS. BAIRD: Hi. Sue Baird from Missouri. I'm with the Missouri Organic Association. I was placed as on to for public support and so I'm here and been here for four years now.

MR. ELA: Let's go next to Asa Bradman.

MR. BRADMAN: I'm Asa Bradman. I'm a professor now at the University of California at Merced, and have worked for many years on issues around environmental health and agricultural communities.

Many years ago actually, in my late teens I worked picking apples and grapefruits for export, took care of chickens in the big chicken sheds, and I actually had the interesting experience of being in the field and having a helicopter come over and spray pesticides on our team while we were picking grapefruits.

So it influenced my interest in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

agriculture. So I look forward to the meeting today. Thanks.

MR. ELA: Thank you, Asa. Next one of our new members, Amy Bruch.

MS. BRUCH: Thank you, Steve. Good afternoon. I'm Amy Bruch, serving in the farmer seat. I'm an ag engineer, also a sixth generation farmer and owner-operator of Cyclone Farms. It's a family farm in Nebraska. We grow small or row crops, small greens, pulses, and also oil seeds.

In addition, I have experience setting up sustainable farming on four different continents. Looking forward to the meeting today. Thank you.

MR. ELA: Thank you so much Amy, and welcome. We appreciate your volunteering to serve on this great Board. We'll go to another new member, Brian Caldwell. Brian, I think you might still be on mute.

MR. CALDWELL: How's this?

MR. ELA: Much better.

MR. CALDWELL: Okay. Yeah, sorry,

yeah. Hello everyone. I'm Brian Caldwell, new to the Board and very pleased to be working with this talented and committed group, really amazing people. I serve in a consumer and public interest spot, and I'm on the Crop, Livestock and Materials Committees, Subcommittees.

I'm retired from Cornell University, where I worked with cooperative extension, and then did research on organic vegetable and field crop systems. Now I operate a small certified organic farm growing apples, pears, chestnuts and hazelnuts in central New York.

MR. ELA: Thank you, Brian, and just like Amy, welcome to the Board. We look forward to your contributions to our thought processes.

We'll move on to Jerry D'Amore. And Jerry, you're on mute as well.

MR. D'AMORE: Steve, you usually welcome that. Thank you. Hi, my name is Jerry D'Amore. At this point two years shy of having spent 50 years in the food business, and 15 of those years were living overseas, mostly in Turkey and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Saudi Arabia.

At my age, I could keep you for another ten minutes, but I would like to say I'm on the Handling Subcommittee in my second year. I love the business that we're all in and I'm both humbled and honored to be a part of the NOSB.

MR. ELA: Thank you very much, Jerry. Now we're going to move another new member, Carolyn Dimitri.

DR. DIMITRI: Hi. I'm Carolyn Dimitri. I'm a professor at New York University.

I have been working on post-farm economic issues in the organic sector, from the farm all the way to the consumer probably for the past 20 years.

I have like a gazillion publications in this area, and I serve in a consumer position. I'm cautiously excited about my term on the Board.

MR. ELA: Well, we're glad to have you, Carolyn. Your experience will be a great contribution to this Board. We'll move on to Rick Greenwood.

MR. GREENWOOD: Hi, I'm Rick

Greenwood. I'm in the environmental position. I'm a faculty member at UCLA in Public Health. Also a certified organic grower of avocados in California, so a background in both academic and actually boots on the ground farming.

I might say today we're actually harvesting, so that's going on in the background.

But did a three-year term earlier with AMS in the Hass Avocado Board, one of the specialty marketing groups. So a number of areas of interest in agriculture.

I'm going I guess onto my fourth year on the Board, just following in Steve's footsteps.

So thank you.

MR. ELA: Thanks, Rick. I'm just amazed you didn't mention something about apples and avocado comparisons. So I know you'll warm up to that later on.

MR. GREENWOOD: It's not worth mentioning, but it looks like there's fire blight in the trees behind you.

MR. ELA: No, those are just blossoms,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you know. I know avocado growers don't really know about that, but we're going to move on to Kim Huseman.

MS. HUSEMAN: With that, hello. My name is Kimberly Huseman. I sit in the handler's seat. This is my second year, coming into my second year on the Board. I chair the Livestock Committee this year. I currently head up the Specialty Ingredients Procurement Division for Pilgrim's. I've been with the organization a little over six years, and prior to that worked in the renewable energy space.

So I grew up with production and agriculture, both crops and livestock, and I've been humbled by the information I've already learned and obtained from the wonderful people on this Board and I'm excited for the next few years.

Back to you, Steve.

MR. ELA: Thanks so much, Kim. We're going to move on to our current secretary, Mindee Jeffery.

MS. JEFFERY: Hi. Thanks, everyone.

Mindee Jeffery representing retailers. Big shout to Good Earth Natural Foods in Northern California. I worked there for about 15 years, did a quick stint in Minnesota and the randomness of the pandemic has me back in California. So I'm super excited to be on this Board and really love the tenor of our relationships and how we do this work, and super grateful for all the amazing partnerships.

MR. ELA: Thank you so much. We're going to move on to another new member, Logan Petrey.

MS. PETREY: Hi, I'm Logan Petrey. I'm in the farmer's seat. I'm a farm manager for Grimmway Farms. We farm over -- here in the Southeast, we farm over 20 different crops, food and vegetables, our main crop being carrots. We also do potatoes and onions, and we also work with commodity crops like corn.

We've had five years' experience here in the Southeast working a piece, and it's been exciting to see the transformation with organics

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and all the benefits from it. It's an honor to serve on the Board.

MR. ELA: Thank you so much, Logan. We are looking forward to having your input, especially from a part of the country that we don't always have represented well. So thanks for -- thanks for joining us. We'll go next to our Vice Chair, Nate Powell Palm.

MR. POWELL PALM: Hi, everybody. Super excited for this meeting. Nate Powell Palm based out of Bozeman, Montana, and I'm a first-generation crop and livestock producer. My operation has been certified organic since about 2008, and I'll give a shout out to my certifier, Montana Department of Ag.

I'm really, you know, really grateful for the opportunity to hear last week from all of the stakeholders. I was reflecting this weekend, as I was on the tractor trying to finish the last bit of planting that I have left to do, and just being like how cool is it that we just all checked in with each other about this industry that we all

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

derive our livelihoods from, that we are all consumers of, and I'm really excited for the continued work. So I'm in my second year and stoked for the coming term.

MR. ELA: Great, and thank you so much for serving as Vice Chair, Nate. It makes my job definitely easier. Okay, we'll move on to our last new member, Kyla Smith. Kyla, go ahead.

MS. SMITH: Hi, everybody, great to be here. My name's Kyla Smith. I'm serving in the certifier seat. I work for PCO, Pennsylvania Certified Organic as the certification director.

I've worked in certification for 18 years. I've done inspections, power review, material review, policy work, just about all the parts that go into certifying farms and food processors.

I've been a long-time audience member at these meetings, and so it's really fun and I'm super grateful to be on this side now, being able to participate in the organic industry in a new way. It's really inspiring to work with this group of people. So I'm looking forward to the meeting.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Great, Kyla, and we're looking forward to your long experience of working with this Board and having you on the other side of the table. It's always good to have people that know how we work. Next, we'll go to Wood Turner.

MR. TURNER: Again, save the least for last there, I see.

MR. ELA: Not at all.

MR. TURNER: Great to be here. I'm Wood Turner. I'm in my second year on the Board.

I became chair of the Materials Subcommittee when Dave Mortensen left the Board after the last meeting, and I really enjoy this process and this experience.

I've had a long career. I'm in one of the resource conservation seats and have a long career, an increasingly long career in environmental sustainability. I lead Environmental and Social Impact for an organization called Agriculture Capital, and we are a grower of organic blueberries, organic table grapes and several other crops as well.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

It's really just such a huge honor and I'm thrilled to be a part of this effort. So thanks so much.

MR. ELA: Thank you, Wood. So appreciated, and I am Steve Ela. I serve as Chair. I am in the farmer seat in my last year. I'm a fourth-generation grower here in western Colorado, tree fruits: apples, pears, cherries, plums, et cetera. We do grow some heirloom tomatoes. We started certifying in 1994 with the Colorado Department of Agriculture, and I think we became fully certified around 2004.

We both have crops and we have a small handling operation where we make our fruits we grow into various artisanal fruit products. It's a fifth year so several of us, Sue, myself and Asa, get to count down the moments. I have to say I've thoroughly enjoyed being on the NOSB. It's been a huge learning process.

So with that, we are going to move on to the Secretary's Report. I'm going to turn it over to Mindee as Secretary to do, let us accept

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the 2000 -- fall 2020 minutes. Go ahead, Mindee.

MS. JEFFERY: Thank you, Steve. NOSB members, do you accept the meeting minutes from the October 2020 NOSB meeting as written, and are there any corrections?

Hearing none, the meeting -- the minutes are accepted.

MR. ELA: Great. Thank you so much, Mindee. We do appreciate it, and just as I said with Nate, it's been great having you on the leadership board. Your input has been really useful and it's been great to serve with both of you.

MS. JEFFERY: Thank you, Steve. I hope that you know the levels at which you are appreciated as well. Thank you.

MR. ELA: Thank you. We're going to move on to the Chairman's Report. Actually, we should say the chairperson to be gender neutral here, and it's -- I just want to, if it's all right, if we can start off with my report, and it's been a pleasure over the last several years to really

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

e encourage people to apply for the NOSB.

We have a number of new positions open.

I'm not certain, I think four of us if I'm correct, and I just -- it's a lot of work, it's a lot of time, but I also -- it's such a fulfilling way to learn so much about the organic industry, both in terms of petitions that are applied to us, proposals that we get and make and work agendas.

And even though the sunsets are somewhat routine and often a little out of our, you know, I never knew about some of these materials, it's interesting because you actually do learn about some materials you never thought you would know about. So I really want people to apply and I especially want to, just as Mae noted, really encourage diversity, even though the Board itself is actually fairly representative of the organic community as a whole right now.

We always talk about the need to diversify the organic community and make it more available to growers of all sorts and such. So I look forward to the administration's push to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

encourage diversity. Certainly we're looking for, you know, racial diversity. We want to see geographic diversity with Jesse going off the Board. Fortunately, Logan has come on, but the South and other parts of the country, it would be really nice to have some of that geographic diversity.

And I also, I don't think we've really talked about it, but gender diversity. We, you know, more and more recognition of our whole community in terms of gender identification. It would be nice to have some of that on the Board as well.

So please apply, and if you have any questions, reach out to Michelle, reach out to myself. There are a number of other organizations that can help you as well, National Organic Coalition, Organic Trade Association and others that, you know, really we're all interested in getting the best pool of people we have.

One of the things that often happens if you have applied before, please apply again.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

It really depends kind of on the mix of people that apply who is selected. So the fact that you weren't picked last time or in some previous application doesn't mean that you won't be picked this time. So please don't let that dissuade you from applying. We'd love to have as many applicants as we can.

Next, this is our third virtual meeting, and it's -- it's worked really well in some ways. It really allows people that are at home to not have to travel, not have to spend the money to come to a Board meeting. I think the webinars for public comment have really allowed more people to comment.

But we all know too that the in person meetings provide a richness, they provide an opportunity for the Board members to meet each other and know each other as friends, not just professionals. So we're keeping our fingers crossed that, for our fall meeting to be in Sacramento.

We certainly have a number of

Californians on the Board. So we'll make your travel short if we have it there. I would love to see your -- you know, meet the new Board members in person that we haven't had to meet, and also see so many friends in the stakeholder community again.

One of the things we're hoping to do, and I know Jenny Tucker is working on this along with Dave Glasgow is, if we do have an in-person meeting, to go ahead and figure out a livestream of it, so to make it more transparent and accessible to all our stakeholders. Again, those who may be on time constraints or not want to travel to a meeting but still want to see the Board deliberations on specific topics.

So we're hoping that that can work out and, you know, our goal continues to be transparency and accountability to our stakeholders. I know we've had routinely a number of comments about the timing of the Board meetings. We take those comments very seriously. There's a lot of issues in trying to move it. But we're

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

hoping if we do have livestreams, that that may allow some of those people that are in the middle of their season to participate in the Board with our current meeting schedule. So we'll continue to work on ways to open the Board to various things.

So with regards to nominations, I do want to point out that next Tuesday, we are having a coffee with the Board. We're going to have a handful of Board members available for people that are interested in applying to the Board, to talk with Board members, to ask questions, for us to talk a little bit about our experience, and just very informal.

But anybody that's interested in the Board or how it works, please chime into that. I think it's come out in the Organic Insider. If you don't see it on the website, please feel free to again contact Michelle and she can get you the log-in information for that. So we'll look forward to talking with future nominees, and please use that if you really want to know more about what you might be getting into and some of the time

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

commitments as well, some of the pleasures of applying to the Board.

I do want to point out that we, we always get comments from our stakeholders about the work agenda items and the tension between the Board selecting our own work agenda items and the program kind of allowing us only to work on certain agenda items.

You know, I think there are arguments, great arguments on both sides of that in terms of the time commitment and not having the Board spend a lot of time on things that may not be actionable, but also of giving the Board some free will to work on some things that may not be on the top priority right now but are of concern to the organic community.

I'm not really sure how to solve that, but you know I guess at some point maybe it would be good to explore a little bit of a mix, where there is, continues to be NOP oversight, that the Board might be able to select a couple of key agenda items that they would like to work on in terms of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

kind of the bigger picture or organics.

I don't know if that's possible, but it might be kind of a compromise on both sides.

We do want to make the time on the Board manageable and not increase it. We already spend too much time and it is hard to, hard to look at the big picture items even with our current work agenda.

But we, you know, I do very clearly hear from our stakeholders that part of our job on the NOSB is to really look at the big picture, and sometimes take on the hard topics that are in our world and provide some insight from this Board on some of these work agenda items.

The next thing, I am so excited to hear the issues of climate change coming down from this administration. We know that this affects all of us. We in Colorado here with fruit, we are in an area where you really shouldn't be able to grow fruit, yet these little microclimates allow us to kind of cheat Mother Nature.

But on the other hand we know that when we farm on the margins, that climate change will

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

very much affect us, whether it's temperature variability or water availability or some of these things. So I think it's critical for agriculture to really look at this, and as we all say organic agriculture is so well-suited to dealing with this issue, both through sustainability, reliability, ability to, you know, persevere through difficult events whether they're large, large rainstorms where we have the ability to let water soak in instead of run off and, you know, in terms of resilience.

And also just, you know, we are a volunteer group. We sign into it, and when we see USDA's comments come out of how can we voluntarily support some of these climate change initiatives, we already exist as volunteers and we have opted into an organization and a way of growing food that really addresses some of those climate-change issues.

So it's, as an environmentalist and as a person that's concerned with sustainability, hearing this language and seeing this focus, not

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

just as a nod, just it does make me really excited.

I am in some ways jealous of the Board members that are going to continue on and work in the environment where some of these things will be recognized and we'll hopefully be able to move forward.

Finally I, you know, in my fifth year here, and I came onto the Board not really having gone to NOSB meetings. I had submitted comments in the past, but not being completely familiar with the process, and certainly coming from western Colorado, we're not in the main flow of information.

But it is such a neat process and I so respect the wisdom of our stakeholders in giving this input. I've talked to so many stakeholders, you know, Kyla would be one of them, that have participated in the Board deliberations for far more years than the Board has. You talk to people with, you know, 15-20 years of experience in giving input to the Board.

I guess with new members, you know, I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

really want to stress how important that is. You have a five-minute that's -- or a five-year snapshot of this, and I can certainly say for myself I am not intimately familiar with past decisions or past deliberations of the Board except through minutes and other people telling us.

So I just, you know, want to shout out to our stakeholder community about how valuable you are and reminding the Board of precedents and past decisions and things that have been decided or guidance that has been created. This is such a cool process of having a 15-person board making decisions, but being so informed by so many people that are so knowledgeable.

So the longer I'm on the Board, the more I realize how important this has been and, you know, as people, the zein or ion exchange or hydroponics or any of these things where people point out what has happened in 2010 or 2012 or 2002. So thank you to our stakeholders. I really look forward to this meeting.

We don't have lots of votes, but the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

discussion items will certainly govern the proposals we put out in the fall. The public comments were outstanding, as always, and they always make me pause and think about the things I've written as well as what other Board members have put out.

So I look forward to the next few days, and with that I will turn it back over to Jenny for her report and updates from the program. So thank you, Jenny.

DR. TUCKER: Let's give Steve a big round of applause. That was terrific kind of to hear your thoughts there Steve. So thank you very much, and again you're just a delightful partner to work with and I genuinely appreciate it.

Okay. I'm going to go ahead and share my screen, and so you should be able to see PowerPoint on the screen. Somebody tell me yes or no hopefully.

MR. ELA: Yes, we can, Jenny. Yep, go ahead.

DR. TUCKER: Okay, okay. I just want

to make sure. We've got just a lot of windows going on here. So okay. So this is a short but I think important update from the National Organic Program. I actually only have six slides, but I'm going to spend some time on each slide.

But first, I do want to invite everyone to watch our full presentation in the Organic Integrity Learning Center. It's about 45 minutes, which is what I would do in a face to face meeting, to give a full update.

When we moved to the virtual meeting, we decided that it was -- that this time was better spent having the Board being able to deliberate with a shortened time zone. So we took the update, the longer update from NOP and moved it online.

I think that's a fun activity for our staff to be able to report out on what they're doing, but it also gives sort of a good, broad perspective on everything that is going on.

So I do want to encourage you to watch that. I am here reminding folks of the four key goals that we are working against. These are our

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

program's four key goal areas that we are working on: strong organic control systems, robust enforcement, developing standards as far as continuous improvement and open transparent process, and engaging partners and stakeholders.

We are finding that over time, these projects really touch each other. We had -- last year in our goals we had -- strong organic control systems was separate from farm to market traceability. As we have continued to advance our work in systems and data and import oversight, the control systems really do include those traceability mechanisms.

A lot of work happening in enforcement.

We do continue to focus on both import oversight and dairy compliance. In fact, dairy compliance has really broadened into our broader livestock work, with partnering with Animal and Plant Health Inspection Services and other federal partners.

So, you know, some of that enforcement work we're not able to be -- we don't celebrate our successes publicly and a lot of those efforts are in the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

enforcement process, but they are happening.

So I did want to mention in particular some of the import work. One thing that happened that was very significant since the last time we all met at the NOSB is the ending of our U.S.-India recognition arrangement.

So that was an organic trade arrangement that had been in place since about 2006, and as a result of doing reviews of India's system, what recognition means is that we had authorized the India government to accredit certifiers. Just like we accredit certifiers in USDA, we had authorized the India government to do those accreditations.

But that didn't, that made it so we didn't have direct insight into what was happening with those certifiers, and we found that India's organic control system was, was not adequate to meet the needs of that recognition arrangement.

So in January, we sent a letter to India, laying out a transition plan for ending that arrangement.

So what that means is that by this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

July, any farmer that's a certified farmer, processor, exporter that is certified under the recognition arrangement must apply for USDA certification by July. And then they have time to transition, to complete the certification process with the USDA certifier.

This is something that is impacting, we are seeing impacts in the market, and it was done to protect the market. So this is part of our import oversight, import oversight work.

We've also been seeing some depending, continued deepening of our relationship with Customs and Border Protection. We continue to work through the working group, the Organic Working Group that was established by Congress through the Farm bill. We meet with that group regularly, and it is enabling a lot of activities that we did not have access before.

So for example we have a staff member who works in CTAC, the Commercial Targeting and something Center, and it allows us to for example send very specific directions to port officials.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So for example if there is an operation that has an open investigation, we can literally put in business rules where if somebody sees something coming in on the border from that operation, they are to follow a certain set of instructions and send it back to us. That's something we did not have a year ago. So we are, we are moving forward.

We have, together with certifiers, the process for being able to access ports to do ship level testing. It's become more clear. We have now sort of the playbook on how to do targeted sampling and testing at ports when there is an investigation that signals the need to do so.

So there is a lot going on in Enforcement, and all of that continues to deepen the control systems, both within the National Organic Program and with our, with our certifiers.

So I wanted to make sure I touched on those, because I think people sort of wonder well what's going on with imports.

There is presentations. The larger NOP presentation goes into some of the more

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

quantitative tools that we're continuing to use around the globe, so that where organic grows we can go in terms doing surveillance and the follow-up work needed with certifiers.

So I want to invite you to go look at that full presentation, but wanted to highlight some of those key areas.

Next, rulemaking is a priority, and so this is the Goal Area 3 of Setting Standards. Standards are important, and we do support continuous improvement. So I wanted to sort of not only give you an update on the rules that are in progress, so Mae gave sort of a sneak preview of that, so the rules that are in progress.

But also I thought it would be instructive to talk about what makes a rulemaking project successful. We have some good case studies now of what makes rulemaking successful.

So we thought it would be good to sort of review what are those factors, because I think they can help all of us in how we frame new regulatory needs for an administration.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

We are a growing program, we are a learning program. We are a growing community and a learning community. So I think learning how we communicate about rules or learning what works in rulemaking makes us all better at continuous improvement. So I thought I would talk about the rules themselves, but also talk about sort of what makes rulemaking successful.

So the rules in progress, give you an update on where we are. Strengthening organic enforcement is a key program priority. We are writing the final rule now, and so there were over 1,500 public comments that came in last fall and took a while to get through because there were lots of different feedback about a lot of different parts of the rule, and all of the parts of the rule are interrelated.

So if you touch one part of the rule, you have to really think about how it's going to impact other parts of the rule. And so we do anticipate that that rule entering the clearance process later this year. So as a reminder of what

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

clearance process is, that means that it goes to many, many offices within USDA and it also goes to Office of Management and Budget, which coordinates inter-agency review. So any other federal agencies that have interest in the topic can weigh in.

But we have a team that has been working very hard on drafting that final rule. So moving ahead nicely.

So here's an update on Origin of Livestock. This is taking a long time, and the rulemaking process is working. It is working. And so we had said publicly earlier this year that we did plan to move ahead with sort of a second notice, a second public comment period to supplement the 2015 proposed rule.

There is a notice that right now is at the Office of Management and Budget. So it has worked its way through the USDA clearance system.

It is with OMB. It is a notice that will activate another public comment period, and it is being done to seek feedback on some specific parts of the rule,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

provisions that were not part of the 2015 rule.

This is where, you know, Origin of Livestock, it has taken a long time and I am not trying to diminish the fact that it's taking a long time. The process takes a long time and it's working. But we got public comments that commented on the 2015 proposed rule, and there were things that people suggested that was great feedback.

But because not everybody had a chance to comment on it, the public needs another chance and that is how the system is supposed to work. So OMB has a new notice that they have already reviewed and given us feedback on and that we've already responded to. So not only is it with OMB, but OMB has done their first review of it and we have gotten the rule back to them.

So this will show up in the Federal Register as a notice. It may be posted in the Proposed Rule section. I think it's officially titled a Notice of Opening Up of a Public Comment Period, okay. So that's moving forward.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And as Mae committed to, this is a high priority for the agency. The natural next step would be a final rule. Now I've said that before and I got some legal, we got legal feedback on this.

Wait, you've got to take another, another step here. And so I'm not going to make the same mistake of saying yes, it's absolutely a final rule because we need to see what happens in public comment. But that is the next natural step of the process, would be a final rule.

Again, this is a high priority. We are moving quickly. The fact that this notice is in OMB in an administration that has been here not very long is -- shows that we have some, we have the momentum here.

National List rules. I think one of the changes that we've made over the past few years is really move along National List rules faster.

I know that the interest tends to be most with the practice rules and National List rules are really important. They are part of what we have to do, and they are part of implementing your

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

recommendations as a board, and that does take time and resources to get through USDA, this USDA system.

We did take the feedback from past NOSB meetings over the last several months, and we do have a commitment to move forward with what is called an Advance Notice of Proposed Rulemaking for Inert, so that is moving along. Mae shared in her presentation, she knows what inerts are.

She gets why this is important, and that's enormously helpful to have somebody with chemistry background, where you don't even need to do the well, once upon a time there was an EPA list and let me tell you about the list. I mean she, she -- you can go right to the chase on this, which has been really helpful.

So right now, those are the key rules that are in progress and that are our leading priorities at this time.

So now let's turn sort of more broadly to what makes rulemaking projects most successful.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And you know over time, we've seen kind of four factors that we believe are the factors that make rulemaking projects successful. I'd actually like to give examples of both where this has worked well and where actually there are some challenges.

And so I know there are some folks who may not like some of what I'm going to say, in terms of here's what makes a rulemaking project not so successful. But I have always committed to being kind of up front about where the challenges are, because we are all learning together.

And so rulemaking projects are most successful when they align with the Act, so when they align with the Organic Foods Production Act.

This is one of the reasons we've been able to sustain momentum with strengthening organic enforcement, is it's very clear in the Farm bill what Congress would like to see happen. So they modified the Organic Foods Production Act to enable things like import certificates, to close loopholes on handler certifications, to establish the inter-agency working group.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And so it's a great example of where rulemaking ties very tightly with the Organic Foods Production Act, which is -- that is what drives the regulation. So SOE is a good example of projects that are successful, when you can draw that straight line.

Second, when rules address needs with the most cross-community support. I'm going to actually point to Origin of Livestock as a success story here, that in around 2018 the community really joined together on the priority of Origin of Livestock in a way we hadn't seen before with that particular rule.

The planets aligned; there were lots of communication on the importance of Origin of Livestock and why it was important across the sector. And so letters came in from folks who weren't even part of the livestock community, but understood the importance of Origin of Livestock to the community. So for needs with the most cross-community support, Origin of Livestock's a really good example of why. It's still underway,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

but it is still a priority and it hasn't fallen off since it was picked up in 2018.

Will resolve known market inconsistencies. When we can describe the problem really clearly in terms of market inconsistency and market impacts, that really helps. This is one where I would also say that Origin of Livestock is another good example. So I'm going to kind of lay out, there are a couple of reasons of why you want a rule.

So one may be consumer expectations and one may be competitive fairness for producers. Both are important, but some rules are going to sell better using one argument over another. So when I started hearing about Origin of Livestock when I first joined the program, it was sort of explained as a consumer expectations thing. Well, consumers need to trust the seal and this is really important for that.

I'm going to tell a little story. I was at a -- it was one of the National Organic Coalition pre-meetings, and I happened to be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

sitting next to a consumer advocacy lead. So it was somebody who led a consumer advocacy group, and we were talking about Origin of Livestock. She said to me you know, she said "I get why it's important to them, but consumers don't really get this stuff."

I thought it was very telling that consumers, that that is a very detailed rule, and expecting consumers to understand it or to rally around that is -- and this was somebody in the community, in the room who didn't actually buy that sell. When the community started selling Origin of Livestock as a competitive practices problem, that's when it got sold. That's when the buy-in came.

So really think about do you have the data to support the fact that consumers care about this. If you do great, we want it, let us know.

But that takes some pretty specific questions in consumer surveys to show that this is an area. There are some good high level questions about standards, some good high level questions about

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

animal care and welfare.

But Origin of Livestock's pretty specialized, and so think through what is the explanatory factor that's really going to grab the people who will make this a priority. And so Origin of Livestock's another good example that when the message shifted a bit to being really about competitive practices within the organic community, that's kind of when at least on the inside I saw it click.

Now you can argue with some of this.

I'm telling you from the inside how that process has worked. My goal is to share with you sort of the NOP perspective on how this plays out as we've seen it. We're all learning, and so I am trying to share with you how I have seen that play out.

And then fourth, when the economic benefits are clear. This has been particularly the case for strengthening organic enforcement.

You know, we did try something pretty different in the economic analysis for SOE, where we talked about deterred fraud and that you can estimate,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

you know, how much food fraud there is and you can estimate how much food fraud would be prevented by the provisions and strengthening organic enforcement.

Jean did a good job of justifying it.

Any time we have numbers helps. Any time we have numbers helps, and so different administrations are going to feel differently about quantitative and qualitative analysis and cost-benefit. The cost-benefit is part of the dynamic.

And so, you know, we often hear well organic is voluntarily and therefore sort of the cost-benefit thing shouldn't apply. Right now it does. It is part of the equations. We are part of the federal rubric where cost-benefit analysis, regulatory impact analyses, all of those features of the Administrative Procedures Act really matter. So when we can articulate what the benefits are, that can make a difference.

So those are examples of factors that contribute to success, and it also helps explain when things aren't quite as either successful or

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

maybe slowed down a little bit or face kind of hiccups. On this one, again I hesitate to bring up examples because -- but I think it's important, is I'm going to on this one use native ecosystems as an example.

There are parts of the -- there's been a number of public comments about the importance of pushing that along, and so I do want to pull it just as an example of when these four things are a little bit sort of more problematic. There were parts of that recommendation that aren't covered by the Organic Foods Production Act. They're really not authorized by the Production Act.

That's automatically going to sort of slow things down. If Congress did not authorize something that's being called for, particularly on something that would have significant economic impact, that's automatically going to sort of raise a bunch of questions. Native ecosystems, there are some very strong champions for it in the community.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

It's also one where there are some people, some groups out there that actually have some hesitation about it, about the barriers that it may create for entry. So there's some, you know, compelling concerns about that particular recommendation.

The economic benefits, that's another one where it is -- can be hard to articulate what the economic benefit of that rule would be. Where are the numbers? What can we learn from those numbers? And so as you are thinking about what your priorities are, thinking about what makes projects successful and how to frame them in those terms, is kind of the goal of what I was hoping to cover here. There is a lot of interest in moving forward many NOSB recommendations.

I do want to highlight how much has been done. There have been more than 600 recommendations from the National Organic Standards Board since 1992. It's about 30 years. For about 15 of those 30 years, the Board was actually bigger than the staff, right, and so it

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

didn't have as many resources as we have today.

And the NOP has implemented more than 85 percent of the practice standards recommendations. They're not always rules. Sometimes they'll be training. Sometimes they're instructions. Sometimes they're guidance, sometimes they're memos to the Board.

But we have implemented a great number of the recommendations that have come from the Board and the vast majority of the materials recommendations. Now I know there are a few that have not been moved forward, and we have forwarded a lot of those recommendations. We have acted on those. So I just wanted to sort of share some of those numbers.

So I'm going to take the next step to therefore what? And so if you have a rulemaking that you're interested in advancing -- and I think we've got some good ones that have been raised certainly through the public comment process -- how did you do that? What are some of the best -- what are some of the best ways of doing that?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is -- I didn't -- I don't think I had a slide on it, but I touched on this at the beginning of the last administration. So I was getting a lot of questions like I'm getting now of well how best to communicate our priorities to a new administration. How do we go about doing that?

Again, a learning process for you, a learning process for me in terms of watching the process of what works best and most effectively.

So I wanted to share from my observations what seems to be most successful in getting things -- getting things moving along. And so things that I have seen that are effective ways, we're talking about writing here, written communication.

Organization letters that reflect membership consensus. And so when there is a membership organization, a group of certifiers, trade organizations, even better when you can get multiple organizations to agree and all sign onto a letter that reflect membership consensus, where the communication indicates that that consensus

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

has been reached.

Again, Origin of Livestock is a really good example of where there were a lot of letters that came in from literally groups of groups talking about this, with a fair amount of information about the impact and some stories. Sign on letters that explain impacts and provide concrete data are very useful.

So sign on letters -- for folks who don't know what that is -- is an organization sort of spearheads a letter and then farmers can sign on, businesses can sign onto that letter saying yes, we agree with that, with this letter. Letters that really substantiate cross sector support. So it's not just about crops, not just about livestock, not just about consumers, not just about handlers, but everybody working across the organic community is willing to support it.

So we're getting letters from a variety of different places. We're getting it from trade, we're getting it from advocacy groups, we're getting it from consumer groups, we're getting it

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

from certifiers. When we get letters from wow, when you have these two groups agreeing on this, that's really a big deal. That's very helpful.

I would say also be clear and honest about what the current state is and why the to be is important. So be clear and honest about the as-is and why the to be state is important. On this one, because that's a little abstract, I'm going to give a couple of examples on this bullet about being honest and clear about the as-is and why the to be is important.

So again, I'm going to tell a story.

A few years ago we started to get some letters in on gene editing -- on gene editing. The letters said well, the NOSB has recommended that gene editing be prohibited, so you need to do that right away. I got a call saying whoa, gene editing's allowed? I would never have thought gene editing is allowed. Really, gene -- because I got this -- we have the letter that says that it's being recommended that it be prohibited.

It actually took a little bit to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

explain, nope it's already prohibited. So here's the language from the regulations, and so if you read the regulations, gene editing is prohibited.

But that took a little bit of work to actually convince people that their assumption was actually correct. It is prohibited. Well why are they recommending that it be prohibited if it's already prohibited?

So being very clear that this is prohibited and this is why we're giving the recommendation, or this is why we're supporting the recommendation is that the regs say this and it could be misinterpreted or it actually is being misinterpreted, or this is important because.

But providing that as is context of what the current state is, because frankly that took a little bit of work to -- because people who didn't think gene editing would ever be allowed all of a sudden had a question about it because they were getting all of these letters saying well, it should be prohibited. Well, it already is. So be clear on the as is when you're describing the situation

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and why you think something different is needed.

What problem will that solve to do something different?

You know I would say this is one where -- and again I'm going to push all the big topics here. This is where containers and hydroponics I think it's important to openly communicate about the as is in a fact-based way. So I get letters -- we get letters about containers that do explain sort of the entire history about what happened with the Board, but they don't stop with the 2010 recommendation.

That they cover what happened after that, including the most recent lawsuit on hydroponics, which has now ended. By painting the whole picture and then talking about what's next, what should a to b be, then it frames the arc and you can still frame that in how you think it should go.

But when you leave out the parts of the story that don't necessarily support your position, it kind of -- it leaves, but wait, I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

thought this stuff happened after that. Why are -- you know, why isn't it the full picture? It is better to be open and honest about what the full picture has been up to this point in time, and then talk about what you would like the to be to be and why and what you think the impact and the importance is.

So sort of selective storytelling, it doesn't help decision makers form the complete picture. Lay out all the facts.

And then think through what can -- who can act. Think through who can act. There are things that we get here at the program that tell us what Congress should do, which is fine. We do get technical assistance questions from Congress and we can communicate some of that through technical assistance.

But there are lots of groups who have connections with Congress, when going to Hill days.

I'm talking about, you know, your fly-in outreach days, fly-in meaning you fly in and talk to the Congressperson. Lots of organic groups that do

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that know which of the most important topics you want to bring to Congress, versus what are things that USDA and the program can do.

We have different roles, and so for something that doesn't have authority right now through the Organic Foods Production Act, or if you think that the current system of certification isn't working, that those are things that are set in the Act and those are things that Congress can control.

So again we're happy to hear it, and thinking through who might be the best recipient of that particular letter or topic can serve your purposes in effective communication.

So what happens when something gets to the building here? So when something gets to the USDA proverbial building -- now we're getting those things virtually which is good -- if they are sent to the Secretary or to MRP --- so Deputy Undersecretary Mae Wu or when we get an undersecretary, an undersecretary, they are generally assigned through a process called

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

controlled correspondence.

And so that means they enter into an accountable mail system where answers, incoming letters, and responses are tracked, and they go through a whole lot of hands in the building before you receive the letter on the other end.

Now sometimes when you actually get the letter, it may say something like we're looking at this or we're evaluating priorities, or here are some things that are happening on this. It may feel a little well, wait. I wanted you to tell me it was on the regulatory agenda tomorrow and you didn't quite get that response.

But there is value in the process, because as that letter moved its way through the review process within USDA, a whole lot of people read about what your priority is, why it's important to you, and our response. So how we are responding in this moment. That's another area where I think Origin of Livestock really made a difference, because we had a lot of letters on Origin of Livestock where the same people in the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

building were seeing the responses over and over and over again and really wow, okay. We get it.

And sometimes it takes a lot of letter writing and it takes a lot of groups, and it takes a lot of discussion to move those things forward.

There are a lot of projects that people would like us to work on, and so really figuring out which ones are going to be the highest priority takes this process. It helps get the priorities and all the differing perspectives on the radar.

Now there are some times where things are important and are going to end up being constrained by the pipeline. So when I talk about the pipeline, I am talking about the USDA review process that we are competing with a whole lot of other USDA agencies and programs for the time of the lawyers, for the time of the reviewers and all the different parts of USDA that have to look at these rules.

Every organization is going to have constraints. So one of the constraints is not only what the program can do but the throughput during

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the clearance process, and the throughput at the Office of Management and Budget, how many rules that they can take in from any particular agency or program.

That is going to force some prioritization because of the pipeline. So thinking through again impact, thinking through how to package rules and how to sell rules in order to be prioritized is right now part of the framework. That is part of the process.

So I'm going to give an example of what I might have done differently a few years ago, because I've learned a whole lot over the past few years. I think we all have. Four rules that tend to come up on the list of things that we haven't done yet are apiculture, so bees; pet food; mushrooms; and aquaculture. So those are four rules and they're all practice standards.

So sort of an interesting collection of all the different rules that people have some interest in. Knowing what we know about the rule pipeline now and how to sell rules, one of the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

things we might have considered at the time would be to think about all of those rules actually together. So they may be different producer groups; they may be different stakeholder groups involved.

But they're all oriented around market development, about developing new sectors of the organic market, of providing clarity in different areas. So might have been interesting at the time to think about how could we have sort of thought about those as kind of a package deal, one omnibus rule that covered all of these different things.

It's an interesting -- I don't know if we could have sold that or not and it's an interesting way to start thinking about rules in a different way. Pet food's another, within that collection another really good example, like I talked with the Origin of Livestock. Do consumers get it? Maybe, maybe not. It is very easy to sell as a competitive practices rule.

Pet food's another good one, that when you first take sort of pet food at face value, it

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

kind of feeds into -- I'll just again be honest about it -- some of that really, pet food, organic pet food? They didn't think we were elitist enough? And so -- and I've had people say that to me.

Whereas actually pet food is really actually a livestock rule, that pet food would help the livestock sector of the organic community. How do you make the maximum use of animals? I think that if it had been originally kind of positioned in that way, it might have actually been -- it would have just been framed and taken in differently.

So again, there's a lot of interest in standards development. So I wanted to really pause and reflect on our experience over the past few years through a few administrations now, in learning how to communicate about these things differently. Because I know folks are frustrated.

I know you're frustrated about the NOSB recommendations that have not moved forward.

I wanted to share today some of the steps that may help shift that conversation in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

different ways, as we are all kind of learning, learning a new team. So I am going to pause and breathe and take a glass of water, and then I'm going to close up with the last two slides here.

So bear with me for a moment.

(Pause.)

DR. TUCKER: Okay. I want to be I think now the third or fourth person to remind everyone of the upcoming call for nominations for the Board. This is a really important process.

I do want to echo what Steve said. If you don't succeed at first, try, try, try again. There are many, many people on the Board who applied more than once, and not just this board but, you know, past boards.

And so it really is about the mix at that time. There are so many forms of diversity and getting the right combination of the right people at the right time is -- it's really important. So if you, if you applied and it didn't work out, you know A, your name is now known in the building and that's never, you know, a bad

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

thing, and try again, try again. Some people have tried multiple times before they got on the Board, but they got on the Board. So please do try again if you didn't make it the first time.

The four categories, this was said before, but individual owning or operating an organic farming operation or an employee of that operation; expertise in environmental protection; resource conservation; an individual representing public interest or consumer interest groups; and the scientists, toxicology, ecology or biochemistry.

And another kind of plug for the coffee with the Board. Again that's on May 4th at 3:00 p.m. Eastern. It's really the Board talking. It won't be NOP people talking. It's really how do you go talk to the Board about -- so please. We do hope folks will take advantage of the opportunity to actually talk to the folks who are serving.

And then finally I wanted to share for everybody an upcoming funding opportunity, and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

this does relate to the human capital work, another really good example of work that has been happening across the community, where there is clear passion and clear commitment across multiple groups and it is a program priority. So a number of folks are contributing to the human capital conversation.

We will be issuing likely early next week a call for proposals. So at the beginning of May, there will be a call for proposals. It will be distributed through the *Organic Insider*.

It will list multiple candidate projects that could be funded. Some of this is real time kind of agile project development that as the Board has been working on this topic, we have also been working on creating this funding opportunity.

So it has been a bit of a side by side, well-informed, integrated process. We've also been getting feedback from certifiers and ACA and IOIA, so Accredited Certifiers Association and the International Organic Inspectors Association, as well as input from industry and community groups.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

So that funding opportunity will list multiple candidate projects. It will be a multiple award thing. So it's sort of like Sound and Sensible that we did a few years ago, where we made multiple awards off of proposals that came in. In this instance, we're going to be use the tool called a cooperative agreement. It's not a contract, but it's not a grant. It is somewhere in between, and we only enter in cooperative agreements with a non-profit.

So a non-profit, a 501(c)(3) needs to lead the project team for it to be a cooperative agreement. We do encourage teaming with a focus on equity and diversity. So if you look around your teaming your teams, and it's looking like you're not quite as diverse, then we would encourage you to consider how you're going to broaden it.

This is part of the broader equity and diversity conversations. How do we encourage forces to join that perhaps have not joined before to create this greater good across, across the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

community? So appreciate all the work that NOSB has put into this topic, as well as ACA and IOIA and other organizations. So look for that the *Organic Insider* next week.

So I am going to now stop sharing, and I think we still have plenty of time for questions and answers with the Board. So Steve, turning it over to you for that process. I am out of water.

MR. ELA: Thanks. Thank you so much, Jenny. We'll in deference to, you know, livestock welfare, try not to dry you out too much here. But I guess I want to thank you so much for your comments. Obviously you've addressed things that have been on Board members' and stakeholders' minds.

I appreciate your addressing those outstanding items that have not been run through the rulemaking process. Obviously, you know there are a number of groups that are -- that's high on their radar screen right now. Now I think the bundling of things together makes a lot of sense, and you know, hopefully we can advance some of those

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

on.

But I also -- I think your point that so many things have been advanced already is -- it's very good to remember about the positive aspects as well as what the work we still have to do. So with that, I am going to turn it over to -- well, I'm not going to turn it over, but I am going to facilitate questions from the Board to Jenny.

So if the Board members would raise their hand and if for some reason raising your hand escapes my attention, please feel free to jump in and I will do my best to recognize you. So are there are people, the Board members that want to ask Jenny any questions? One of the Board members is noting that may not be able to raise their hands.

So go ahead. You want to make a

MR. TURNER: Yeah, I do have a question Steve, thanks. So thanks Jenny, great remarks.

I just want to reiterate concerns that I previously made at several organic stakeholder meetings, and Steve made his remarks that access

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

to the organic movement or organic certification does not reflect our country's extraordinary racial and ethnic diversity.

I continue to reminded of this on our Board calls and our public comment webinars, and looking broadly across the organic landscape. We've got to do better on diversity and inclusion, not because the current administration has called it a priority, but because it makes our communities, our systems, our institutions and our world fundamentally better.

So in addition to improving Board recruitment outreach to under-represented groups, I just want to flag that one concrete way for the NOP to elevate this issue is to ensure that all NOP resources are available in languages other than English. Currently in the NOP Document and Resources Available in Spanish page on the website, the link to the organic regulations has Spanish links to an English version of the regulations, and the link to the NOP handbook in Spanish is broken.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So can you talk a little bit more about the program's ongoing plans to address the issue?

You mentioned it in your human capital remarks, but I'd just love to hear you talk about it a little more broadly.

DR. TUCKER: Yeah. So let me talk first about the Spanish issue. We are aware of that and next week we are going to be issuing *Organic Insider* that points to a whole bunch of Spanish translation resources, including the regulations, an updated translation of the regulations and some handbooks. So we really, really hope to get that out before the NOSB meeting, because it is something we've been, you know, the community has asked for and we agree with the need for.

So I think we had invested some work in that a few years ago, and unfortunately I think content governance was a bit of a problem on that, as how do you kind of keep up with it. I think we are now with more resources in a much better position to keep up with that. So we need to --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

we will get that information out and we will clean up those old links in order to make those materials more accessible.

So that can help the translation of materials into Spanish. We do know that that is a particularly important language and there may be others. So we're going to continue to look at what is the distribution of needs out there. Spanish was a very, very important step for us to complete.

I think the other -- this human capital area in the call for proposal is going to emphasize equity and diversity as part of the evaluation criteria. And so we will reward proposals that really take a stand in this issue, and have a concrete way of doing projects that support equity and diversity. So I do encourage teaming relationships because that's how this starts.

I had a boss once that said collaboration is a wonderful idea. It only happens when people actually have projects to work on together. It takes, you know, concrete things

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

for people to come together and do in order to build that broader collaborative framework and frankly grow, grow the pool of folks who are in the group and make that group broader.

Diversity of the Board is a challenge because diversity in the organic community is a challenge. I think we will continue to do outreach. The human capital work will not have an impact in the next two months, but it might have an impact in the next two years. So we have to take short-term and long-term steps on this issue collectively.

I would ask everybody on the line, there are 176 attendees on my computer right now. If every single one of you pick up the phone and call somebody and encourage them to apply for the Board, I think that could really make a difference. You know, there are a number of folks who when I've reached out to them and said, hey have you considered applying to the Board? Well you know people have been encouraging me to, and I hadn't really thought I was ready. But you know people

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

are telling me maybe I should.

You know, there are a couple of Board members I'm looking at right now who said that, that wow, yeah. It took somebody calling me before I felt comfortable doing it.

So I challenge all of you, pick up the phone and call somebody, and tell them that you think they would be a great member of the Board and think about what, who are some people that might not occur to you to pick up the phone call immediately. But if you thought of a broader pool, maybe people weren't first on your rolodex, but you knew well enough to give them a call because maybe they look and sound different from you. That would be a good phone call to make.

MR. TURNER: Thanks for the call to action, Jenny.

MR. ELA: Yeah. Thank you Wood for asking that question. We're going to go to Rick, then Kim and then Amy and then Kyla. I know some Board members are having trouble with the raise hand function. So just text me if you, if you want

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to ask a question. So Rick, go ahead.

MS. ARSENAULT: Rick, you're on mute.

MR. ELA: Rick, you're on mute.

MS. ARSENAULT: Still.

(Pause.)

MR. GREENWOOD: How's that?

MR. ELA: There you go. That's better.

MR. GREENWOOD: Jenny, you missed all my best comments. But anyhow, no. Really appreciated your comments, and a couple of weeks ago at one of the executive meetings, I had mentioned the form letters that we receive from the group. You had talked about that a little bit in your comments about letter writing.

I'm wondering if you could go over that for the audience, because I thought it was instructive since we all as Board members go through the 2,300 pages of letters and many times you end up with 100 that are exactly the same. I just wanted basically everyone to hear your comments about those kinds of letters.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. TUCKER: Yeah. I was, I was trying to focus on what are the positive good things and ways of doing this. So form letters have value, and so certainly in the public comment process both for the Board and -- Board comments and for rulemaking, form letters help communicate the number of people who may feel a certain way.

And any time somebody does original writing, that's going to make a bigger difference.

So any time a letter can be more personalized and sort of tell the story of their farm or their business, I think we will generally sort of -- when we're cataloguing public comments for rules, we will tend to okay, all of these letters were about the same. There were X number of people who felt this way, and so that it goes side by side with and this organization wrote about this, this organization wrote about that, this collection of folks write about this.

And so it is as effective if not more effective simply for the paper management to have the sign on letter, where it is a single letter

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that multiple people sign on. That has as much or more value than 250 of the exact same letter that Michelle or somebody else has to kind of upload by hand.

So it is, those sign on letters it's just -- anything, any time you can make things a little bit easier for civil servants or the ones that end up having to upload all this stuff, honestly it does make, it makes a difference. I would say the least effective ones in that light are the ones where people on a website kind of click a button and that automatically sends email into my email system.

And so there have been times where I log in in the morning, a bunch of things I need to do like getting Origin of Livestock over to the Office of General Counsel, and I can't really do that because, you know, in the first ten minutes of my day, you know, there are 100 emails all on the same thing that has nothing to do with my actual regulatory authority.

But it's an online thing that now a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

bunch of people are clicking on that is going into my inbox. So that, it just -- those are the least effective in terms of impact, in terms of really moving the conversation forward. I've gotten four or five of those campaigns over the last couple of years.

I do take note of it. I certainly send a note to the powers that be that say okay, we've got a campaign on this. But those are the ones that tend to be the least, the least effective.

Then my email runs really slow for three days while email sorts through and moves them all into another folder. It takes me, you know, a half an hour or more to get Origin of Livestock over to the Office of General Counsel.

I'm actually using that as a real example. I really needed to get something over, and I couldn't even find the right email because there were literally hundreds of these coming into my email box. So again, civil servants, we really -- we are here to serve, and so help us help you.

MR. ELA: Okay. Thank you Jenny.

Rick, you're still on mute. Okay, we'll move on.

So we've got -- at the point we've got about 25 minutes. We could go a little bit over, but if people ask questions, if you can be -- or make comments just think of the time constraints. We want to hear from as many people as we can.

So we've got Kim and Amy, then Kyla, then Asa then Carolyn. So Kim, you're up.

MS. HUSEMAN: Thanks Steve. Jenny, first I want to say thank you for the information around the strengthening of the import program, as well as the communication that the NOP put together in a separate webinar not too long ago.

Since that time, and actually even since January when the information went into effect stating that the NOP (audio interference) no longer, you know, we're in the middle of a pandemic.

Across the news most recently is India's COVID intensified, intensity has really been the highlight. In addition to that, the Suez Canal, I'll use that as an example of freight being a large concern on imported products that are

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

legitimate organic products.

Is the NOP taking any stance or making any adjustments with the time line or with feed ingredients as far as being organically certified for producers in this time frame?

DR. TUCKER: A great, very very practical question, and certainly COVID is still very, very much with us around the world. So I think the key term that you brought up is legitimate trade, is how do we facilitate legitimate trade?

I think the time line that we laid out for India was purposeful in facilitating legitimate trade while giving people time for this transition.

So the deadlines are by January, by July, we said this in January but July, anyone who wants to continue to ship to the United States or has ingredients coming to the United States, they should apply for certification. They don't have to have completed certification, but they need to have applied for certification.

So that gives us more oversight so we know who's out there, and what certifiers are out

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

there so we can look at their control systems to make sure that they are managing those applications appropriately. You know, there have been other situations where countries have imposed new requirements and have said well, you have to have certification done by this date and they don't give a whole lot of time.

We actually believe the approach with India is a good model for how to do it, and that allows for operations to -- we get more visibility on what's happening in the markets, while also giving people time to complete the process so that legitimate traders can continue to trade.

We're going to keep an eye on the deadlines. We're not quite ready, we're not ready to shift any deadlines at this point based on monitoring progress. There are a number of factors happening with India. There is a complaint that was submitted to the International Trade Commission on that. COVID is a variable.

India has made some changes in their oversight system which we welcome, but that has

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

also changed some of the supplies coming out of India. So our number one priority has to be protecting the markets, and creating a fair and competitive playing field.

So that feeds to your second question about any kind of provisions for sort of non-organic ingredients or fraud. So I do want to make it, you know, very clear. Our first priority has to be protecting the integrity of the seal and a fair and competitive marketplace.

So we are starting to hear about some businesses that might be interested in sort of requests for exception exemption to be able to use non-organic feeds because there are supply constraints now for a variety of reasons. Those are generally handled through a process called the temporary variance process, where they come to NOP from certifiers.

I do want to be really clear both with the Board and the public here, it is long-standing published policy and practice that temporary variances may not be granted for feeding

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

non-organic feed to organic livestock, period. So that is long-standing policy and practice. Temporary variances are not granted for feeding non-organic feed to organic livestock.

This is in our handbook on NOP 2606 on temporary variances. That's been out on the website for years. That type of formal and informal request has been received in the past, and has been rejected each time. And so I, we are seeing supply constraints. That is part of the market. We believe the approach we're taking with India is the right one. We will monitor those states.

But I'd like to not right now commit to adjusting them given the progress we're seeing.

MS. HUSEMAN: Thank you.

MR. ELA: Great. We are going to go to Amy, then Kyla, Asa, Carolyn, Nate and I have a question as well. So --

DR. TUCKER: I'll try and keep my answers shorter, sorry.

MR. ELA: No worries.

MS. BRUCH: Okay. Thank you Steve and thank you Jenny so much for your information and your continued commitment to robust enforcement and import oversight in the SOE. We really appreciate that. In addition to what Kim said, can you comment maybe on what, what you anticipate on seeing with the changes being made in India and some of the maybe countries that are seemingly rising in their increase of exports, and these countries seem to have substantially different or even no country standards. Can you just make a general comment on that please?

DR. TUCKER: Sure. General comment on that is we are much better able now to see where the growth is as it's happening. So this is one of the big initiative for the import certificates.

We are starting to see data flow. There are some importers that have voluntarily started to fill in import certificates, and we've been investing in data visualization so that we can really now start to see where our supply is coming.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And so that's going to help us because it allows us to get ahead of the curve, in checking to see what the control systems are. Now even if a country doesn't have their own organic standards, organic businesses there can be certified to our standard. So business in for example the Ukraine can be certified to the USDA standards by a USDA certifier.

We oversee those certifiers. As soon as we see a count of certified operations start to increase some place, that gives us an early detection system so we can find out how those certifiers are doing in overseeing that market.

I have heard anecdotally it's hard to find a certifier in some parts of the world right now.

But in high risk markets, certifiers don't want to compromise their accreditation, and they have now seen enough certifiers lose it or lose a satellite office or have to constrain their services. They don't want to be one of those certifiers. Many of them are voluntarily saying we do not have the administrative capacity to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

certify responsibly in this part of the world.

Again, we'll see some -- we do see some supply constraints. Because of that, protecting integrity has to be the first priority.

MR. ELA: Thanks Jenny. We'll go to Kyla next.

MS. SMITH: Steve, can you hear me okay? I had to change my headset, so we're good?

MR. ELA: It's better, yes.

MS. SMITH: Okay, thank you. Jenny, thanks so much. Mine's more just of a comment, so I'll be brief. I just wanted to thank you for the candidness of where things are in the rulemaking process, and I would just encourage the program to continue to do that, so that stakeholders are all on the same page on where these rules sort of end up. Sometimes they end up just sort of in the ether.

So I really appreciated the update and hearing what makes a successful rule get through that narrow pipeline. So I just want to encourage the program to continue to give such candid updates

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of things.

MR. ELA: Thanks Kyla, and thank you Jenny for that candidness. I appreciate that as well. We're going to next go to Asa, then Carolyn, Nate and then myself. Asa, go ahead.

MR. BRADMAN: Thank you. I just have kind of a question and comment, and you did address some of my concerns and Mae as well, about the need to move ahead on List 4 and List 3 inerts. I think that's a real high priority. It's been around for a long time, and also reflects not just an obligation to the community but also an obligation to the Board.

You know as you know the Board is extremely busy. It's volunteer, and I think it's just respectful to the Board process to make sure that we don't spend time on subjects that don't really need it. There was, I think, a lot of drama and a lot of hours spent in the previous year around inerts that really shouldn't have happened. So it's great to hear that that's moving forward.

Similarly with the Origin of Livestock.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I'm glad to hear that there's going to be such an emphasis on that, and that's a really important outstanding issue that needs to move forward as quickly as possible.

One last comment too about native ecosystems and the needs of OFPA. One, there needs to be a cost-benefit analysis, and I think there we get into some hard issues with organic. One of course amid ecosystems there's ecosystem services that can be quantified, although I think it's dangerous to try to put a monetary value on the environment, but sometimes it's necessary, and then also it reflects values.

A lot of the organic industry and systems are based on values, not just on dollars.

So to the extent that we can incorporate those values into setting priorities for rulemaking, especially for something like native ecosystems, I think that's something as a community and as an agency we need to consider. Thank you.

DR. TUCKER: Yeah, I would say we need both, right. We need both the values and we need

the stuff that are in the Administrative Procedures Act. So yes, it is a balance. I really appreciate the comment, Asa. We do take the Board's time and care seriously.

This is one because somebody's going to ask me about containers. So I might as well use this as an opportunity to sort of say that.

I think right now it's a good question as to what.

I'm sensitive about the Board's time. I know there are a lot of folks who would like you to work on and many of you would like to work on containers.

How do we do that in a way that will end up yielding a product that can be moved forward with? So I don't want you working on containers for two or three years and then say oh well thanks for your work, see ya. You know, I think we need, we would need to really talk through do we have a commitment to move forward with rulemaking if we work on that agenda item.

That's going to take some buy-in and sort of looking what is the long-term arc of this?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

How would we get from containers discussion in the Board through a rulemaking process? What does that look like? I think that -- and what is the Board willing to work on, and what does that -- what does that look like?

So that I think comes naturally out of that conversation out of mutual respect. I don't want you working on things I can't do anything about either. So it is a tension, Steve brought it up earlier, well sometimes we just want to be able to work on things to advance them.

Well I'm fine with that and then, but if I get beat up about it, you know, two years down the road, why haven't you done anything about it?

Well, we said we weren't going to do anything with it right away. Well then that just becomes a source of tension and push-pull.

MR. BRADMAN: Thank you, and I appreciate that. To extend the comment, one last thing sorry Steve, is about time and diversity on the Board. You know, I was recently nominated for a SAP position with a FIFRA advisory panel. EPA

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

pays \$50 an hour for people's time. You know, I think it's important but the volunteer nature of our Board is very valuable.

But if we really want to diversify the Board, we have to make it accessible to people who don't have resources and time to devote to this, because it may have costs elsewhere in their -- in their lives. I think that's really important.

MR. ELA: All right. We're going to go to Carolyn, then Nate and then myself. So Carolyn, go ahead.

DR. DIMITRI: Great, thank you. Jenny, thank you so much for your transparent and direct introduction. I really appreciated that clarity. I wanted to talk a little bit about the competitive practices concept for putting forth a new rule, and as you know, it's always challenging to talk about competitive practices in cases where you don't have really strong and solid data.

Having looked through many of the comments in the federal -- comments to the *Federal Register* notices, I often can see the one-sidedness

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of like the stakeholders' comments, which I can understand because that stakeholder is putting forth their position.

And I've also kind of read some of *Federal Register* notices of the NOP, which look like maybe it could be a little bit strengthened.

So I wonder, is there any efforts to work with like NASS or ERS or other agencies to help get better data to look at these really important competitive issues, particularly when you're looking at like cost differentials across farm size for example?

DR. TUCKER: What a great question. Yeah, I do think the Organic Data Initiative was brought out of a different part of the AMS is important. Certainly at NASS, NASS continues to do it, organic surveys. Very, very important. As far as strengthening organic enforcement, more reporting will be required into the Organic Integrity Database on acreage. That should be a big help.

So I think there are -- we are now better

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

able to look across our systems at trends in the data for enforcement purposes. For rule writing, the data is hard and so that is a challenge, and I do believe that that NASS data is helpful, as are other sort of surveys. Public surveys are always more defensible in rulemaking than private surveys, and that's just sort of part of the -- part of the game there.

Acreage reporting will help a lot in understanding what the market impacts are. But you know, letters from in the case of Origin of Livestock livestock producers, talking about, you know, how much cows cost and what are the price differentials out there. It does help, helps in informing that rule writing process. Data is always going to be -- you always want more of it.

So I appreciate the comments.

DR. DIMITRI: Can I just follow up with one more comment? So I think in particular the ARMS survey, which actually collects cost of production data, they used to really actively over-sample organic farms by commodity. I noticed

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that that's been diminishing over time. I don't -- and I'm just throwing that out there for you to mull over.

DR. TUCKER: That's really useful feedback, and I have learned a bit about ARMS data in the work on Origin of Livestock, so not something I knew as much about. So I'm learning more about it, and I know we have several members of the team listening in here. So thank you Carolyn.

DR. DIMITRI: Great. Thanks very much, Jenny.

MR. ELA: Thank you Carolyn, and certainly your data background is going to be a huge help to the Board in understanding where some of these figures come from. So we have Nate next.

MR. POWELL-PALM: Awesome. Thank you so much Jenny. This entire morning's presentation has been really clarifying. I feel like I'm lucky to have heard a preview of it.

One thing I was thinking about while you were talking this morning though was as a -- for the last ten years or so, I've been privileged

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to be an organic inspector. When I travel around any with new farmers, oftentimes they say oh well like the standards in Montana for organic are different than the standards in Pennsylvania.

I'm like no, that's the greatest thing about organics. It's the same standard across the board for the whole deal. And so and I know as part of, you know, one of the three purposes of OFPA, consistency of the standard is really one of -- I think one of the greatest values of the law.

So I look at the backlog of those 20 recommendations that haven't been acted on, and I worry that that consistency is compromised by that backlog, because ultimately the community in an attempt to clarify the rules and get consistency made those recommendations. We've been kind of stagnating.

We are left, especially in the certification community, without the ability to be consistent, to have certifiers ultimately having to be on their own making inconsistent

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

decisions.

So the question I just wanted to have you philosophize on for just a moment is do you believe that OFPA made the USDA ultimately the decider of what the organics should look like, or the community? I realize that is a loaded question, and I will ask for the most pithy answer because I think we're talking about this a lot this meeting. But I would just question just kind of your ideas behind that.

DR. TUCKER: So that is what a unique framework we have in organic, of the public-private partnership of completely public, open, transparent standards. Anybody can go and see what the organic standards are, and then this group of more than 200 people are coming together to talk about what those standards should be, and that is working within a framework of a federal government, that has a whole lot of rules and regulations related to rulemaking.

In order to, to protect the process, protect the democratic process. And so yeah,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

there are a lot of gates to rulemaking and I'm kind of glad there are, you know, as a citizen. That the governing process is hard. It's complicated and there are lots of different perspectives.

So the community owns the standards and the Act owns the standards. Part of our job as a community is how to make that both/and, because I think too often it is framed as a conflict where it's actually a sign of diversity and richness.

We've been talking about a diversity a good amount and, you know, there's a lot of research that will tell you that more diverse teams have more conflict.

I actually think that, you know, applies here too, that you have a diversity in regulatory frameworks in the public-private partnerships. You've got acts, you've got communities, you've got values, you've got dollars. That's pretty darn diverse when it comes to regulatory framework. It's why I come to work every day.

And so I think my answer is yes, let's

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

let that diversity and tension and conflict and public process and different perspectives, let's celebrate that because that's who we are, and ultimately that's what will join more people into the spirit of organic.

MR. POWELL-PALM: Thank you so much.

MR. ELA: Thanks Jenny. That's a great answer, and I always -- personally I know sometimes the government process can be sort of frustrating because it's so slow, and then on other topics I'm so glad it's so slow so that things don't yo-yo between this and that. I know it's always a tension.

But so my question, Jenny you kind of referred to aspects of it I guess is, you know, and Nate just talked about lack of consistency.

I guess I'm personally, you know, as a grower worried about that lack of consistency in the three-year transition requirement, you know.

I know it is an issue that you mentioned at apiculture and aquiculture, that it, you know, cuts across greenhouses, containers and mushrooms.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And we keep hearing from stakeholders that they really are concerned about that lack of consistency between some allowing three-year periods and some not.

We've heard generally from National Organic Coalition and Organic Farmers Association and I think, you know, in some ways even more importantly the Associated Treasurers, association now. You've mentioned that, you know public, government is coming out of your office or Carolyn's office or somewhere, that those surveys are more poignant than maybe private surveys, but the surveys that NOP presented to us I think a year ago that really did highlight some of those inconsistencies. I mean for me, you know, kind of brought up this real question.

I know again that, you know, since the ACAs have really put some time in an effort to try and come to consensus on this consistency, and they haven't completely been able to do so. They're asking us for, to address this through formal rulemaking in greenhouse and container standards.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

You mentioned cross-community support in resolving known inconsistencies, and this certainly is a known inconsistency. So I know we've asked this question a number of times, but do you think this lack of consistency is a problem, and how do we move forward on this given that it is, I know it's not just a simple fix that, you know. How do we take care of this inconsistency?

DR. TUCKER: Yeah, and I think it's a great question because I think the other tension I didn't mention when Nate was talking is also this tension between this overarching framework of the Organic Food Production Act and the nuance of site-specific conditions and site-specific decision-making that every certifier has to do.

The certifiers have a really hard job, and I think sometimes I'm a little worried that the three-year transition period is framed as a waiting period. Well actually it has to do with the application of prohibited substances. It has to do with whether crops are -- have been, are they organic?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So I think agreeing on what the problem is and what is going to be the scope of the work ahead. So there have been very focused conversations now about hydroponics, that the lawsuit for that was resolved. I think that that now does, it does frame the issue and it provides more data for that issue.

So what do we want to work on here? Are we working? So I think that's the first question, is what problem are we going to address here and how we view the three-year transition, what the three-year transition means. We need to -- I think we all need to go back to what that actually means, because a decision may differ between different certifiers not because -- because it's not a three-year waiting period. It has to do with three years since the application prohibited substances.

I think there are some -- some of the, and I've said this before, and so there are some certifiers that I believe are, you know, they have made the choice not to certify certain systems.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

There are other certifiers that have acknowledged to me that they are, that they are taking a more conservative interpretation than even they think that the regulations support. But they're getting so much pushback from their community that they feel they need to do that.

That's again where I think this tension between a community and regulatory framework occurs. So I do think this conversation needs to continue. I think determining what the scope of what the Board would work on and what we're moving to, what does that look like?

I don't know, see. So I don't have -- well, this is the next -- these are the next 12 steps that we shall engage in. I think we are engaging in the conversation and that has value.

MR. ELA: Yeah, agreed. So I'm not surprised that you don't have an exact schedule on that. But you know, I just wanted to keep it on the radar screen, because I know some of my stakeholders are quite concerned about equitable

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

playing fields.

Are there other questions? We're running just a little bit over time, but I -- this is such a valuable time to be able to talk publicly with Jenny, and for the full board to participate.

I would entertain another question if there's something that somebody really wants to ask.

I am not seeing any. So Jenny, we know these questions and answers really put you on the spot, and it's hard to answer some of them because of your position. So thank you for being as candid as you can, and we really appreciate that. So we're going to take a -- let me get my agenda.

We're going to take a 55 minute lunch break. We're going to come back at -- oh, I have to get this right, time conversions. Help me out Michelle.

MS. ARSENAULT: Three o'clock Eastern, noon Pacific.

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

This is the Mountain to Eastern Time Zone that just screws me up sometimes. I usually do great.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So three o'clock Eastern, and at three o'clock Eastern we are going to have a presentation from the National Institute of Food and Agriculture known as NIFA.

It really ties into the research priorities that we have put out there from the Materials Subcommittee over a number of years. We've seen those number of questions expand. So I think it will be great to hear from the NIFA people. We thought we would be in Crystal City, where they would be next door and be able to talk to us in person, but we're still going to do it virtually.

So we'll come back at three o'clock Eastern, and enjoy your lunch.

(Whereupon, the above-entitled matter went off the record at 2:05 p.m. and resumed at 3:00 p.m.)

MR. ELA: So we will go ahead and get started again. Michelle, are you there? Maybe.

MS. ARSENAULT: I am here Steve. I just couldn't get to my mute button.

MR. ELA: Okay, sounds good. We're just trying to, you know, keep you nimble. But all right. Well, I'm excited about this section of the program. We are going to move into a presentation by the National Institute of Food and Agriculture otherwise known as NIFA.

As everyone knows, we every year put forth a list of research priorities from the NOSB.

We put those out and talk to our stakeholders for questions, revisions, thoughts, and then we vote on them in the fall. But there's been numerous questions from the Board as to where those go or if it's an academic exercise.

So we thought it would be great to kind of, since we were supposed to be meeting in Crystal City and these folks were next door, for them to give us an update on NIFA and possibly how our research priorities could tie into actually moving the state of the science forward. So with that, I will turn it over. I'd like to have Mat from NIFA. He's the National Science Liaison. He is going to introduce himself and the other two people

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

on the panel.

My understanding is he will give a short presentation and then we'll open it up for questions and comments from the Board, and have some give and take from these folks. So Mat welcome. We're so glad you made some time for us, and I'm really looking forward to your presentation. So I'll let you go ahead and introduce yourself and the other two members, and move on with your presentation.

DR. NGOUAJIO: Thank you Steve, and thank you for inviting us to come and share with you some of the work that we are doing at NIFA.

My name is Mat Ngouajio. I have been at NIFA for about eight years now. I'm a National Science Liaison and before coming to NIFA I was a professor at Michigan State University, where I spent about 13 years, and I work on the organic programs at NIFA. I will ask my colleague Steve to introduce himself. Steve.

MR. SMITH: Good afternoon. I'm Steve

Smith. I'm National Program Leader for Animal Production Systems within NIFA. I've been with NIFA oh, between 12 and 13 years now, and I have been associated with both of the organic programs for the majority of those years. I think probably 11 of the 12-1/2 years I've been associated with these programs and found them very rewarding.

They've really evolved into quite effective programs, and a lot of that is attributable to you folks. So thank you for your inputs and your help in identifying priorities, and again I look forward to visiting with you further.

DR. NGOUAJIO: And we have one new person on our team, Neerja Tyagi. Neerja, are you there?

MS. TYAGI: Yes Mat, I'm here. I'm Neerja Tyagi. I'm a program specialist who works on the organic programs both of them, OREI and ORG. I joined NIFA last year in June. I'm really excited to be working with this program.

DR. NGOUAJIO: Okay, thank you. The

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

way we will do this, I will give a short presentation and then my colleagues Steve and Neerja will join me to answer any question that you may have. I will just start by saying again thank you for giving us this opportunity.

NIFA is the extramural funding agency within USDA. We are a relatively small agency.

When we are fully staffed, we are about 300 to 350 people within the agency. But we have a significant budget of \$1.8 billion, which is usually spent on research, education and extension, most of that with land grant institutions.

So I'll -- organic agriculture is part of that portfolio. And that's what we will be focusing on today. So next, Michelle.

And we are very, you know, happy too, like you all, to see that the organic industry continues to grow. And the last survey showed a 31 percent increase in sales.

The number of farms also increased. And the total certified land increased. So, we

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

are very excited at NIFA to look at those numbers and hope that we continue to increase. Next one.

But, this is not just here in the U.S. that we are observing that increase in the organic sector. The same thing is true, similar trends are being observed in Europe.

And one thing that is specifically interesting in Europe is that we are seeing a growth both in production and in processing of organic produce. So, that is pretty exciting. Next one.

I will try to go pretty quick here, because again, these slides, Michelle told me, that they will be available.

And one of the things that we have noticed however, which is really not that exciting is that the growth in the organic sector has not been compounded by a significant or a corresponding group in the amount of research and development invested by the economies.

This graph shows you some of the major world economies, and how much money they are spending in research and development. You can see

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

two things.

For the U.S. here, showed with the yellow arrow, it is pretty low compared to other major economies. So, we are not spending enough in research and development.

And second, from 2018 to 2019, that investment was pretty flat. So, not enough, but with not even increasing over time. Next one.

And we all recognize that we need that strong investment in research and innovation, to be able to sustain the growth in organic agriculture.

But, we are pretty lucky at NIFA that we have two programs that have helped us fill that gap in research and education and extension in that area.

One of the programs is the Organic Agriculture Research and Extension Initiative, OREI. And the second is the Organic Transitions.

I will be focusing on those two programs today. But, I just wanted you to know that those are not the only programs that support organic

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

agriculture at NIFA.

We have many, many other programs, including our AFRI, which is our flagship program.

Including the SARE program, including the Beginning Farmers Program, and we also invest significantly in organic agriculture through the Hatch program. Next, Michelle.

And even if we go outside of NIFA, I say that NIFA was the original founding agency.

But, that is not the only one.

If we go outside of NIFA, you will notice that many other USDA agencies support organic agriculture, including ARS, Agriculture Research Service, and the Economic Research Service.

And I'm sure Jenny and Michelle, they spend a lot of money at the Agricultural Marketing Service on organic agriculture. We've got NRCS, and many, many other agencies within the USDA. Next.

So, what are the challenges that the organic agriculture is facing right now? And I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

will just say that, you know, the issues that we are trying to solve in organic agriculture are -- span the entire supply chain.

From the field, the time we put the seed in the ground, up to the time when we eat the food, we face a lot of challenges. And we need a true partnership to be able to solve those challenges.

And I have a graph there showing some of our partners that we work with. And you can see there that NOSB is very prominent on that graph.

And it tells you how important you are to us and to the organic industry. And we use your input and also we use input from the Farm Bill, from national surveys, from listening sessions, meetings, to be able to identify those needs that need to be addressed by the organic industry. Next.

And those challenges, next slide. It's not moving here with me. Okay. We got it next one.

So, we really need that option by the industry both for issue identification, to set

priorities to tell us what issues need to be addressed first. And you can clearly see how NOSB has been helping with that.

We need those partners to work with USDA and to work with Congress with a goal of making sure that we have enough funding to support research, education, and extension in the area of organic agriculture. Next Michelle.

So, Congress has been pretty responsive to the call. If you look here, I'm just showing a graph for one of our programs, OREI, how much funding we have received from Congress through time.

Starting back in 2004, the funding was just around \$4 million. And that increased to \$20 in 2009.

Yeah, you see a big dip there in 2013. We all remember that year with sequestration. And a lot of programs were not funded.

But, it came back in 2014. And we have continued with those for \$20 million until 2020.

And this year, 2021, Congress increased

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

our budget to \$25 million. Next year it will be \$30 million.

And 2023, we will have the opportunity to have in our hands, \$50 million to support organic agricultural research. So, Congress has really responded to our call. Next.

Okay. Now, within NIFA, we saw that the industry has done its job. Congress has done its job. So, what have we done at NIFA with that funding that we've received?

Within NIFA, we took all the industry priorities, whether they came from the White House, from the Farm Bill, from NOSB, from all stakeholders. We take all that input and translate it into what we call the request for applications.

That is the call, or some people call it the call for proposals. Then we use a very strict panel review process to screen those applications.

Based only on scientific merits, because we thought if we want to stimulate

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

research, cutting edge research in this area, we have to base most of our criteria on scientific merit.

And then we also used a post-award of management. Very close management to make sure that the researchers are doing what they promised to do. Next.

Now, you will be wondering what -- how about the input that will receive, -- no, back one.

Back one, Michelle. Yes, there you go.

The input that we receive from NOSB. How about your priorities that you give to us every year?

I will just start by saying, your priorities become our priorities. They are included in our RFAs, in our two parts for Organic Agricultural Research and Extension Initiative, and the Organic Transmission.

However, for most input, sometimes we can boil it down to one sentence. Or sometimes even just one statement or one word.

But, because your priorities are so

important, the best way for us to integrate that in the RFA was to come to directly link that in the RFA, so that all our applicants can have access to them.

And part of the way we use them is, some of the applicants use NOSB priorities as a way to establish relevance. You know, for us to fund research in organic agriculture, it has to be organic research.

And a priority from NOSB, when someone is addressing that priority, there is no more question whether the topic is relevant or not. Automatically, they will establish that relevance.

Next.

And here, I shall go quickly for the remainder of my time. So, I'm just showing here some of the statistics on the program.

And this graph is showing you the number of proposals that we have received over time. The yellow bar will be the ones that we have -- were declined.

And the green shows you the ones that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

were funded. So, clearly you can see that a large proportion of those programs or those projects, are declined.

And over time, they have been increasing. They're up and down. Last year we received close to 100 projects. Next.

Now, you will ask us also, you know, yes, this shows you the same figures. So, a total of about 17 thousand projects have been submitted to this program. Out of which 356 were funded, throughout the lifetime of these two programs. Next.

Now, you will ask me, what is the success rate of those projects? Other than 2001, which was kind of an outlier with 75 percent success rate, we have an average of about 24 percent success rate for projects submitted to our programs.

It goes up and down, you know, from year to year. Some years it's really low, like 18 percent. Some other years we can go close to 30. But, on average, we have 24 percent success rate. Next.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And I'm sure you will be asking us, where are those projects coming from?

This is a graph showing the map of the country, and where most of the projects on organic agriculture come from. You see here the west coast, Washington, Oregon, California, big deal.

Texas in the south, Florida. And then the remainder, most of the projects will come from the north central and northeast region.

So, that is basically where the action is in terms of the total number of projects submitted.

And you will be asking, so, how about the ones that were funded? That is the next graph here. And it shows pretty much the same picture.

These are the projects that were funded. And we've got Washington state, Oregon, Minnesota, New York. Those are the leaders.

But then we follow by California, Texas, Florida, Michigan, Pennsylvania, and a couple of other parts. So, basically follow the same picture there. Next.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Okay. Some of the good news. When we started, I came to NIFA, Steve was already there.

We have some difficulty funding research projects and animal systems.

But, over the last couple of years, we have seen some significant increase there. The same thing was true with small and minority serving institutions.

We have moved the meter a little bit also, and we are funding more projects in the southern region. That wasn't the case.

We are also seeing an increase in success rate for our breeding projects. And in fact, breeding projects are the most successful as you see there on this graph, than the rest of the projects submitted to this program. Next.

Okay. So again, I talk about the increase in our budget, which was a big win. That will give us an opportunity to stimulate research and innovation, and to really tackle big challenges in the couple of years to follow. Next one.

And we will focus here on the three legs

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

of our stool, which is, continue to promote research and innovation, build on extension opportunities, and continue to train the next generation of organic farmers and leaders.

So, those are still going to be the major buckets where most of our funding will go.

Next.

And then someone will be asking, what are the different topics that you are going to be covering?

Yes, we will continue to look at things like smart tools for use by farmers and processors.

Things like seed, things like natural substances to replace those that are being phased out, or even just new products for farmers.

We are very interested in developing a tool, a smart tool for enforcement of, you know, to be used by agents to support the organic integrity. An example would be something that you can use to tell if the product is organic or not.

So, those are some of the things that we are really excited about. And we also want to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

better understand the human dimension of organic agriculture.

And finally, we want to make sure that the research or the knowledge is accessible and available to farmers. Next.

On that, and this is the last slide, just to show you our contact information. At NIFA, myself, Steve, and Neerja.

And the two division directors that oversee the programs. One is in Plant Systems, and that is John. And Deb is in Animal Systems.

So, on that, I will stop and take any question that you may have.

MR. ELA: Thank you so much for that presentation. It's so much appreciated how much you integrate the NOSB's research priorities.

I did not realize that it was quite that strong. So, let me open it up to questions from the Board.

It looks like Brian has one. I just want to say, Brian is from New York. Just to give you a little bit of context of where the Board

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Members are.

Yes, Brian?

MR. CALDWELL: Thank you very much.

DR. NGOUAJIO: And New York receives a lot of our funding.

MR. CALDWELL: Well, in fact I worked on several projects that were funded by OREI. So, we really appreciate it.

I did research at Cornell University, so, we -- it's very important to the group at Cornell.

But, what I want to ask you about, two questions. The first one is, I'm wondering what -- exactly what smart tools mean? I'm not sure what it means in this context.

But the second one, I guess, is more of a comment. And that is that one of the projects that I worked on, funded very early on through OREI, was a long term systems project.

And I think those are really important for understanding that kind of the deeper soil and management and economic issues with organic

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

farming.

And that the only point that I want to make is that we were funded twice through OREI.

But then the third round, we were not funded.

And in fact, one of our projects, it was a vegetable and a grain experiment, we had to drop the vegetable one after a few years due to lack of funding. And the grain one did continue.

But, it's such a difficult adolescent period for these long term trials. I mean, assuming they have validity and they're doing good work, so many of them really struggle in, you know, in the 10th to the 20th year. And yet that is when a lot of the data really starts to become meaningful.

But, I'm just wondering how you see, I guess, that is a question. I'm wondering how you see OREI, you know, sort of working within, you know, on that issue.

And then the other one is about the smart tools. So, thank you very much.

DR. NGOUAJIO: Okay. Steve, can you

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

take a first crack?

DR. SMITH: Sure. Whether it's from the animal side or the plant side, and you know, the many facets of this, yeah, we definitely recognize your point about the long term investment in these longer projects.

The challenge we face is that through Congress, appropriations, you know, almost exclusively, at least as they come to us, only offer a five year funding authority.

So, the longest project that we are legally permitted to support is five years. And certainly you've been the beneficiary of having repeated, you know, awards.

But, just like all the rest of them, they are then competing one more time with, you know, all the other projects that are submitted.

And you know, we are not, Mat and Neerja, and I are not in a position to where we can influence the rankings of the panels.

So, that's the jeopardy you have. And I'm not, I honestly am not sure what the best right

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

answer is there. It's a very valid point. Particularly when you start talking about soils on the crop side, and well even on the animal side as it relates to soil issues.

But, I'm certainly open to any thoughts or suggestions to how we might get around the Congressional guidelines we have.

So, with -- I'll pop it back to Mat and let him fill in any facts that I may have missed.

DR. NGOUAJIO: No Steve, I think you covered it very well. And we, initially we used to fund projects only for three years.

We got this type of comment, and we increased the duration of our funding to four years and even five years, which is the maximum authority for our program.

But now, when it comes to long term projects, it will become again, very complicated if we, let's say we take five projects, we give them 70 percent of our funding, and we maintain those five projects for 15 years.

You can clearly understand that the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

rest of the community is going to come quickly and complain why we selected those projects to fund on a long term basis.

However, what we do is, we can fund -- we have projects that we have been funding for the third round. However, they still need to compete.

And usually when they compete, they are at a great advantage, because they can show outcomes from previous years. And that puts them at a great advantage.

But again, we are still struggling with that long term versus every two or three years, or four years.

Now, in terms of smart tools, maybe we -- we mean a smart tool is everything that is going to be used by farmers or by enforcement agents.

That can be as simple as let's say a product, a natural product for weed control. It could be a cultivator. It could be something that is solving a unique issue to organic farmers.

So, we really do not want to restrict that to a budget or something completely, very

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

complicated. With anything that we can get to resolve specific issues that organic farmers see as a barrier. We call that a smart tool.

MR. CALDWELL: Thanks very much.

DR. NGOUAJIO: Thank you.

MR. ELA: Carolyn has a question for you.

DR. DIMITRI: I don't have a question. I just wanted to say hi Mat. Hi Steve, it's great to see you too.

DR. SMITH: Hey Carolyn, it's great to see you as well.

DR. NGOUAJIO: Yeah. I'm thankful for the great job you do for the program.

DR. DIMITRI: Yeah. Oh great, you do great work also. Thank you.

MR. ELA: Okay. Amy has a question next.

MS. BRUCH: Hi. Thank you guys for your time today. This was a really interesting presentation.

But, I just had a question. There are

so many facets to organic farming. Is there any shared learnings with some of the countries that we have equivalency with?

Organic equivalency that I see, you know, invest in organics and agriculture that we could kind of maybe speed up the learning process with some collaboration?

DR. NGOUAJIO: Steve, you want to? Go ahead.

DR. SMITH: Sure. I can start. Within NIFA, and you'll find it in our RFAs, we strongly encourage international collaborations to the extent that they benefit the U.S.

So, what we won't do, or don't do is, if you have a unique crop, and we have had some examples of this, where we've had someone submit in support -- to do research in support of a crop that is not even -- does not exist in the U.S. It was strictly in that case, it was a crop that was grown in Africa.

We're not very interested in that, because there's not a benefit to the U.S. I mean,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

we're interested cognitively, but we are not interested in funding those.

But, we do, if you look in the RFAs, we do encourage and support international collaborations. The primary investigator has to be a U.S. entity.

So it, you know, again, stressing and in particularly the cosmetics to Congress and to the public, you know, it needs to be really clear that we are investing in U.S. agriculture.

But, to the extent that we can benefit from what's already learned, as you pointed out in your question, we want to capture that. I mean, there's no reason to reinvent the wheel if we can collaborate and both sides win.

So, we -- a few of our programs actually have incentive funds to support that. The legislation that created OREI doesn't really allow us to offer an incentive to, you know, extra money to collaborate internationally.

But, there's absolutely nothing to prevent it. So, it's just limited only by the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

creativity and the connections, the network of the individual research groups that are trying to present a compelling project for funding.

MS. BRUCH: Okay. Thank you.

DR. SMITH: Oh, you're very welcome.

MR. ELA: We have Rick and then Kyla.

DR. NGOUAJIO: Rick, you are muted.

MR. GREENWOOD: Yeah. I just unmuted.

Thanks very much. My question is, you had a graph that showed success of the research.

And I was curious, how do you measure success base? Some of it has to do with the researchers expected outcome.

So, let's say they do something like we're going to increase crop productivity 10 percent. If they come out at 5 percent, is that still a success?

Or do you consider that a failure? I'm just curious how you do your metrics, because on the graph it looks very rigid. But, I don't think research is like that.

So, I used to be the Assistant Vice

Chancellor for research at UCLA, so I know -- I know it's tough.

DR. SMITH: Right. And thank you for that question, because clearly that slide is a little misleading.

The success in that slide is success rate of the applicant. So, we -- if you get 100 applications and you fund 20 of them, that's a 20 percent success rate.

I'd love to have some measure like you're talking about, of the actual success of the project. But, a lot of times, that's very elusive.

Some of the ones that I would look back in my career, or you know, just overall of agricultural research, some of the ones that have been in hindsight most successful were probably initially underappreciated.

One I can think of on the reproduction side that would be for, just it was basic follicular function that they were studying. Nobody had an idea what they were going to do with it.

In fact, the panel pushed back on it

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

thinking that, why would we do this? What is it -- where is it ever going to go with the industry?

But then ultimately it became the basis for, for estrous synchronization in breeding in beef cattle and dairy cattle, you know, across the nation.

Okay. Looking back, that was a huge success. But, we didn't know it for, you know, several years after the project started.

So, that is all but impossible to measure other than with some of the data that we get back from NASS and ERS, where they'll come back and talk about return on investment in agriculture and some of the benefits there.

And they can take a little longer look than we do. And it's not project by project. It's just oh, we have these innovations into the market, and here's what it's done.

So, they take a stab at that. But, we don't really have the ability to drill it down to the individual project.

So, it's a great question. And if you

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

have a suggestion on how we might capture that, I'd love to have it, because I could carry it back to Congress. You know, I couldn't because I can't lobby.

But, you know, we could put it up through the chain to Congress and say, look what you've got. And we're already doing a lot of that.

You know, we've already got a lot of success stories. But, it presents a success story rather than a numerical score of all the successes we have.

So I am open to idea.

MR. GREENWOOD: Yeah. Well actually, I was hoping you'd kind of give me some ideas.

But some of the big research universities measure success in Nobel prizes. And so, it's a -- it's a tough body.

I was just curious. I appreciate your answer and some of your pain.

DR. SMITH: Yeah.

DR. NGOUAJIO: And Rick, what we do is we do actually take a significant amount of risk

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

in those programs. Meaning that you know, it's not like high risk/high reward like our foundational programs.

But, we do have some level of risk. Because if you're only looking for projects that will be successful, you will likely miss some areas of investigation that needed the investment. So --

(Simultaneous speaking.)

MR. GREENWOOD: Yes, absolutely. And that -- that's the criticism that research gets all the time, is when it hits the public and they have an article, well, they're doing this silly research on something, and it's meaningless.

You never know how it's going to turn out. So no, I -- I get that.

DR. NGOUAJIO: Thanks.

MR. ELA: We have a question from Kyla. And then one from Wood. So go ahead Kyla.

MS. SMITH: Hi. Thank you both for being with us today. I appreciated your presentation.

This is an area that I don't know a whole lot about. So, it's fun to dig in a little bit.

So, this might be an obvious answer. But, I'm going to ask it anyway.

For the projects that are declined, is that all funding based? There's just not enough money to fund them?

Or is that based on something else such as, I don't know, other reasons? Like they didn't fit the bill of criteria. Not enough information, whatever.

DR. SMITH: That's a yes and answer.

Because we do have some that are -- that the panel ranks in what we call low priority.

That is not considered a fundable category. So, if it's -- if they don't -- they don't -- we use, you know, just as a tool.

This is just a ranking tool by the panel to help them in the sort. And we have a grid on the wall, you know, think of it as that.

And they place them in outstanding, high priority, medium priority, low priority, and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

do not fund. Medium priority is the -- is the lowest it can go and still be considered a fundable category.

So, if you had the budget of the Department of Defense, you could fund everything into the bottom of medium priority. Okay, the others, even if you had -- even if you had money to burn, you can't fund those.

But, usually we're running out of money sometimes before we even get through the outstanding projects. But more, you know, more commonly, we will get into some of what are considered the high priority projects.

We just run out of money. Even with the increases we've gotten, you know, going up to \$20 million, we still had, you know, a lot of fundable projects we couldn't fund.

And then, you know, we've gone to \$25 million. We've still got quite a few fundable projects we can't find.

When we get to \$50 million, it might be easier, we can go further. But, what we're

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

seeing is, and this is, we can call it good news or bad news, but, I think it's extraordinarily good news.

What we're seeing is, more people, more researchers, and educators and extension people, coming in with applications, anticipating this growth in the program.

And we're getting -- we're getting more players. Which we've wanted all along, because it makes it a whole lot easier to conduct a broad array of research projects if we're not limited too just a few institutions that have gone through the certification process.

Which OREI by the way, does require.

The field work has to be done on certified land. Well, you know, how many players in 2001 did we have that could even do organic research?

Okay, you fast forward to today, you know, just this last round, we've got a -- we've had applications from folks we've never heard from before.

But now, they've gone through the step

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of getting access to certified lands. It's really exciting to watch.

But, whether that will change in our success rate, I don't know. The only way it wouldn't, is if we get just that many more applications competing.

So, if we -- if we jump from almost 100 applications to almost 200 applications, well that's great news for us, because we then have more projects we can pick between and among based on their scientific merit.

But, then our success rate won't change very much. So, it's all a matter of who applies.

But, we're seeing more and more coming in response to this increased funding.

DR. NGOUAJIO: And again, one other thing is again, if the research is not focusing on organic agriculture, if someone is just trying to get money to do research, and that is not going to have organic farmers, no matter how good you put together that proposal, it will be declined by the program.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. SMITH: We have a list. We even will challenge them. Say okay, if you were looking at this proposal, if you were to take the word organic out of the proposal, would it change?

And if their answer is no, then it's pretty clear, you know, it's a conventional system that they're wanting to look at, and just putting the organic label on it so they can in -- because our success rates are a little higher than some of the other programs.

And they're just wanting to dip their feet in the pond and perhaps share in the increased funding. And the panel is probably more vigilant than I am as far as catching those that really aren't organic projects.

So, the integrity of the program is safeguarded by a lot of people.

MR. ELA: And I want to point out that Kyla sits in our certifier seat. So, she is on the other end of the spectrum of trying to enforce all of those rules.

And it's something I don't envy. But,

--

MS. SMITH: Right. And I live in state college. So, Penn State and so I'm sure that they have submitted many a proposal over the years.

And I certify some of their lands.

DR. NGOUAJIO: Yes. And they're successful also.

MS. SMITH: Yes.

MR. ELA: Well, we're going to move onto Wood. But, I just want to say, thank you so much for requiring certified organic grounds.

You know, we see over and over people give us data where it's like well, it's off conventional ground. And it's just the same.

And it's not. And we know that. So, thank you for holding that -- that bar very high.

Wood, go ahead.

MR. TURNER: Thanks Steve. Thanks Mat for the presentation. It was great. I'm the chair of the Materials Subcommittee, which is responsible first for pulling together all the research areas from different subcommittees at

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

NOSB.

And I'm learning this process and trying to get my feet wet here. And so, it's really helpful for me to sort of understand a little bit more of how what we're trying to do at NOSB that sort of coalesce a number of research priorities for the community, for our stakeholders, into something that you can use.

How that works. And I'm still -- I still have a lot of learning to do. But, it was very helpful.

I understand that the timing of our research priority approval process, whereas, you know, we'll present a discussion document at this meeting, and then vote on our research priorities in the fall, isn't in sync. Is not at all in sync with the RFA process.

And I'm just curious, if there's any solution to that problem from your perspective?

Is there -- because it seems to me that for this to work best for the community, it's worth it for us to maybe lean into that question a little

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

bit, and one, and figure if there's a way to make that more of an optimal process.

So, I just -- I don't know that there is. But, I just wanted to ask you that question and see if you had any thoughts on it.

I'm not sure that -- again, I'm jumping in here and learning this process myself. So, I don't know what's possible, but I'd love to hear you speak to it a little bit.

DR. NGOUAJIO: Yes, Wood. I mean, our biggest problem at the beginning was really to have a point person that we could even work with. And know that we can, you know, contact.

Now, when we share, we know who to contact. And she knows us. And when things are available, she will send them to us.

But, the key thing is, really for timing, we can always make a change to our RFA, make an amendment to our RFA when the research priorities are posted.

And again, I have also noted that it doesn't change that much from year to year. Right?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The same thing is true for our own RFAs.

Our own priorities are -- the community wants it to be a little bit more stable so it is predictable.

And so that if you submit a project and it's not funded, you can still go back and resubmit it again.

So, the key thing would just be to be in touch with us, and let us know once you have your research priority ready, even if our RFA is published, we can always amend it to put the new version.

DR. SMITH: And the beauty is, of you know, what we've done with the RFA where we're linked to your priorities, then if they follow that link, it's somewhat depended on the Board, how they have that presented.

But, if you have each one as you like, if you post a new one, if there's a link from the old one to the new one, something as simple as that.

If they pop onto that screen through our link and it says, or if it's a cover sheet that says, here's our priorities.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Here's 2020, here's 2021, here's 2022, as you're adding them. And then they can choose to go to the most current one, then there's never a point where we're out of sync.

Yeah. We'll link to your website and your priorities if we can get it set up in a way where, you know, it's clear that you're going to NOSB priorities. And here's the most recent one, whatever it is.

And even if you allow them to look at the ones historically, I think that's useful and it's valuable.

But, if you want them to see the most current one, that's probably the easiest way, because then that requires nothing on -- on -- then no changes in the RFA, because it's automatic.

You've put them where they can find them. We're directing them to it. And then that way the synergy between us is obvious to everybody.

The mutual support becomes even more ironclad.

DR. NGOUAJIO: Yeah. And we always link the last two years. It's not just the most

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

recent one.

We put the most recent one, and then the one, the year before that. So, we always put two years of NOSB priorities in the RFA.

So, that applicants can see the evolution of those priorities also.

MR. ELA: Great. And then that just gives such a concrete link for us that those priorities aren't just esoteric.

That that direct link, it kind of gives me shivers a little bit. That these really do have meaning to the community.

We are essentially out of time. But I have one more question for you that really deals with -- that we've wrestled with.

Our list of research priorities has increased quite a bit since I've been on the Board.

I'm in my fifth year.

It used to be fairly succinct and rudimentary. And now, we keep adding things, because obviously there are a lot of research priorities out there.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

From your perspective, should we -- with our current list, should we try and prioritize them so there are fewer?

Is it about right? Should we expand it? Do you have any feedback to us on how we, you know, what the right length is or prioritizations are?

DR. NGOUAJIO: Steve, go ahead.

DR. SMITH: And I'll jump in, because he hit -- he hit sort of a hot button for me. And that is, you've really got two audiences.

And if you're talking to us, I want your full list. And if you want to prioritize them, that makes it even better for me.

But, you know, if it's a big long list that's great, because I can share that with a whole host of stakeholders that, you know, might offer research support.

And, you never know who's out there who really has this really brilliant breakthrough idea for, you know, one of those priorities and can jump on it and send us an unexpectedly compelling

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

application to address it.

Okay. So, you know, I like a big broad call for research. And then just them -- you know, let them, I'll say duke it out, if you want to use that term, with their brilliant ideas, and float to the top, and you know, that's exciting.

Okay. But, your second audience is a little different. And -- at least as I see it.

And what I would consider your second audience, which is one I can't touch, are legislators, folks that might provide funding.

Okay. You give them a big long list, and they're -- I want to say this politely, but by design, the nature of their job is they have to be -- have a short attention span.

You know, they're jumping from meeting to meeting to meeting to meeting and to one request after another, after another. And you give them a big long list, they're probably already tuned out before they get two-thirds of the way down the list.

However, if you go to them and say,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

we've got a long list. You can look at it if you like, but here are your, pick any number, five, ten, whatever reasonable number appears to be. And say okay, but this is what I want you to focus on today.

I think that's a much more effective strategy. So, what I would like, and what I would find beneficial from a research standpoint, is really what this conversation is about.

And so, please take my first answer.

But, don't under appreciate the power of focus if you're, you know, if you've got a different audience that are not scientists looking for this remarkable breakthrough idea.

DR. NGOUAJIO: Yeah. And, Steve, also you will notice that in our RFA, we try not to number our priorities, because when you start putting them one, two, three, four, five, people think that number one means that it's the most important thing.

And we don't want to go there. They are equally important to us. And like Steve was

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

saying, you never know where you will get the brightest idea to solve an issue that you have.

So, we like that long list. It will only increase the pool of applications that you will get.

So, -- so, our RFA that's what we need. That long list. But don't prioritize them. Don't say this is the top one or the bottom one. They are all important.

MR. ELA: Well you can rest assured, we have thought we should prioritize them and run into the same problem that we really couldn't. But they are all important and there is really no one priority. And you know, especially if you get between crops and handling and livestock.

So I'm glad to hear that feedback that we shouldn't try and go down that road, because we haven't been able to. But I guess, you know, we could -- we could work on, quote unquote, making the Cliff Note version for legislators with maybe higher, higher-level research priorities that maybe aren't quite so specific, and then give you

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

all the longer list.

I am pleased to hear that we haven't -- haven't overwhelmed you with the length of the list yet, but you probably shouldn't give us too much rope, so.

Well we're going to move on, but thank you so much for taking the time to come present to us. It really does give us perspective. And like I said, it makes me feel like that work is so much more valuable, that that direct link is very much appreciated, so.

And we, you know, we appreciate our stakeholders giving us comment. We have a discussion document this meeting and they say add this, take away this. And you know, so we feel like we're not just representing the Board but actually, you know, a good part of the organic community. So thank you for supporting us. And like I said, thank you for taking the time.

DR. SMITH: Thank you for the opportunity to be here, appreciate it.

DR. NGOUAJIO: Thank you. And thanks

to Jenny and Michelle for keeping us in the loop.

MR. ELA: We hope to continue the partnership.

MS. ARSENAULT: Thank you to the three of --

MR. ELA: Yup.

MS. ARSENAULT: She was off-camera, so I just didn't want to leave her out.

MR. ELA: Yeah. Well with that we're going to move on to the first subcommittee report.

Livestock I guess either drew the long straw or the short straw to go first, up to your interpretation. And as always I try, you know, especially on virtual meetings, I try and dress the part. I don't have a livestock shirt, we'll see if the ah, come on chicken. I'll turn off my virtual video here a sec so we get a good -- there.

Okay, so I'll have the chicken for the livestock meeting here. So Kim, would you like to ahead and take over Livestock and share?

MS. HUSEMAN: Yes, sure, Steve. If I would have known or considered, I would have tried

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to one-up you. But I don't think I could have underneath time pressures.

So thank you all, please bear with me, this is the first time that I am chairing a subcommittee. So I will -- we'll go ahead and we'll get started. We have a few of our sunset review items. I think to begin we have calcium borogluconate first up, is that --

MR. ELA: Kim, can I --

MS. HUSEMAN: Oh, I'm sorry.

MR. ELA: Can I just jump in?

MS. HUSEMAN: Yes.

MR. ELA: And I neglected, to our stakeholders, we are going to slightly change the order on these. We're going to start with calcium borogluconate and then go to calcium propionate, and then back to activated charcoal.

One of our new members is the lead on activated charcoal, and rather than throwing Brian into the lion's den to be the first presenter of the whole meeting as a new member, we thought we'd at least give him two sunset -- two sunsets as

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

examples before we throw him into it.

So we will come back to activated charcoal right after calcium propionate. So Kim, go ahead.

MS. HUSEMAN: Yes, thank you, Steve.

So first, switching it from third over to first, we will start with calcium borogluconate, which is item 205.603, synthetic substances allowed for use in organic livestock production as a disinfectant, sanitizer, and medical treatments as applicable. And that would be Mindee Jeffery.

MS. JEFFERY: Thank you. Calcium borogluconate is a really interesting substance in its history as it progressed through consideration on the National List. So it was fun doing some sleuthing there, and one of our questions was seeking clarity from the FDA on its classification of calcium borogluconate.

And I am so grateful that we have Jared, our National List manager. Jared, do you have some information for us on that regard?

MR. CLARK: I do. Let me just get on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

video here. So pull this up.

So digging back into the final rule when it was added, I think this paragraph from the preamble covers it pretty well. And if you want to look at this yourself, you can go to federalregister.gov and type in that ID up there, 83 FR 66559, that's the volume and page number in the Federal Register for this rule.

But the -- when this was added, they acknowledged that there was some -- that the discrepancy between the FDA and the USDA National Organic Program was brought up, and it was addressed at that time when it was added to the National List.

MS. JEFFERY: Great, thank you for that clarity, Jared.

MR. CLARK: You are welcome.

MS. JEFFERY: So some other great feedback from stakeholders on our questions. That prevention is our best tool, and avoiding circumstances that require the use of the substance are practiced by many stakeholders. And seems as

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

though the requirement for use is prevented often.

Organic dairies -- one stakeholder reflected that organic dairies can face this issue more frequently because they tend to keep cows longer, which I thought was really cool. The -- a couple of certifiers reflected that the listing is redundant, but they also -- because it is listed under electrolytes, and there's a lot of information in the electrolyte TR about this substance too, the 2015 electrolyte TR.

And the certifiers reflected that the listing could be viewed as redundant, but it doesn't cause different decision-making. One producer reflected that continuing to list it on the National List may eliminate confusion or varied interpretations.

It is -- one producer reflected that it's common and inexpensive and remains the traditional treatment for milk fever in ruminants.

Another producer group reflected that it's really -- it's necessary to have a variety of treatments for this because they perform differently. And

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

two vets commented that this substance is extremely essential in livestock treatment.

That's what I have, Kim, if there are any questions.

MR. ELA: That's great. Thanks, Mindee, and I'll take over. Questions, are there any questions from the Board? I do not see any, and so unless somebody wants to note that I didn't see them, we will move on to the next one.

So thanks, Mindee, back to you, Kim.

MS. HUSEMAN: Thank you, Steve. So the next sunset review item that we have is going to be calcium propionate. And so let's see here.

Calcium propionate, which is 205.603, for treatment of milk fever only. And Sue Baird is up on that.

MS. BAIRD: Hi, yes, calcium propionate is produced by reacting propionic acid with an aqueous solution of calcium hydroxide. It also is used for treatment of milk fever, which is the result of metabolic stress occurring on or near giving birth.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And so when lactation starts, they could treat milk fever by intravenous administrations of electrolytes. We have the same types of questions. Do we think that there's a listing for calcium propionate necessary because of the electrolytes, as listed in 205.603 (a) (11), electrolytes without antibiotics?

The comments that were heard was that farmers absolutely really do need calcium propionate and other electrolytes. When a cow goes down with milk fever, it's past time for giving boluses or paste or anything else. If a cow is down with milk fever, they absolutely need to give an intravenous injection of calcium propionate or calcium borogluconate.

So that's basically what we heard, was that it's important. Internationally calcium propionate is either listed directly, mainly normally it's listed as a -- as part of the -- normally it's listed as a method to prevent suffering of an animal. Not listed directly.

Either as a medical when there's no

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

alternative permitted substances, treatments, or just in general as let's don't let that cow suffer.

So internationally it's an accepted product. Nationally comments seems like it's something that's absolutely necessary.

MR. ELA: All right, thanks, Sue. Are there questions from the Board? I am not seeing any, so back to you, Kim.

MS. HUSEMAN: Great, thank you, Steve. So we didn't give Brian a whole lot of time, however, we're going to quick back up to the top of our list and talk about activated charcoal. Activated charcoal, number 205.603, must be from vegetative sources.

Brian, this is your material.

MR. CALDWELL: All right, well thanks, Kim. Yeah, I'm glad you gave me a few before I got thrown to the lions, I appreciate that.

Basically activated charcoal is charcoal, but it's considered a synthetic because of the activation process. And it's also, I didn't see much about it, but it must be purified in some

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

way and pulverized and everything to be used. But it is considered synthetic, even though it's based on a very -- charcoal, which is a natural, natural thing.

In terms of the written comments on activated charcoal, there were 10 written comments in favor of it, none opposed. And then a few more that described it and its use that didn't seem to endorse it one way or another.

But the one thing that was a little bit confusing to me was that several of the certifiers noted that a really small percentage of their producers actually listed it on their farm plans, organic farm plans.

And I don't know exactly how this is handled with livestock, organic livestock, but it seems like if it was actually being used for emergency situations, that it would be listed. But I don't really understand that, so maybe other people will have comments on that.

But I didn't find any activated charcoal products on the OMRI list, which is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

something that a crop producer like myself would look at. Even if we got in a jam and for some reason needed a new material that's on the list, we would be pretty sure that our certifier would approve it.

But anyways so the question in my mind is how critical is -- how necessary is activated charcoal for livestock production? And the comments that were in favor of it all seemed to indicate that it was quite necessary. And Hugh Karreman, who I know is a vet, maybe I shouldn't mention his name specifically, but a vet specifically did say this is a really important tool.

So that's -- that's pretty much it. In terms of alternatives, several alternatives were mentioned, but nothing was -- nothing came out as a strong alternative. They were all sort of offhand. So I guess that's it.

Oh, maybe I should point out too that the emergency situation that requires activated charcoal is basically if an animal gets poisoned

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and -- or eats like moldy feed or something like that, and you want to take toxins out of its system.

The, you know, feeding a lot of activated charcoal will absorb those toxins out and prevent the animal from getting, you know, sick or dying. So that's basically the story.

MR. ELA: Brian, congratulations on your first sunset drill. We -- Kyla has a question for you. Or discussion. These don't have to all be questions, they can also be just thoughts, perspectives, a chance -- it's the Board's chance to discuss thoughts on this, on all these sunsets. So go ahead, Kyla.

MS. SMITH: Yeah, mine's not a question, it's just a comment to maybe hopefully answer Brian. So just be careful when you're reading the public comments. I know that PCO in their written comment -- or for certifiers I would say when we're quantifying numbers, PCO doesn't have a way currently in our current database to tell the number of clients that are using this.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So when we list seven, that's the number of products that we've reviewed that has this ingredient in it. And so it could be that hundreds of certified operations are using those seven products. So there -- look for words like seven inputs or you know, sometimes it will be clarified as like we've reviewed X number of products that so many producers are using.

But I will say that depending on certifiers' databases, sometimes it's really hard to pull out the number of operations that are actually using a particular product.

MR. CALDWELL: Yeah, thanks, Kyla. The ones that I was thinking of actually did mention, you know, that it was that number of operations within that they were certifying, mentioned that on their organic farm plan. So you know, I guess the rest of them don't, you know, don't have it on their plan.

So yeah, that's a great, great point. And it's good for me to know that there are probably seven, at least seven products that exist

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that are approved for this that have gone through some kind of a review process that, again, I couldn't find them on OMRI, so.

MR. ELA: Are there other questions or comments I should say? And Brian, I would also just chime in. It's a perpetual problem we all face on the Board is on these sunsets, you know, we often end up with the problem of people not commenting on them.

And then it's very difficult to tell if they're not being used and should be delisted for that reason, or if people just didn't send in comments. And we sometimes, you know, if we know that they're being used or you know, have good reason to think they're being used, we may use our discretion as Board members to say we have common knowledge of this.

And on some of the materials we, you know, we'll say if there were no positive comments, you know, when we go back to subcommittee and do our write-ups taking into account these comments, you know, there may be a split subcommittee vote

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

for -- some saying, you know, we should delist this, some saying we shouldn't.

And that's always a good signal that stakeholders as well that maybe it would be a good time to chime in that this is a useful product.

But it's a difficult one when we don't get a lot of comments on use and why we should keep it listed, so. So we always struggle with that.

All right, if there are no ---

MR. CALDWELL: Yeah, thanks, just last quick thing that I probably should have added, and that is that yeah, there were no negative comments about it, against it and 10 specifically in favor.

And a few did mention concerns like that it shouldn't be fed routinely, but I don't think the NOP guidelines allow for that, so. Yeah, great, thank you.

MR. ELA: Thanks, Brian, good job. Kim, back to you.

MS. HUSEMAN: Great, thank you, Brian. Well done on your first sunset.

We'll be moving on to chlorine

materials, listed as 205.603(a)(10). Chlorine materials disinfecting and sanitizing facilities and equipment, residual chlorine levels in the water shall not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act.

This includes calcium hypochlorite, chlorine dioxide, sodium hypochlorite. Think I got all of those -- oh, and hypochlorous acid.

Nate Powell-Palm, this is your assistance.

MR. POWELL-PALM: Yes, thank you. So it's a -- chlorine materials have been on the mind of the NOSB for many years as an integral disinfectant and sanitizer. There were quite a few comments, mostly I would say more oriented towards crop and handling than livestock.

But of the livestock commenters, there were some really great and I thought really well-considered comments about the role that chlorine materials have, especially on dairies.

And so the more dairy-oriented commenters highlighted that there are several materials that can be used to sanitize dairy equipment and milk contact surfaces, but keeping the microbes guessing, food-borne pathogens guessing.

And so making sure that we have several different materials, including chlorine, that can make it so that we have a robust and rotating set of sanitizers to avoid resistance buildup. I thought that was a really well-considered comment.

There were other comments that it's one of the more economical of the sanitizers out there, and a lot of systems have built to ultimately be well-designed for chlorine use.

Of course, some of the questions were informed by -- some of the questions I had and the Committee came up with were looking at our sanitizer panel that we had last fall and trying to think of, when we think about this ecosystem and sanitizers, are there things that we should be looking at and other ways we should be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

considering the integration of these tools towards trying to make a system that requires less toxic, less acute sanitizers and build in more, a more holistic system that ultimately leads to the suppression of food-borne pathogens.

But overall, the comments were resoundingly united that this is a really important and effective tool for livestock producers. Any questions? Asa. Or I'm sorry, Steve's supposed to do this part. I will --

MR. ELA: No, that's fine, go ahead, you've got it.

MR. BRADMAN: Just a comment. I mean, I think this issue comes up with all of the listings for chlorine materials that are coming up next fall. I've had a number of discussions with safety people and, you know, I kind of, the feeling is -- my sense if the feeling is people don't want to use them, they would rather use something less toxic. But that they're essential given the mix of materials available.

And you know, the notion also of kind

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of encouraging a microbial ecology that, you know, fosters less pathogenic organisms versus more pathogenic is extremely difficult to monitor and actually implement. And so there's -- they didn't see a practical way to implement anything like that.

But again, you know, the notion of having a rotation and trying to use chlorine as a last resort seems to be the goal. But the combination of materials doesn't seem out there to accomplish that.

MR. POWELL-PALM: And that I think was well-reflected in several of the more dairy-oriented comments, what you just said.

That there's the goal, but there's also the very practical nature of some pretty extreme, you know, food-borne pathogens that would be present on dairy, and to try to figure out how we don't become an industry that's known with food safety problems, how we keep ourselves at the top of our game with food safety.

Thank you for that.

MR. ELA: Looks like Amy.

MS. BRUCH: Thank you, Steve. Nate, I just had a quick question. That was a comment, actually, by OMRI and just, you know, clarifying, you know, some of the sanitizers that are used for milking equipment.

It looks like, you know, sometimes they're reviewing those under more of a handling-type mentality. Can you just provide a little bit of clarification with the crossover on some of these materials and when we see them in other subcommittees?

MR. POWELL-PALM: Yeah, so in every dairy there is a very small but very important amount of handling that goes on because you're ultimately moving to a -- from a, you know, collecting milk from the cows to a bulk tank.

And so those food contact surfaces which would be bulk tanks, milkers, those surfaces that actually come in contact with the milk, those are going to be on farm, so they fall under livestock.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Dairies aren't needing -- they don't need to be certified as handlers. But you know, if we go, say if you've gone to a creamery, a lot of the same food contact surfaces exist. You know, we saw tankers, we saw trucks going from dairies to creameries. But those are -- those are formal handlers.

And so that's why there's that crossover if there's a little bit of handling on the dairy as far as getting it into a storage capacity so it can be shipped out. But mostly dairy falls under that livestock probably. Does that answer your question?

MS. BRUCH: Yeah, thank you, Nate.

MR. POWELL-PALM: Okay, yeah.

MR. ELA: Well, Wood is next.

MR. TURNER: Thanks, Nate, it's more of a comment than it is a question, but I'd love to hear your thoughts on it. I just want to pivot off of what Asa was saying, because obviously we're looking at chlorine materials in three different committees right now, your committee, well this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

committee, handling and crops.

And you know, it's -- it is clear that we're coming --we keep cycling on this idea that, you know, there's not a lot of options and there's a lot of, you know, there's a need to have rotations for sanitizers and coming off of the sanitizer panel and figuring out what to do next.

And it occurs to me that a little bit coming off the NEPA presentation that we need to be a little more forceful in some ways in the research priorities about sort of what we're really looking for here on chlorine materials and sanitizers in general.

And I know -- I know this is just lingering issue that's sitting out there because we have that panel in the fall and what we do next with it. But I just would say, you know, right now in the discussion document on research priorities, we're really -- it's really addressing this issue from a handling perspective.

And I'm just arguing to myself a little bit, Nate, that we should also include a livestock

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and crops perspective on this as well. Because I think this is a -- I think this is a higher priority than I think we're realizing in some ways, to try to figure out what these other toolkit options might be.

And you know, I get a little nervous whenever we say it's the cheapest option so we go to have it in the toolkit. I know you didn't say -- those weren't exactly your words, but that's a bit of a concern. And so I just want to flag that issue.

MR. POWELL-PALM: Yeah, no thank you.

I don't know if I'd have much to answer to your clear articulation of that issue. I realize that it's something that is -- it's going to take a whole community lift because it is such a really important control point for producers, especially farms and livestock to make sure that they have safe products that they're sending from their farms.

And it's also, you know, for a dairy, it's kind of one of many processes and procedures

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

that they're doing to get that milk from ultimately the grass through a cow to a bulk tank. So I think that -- I mean as a livestock person myself and an inspector of a lot of livestock people, I completely hear you.

And I think that a path forward -- I don't think that in the comments I read anything that was not eager to, you know, identify every tool we can, while making sure we don't do anything hastily enough that it compromises food safety.

MR. ELA: Kyla has a question/comment.

MS. SMITH: More of a comment. And sort of building off of what Wood was saying, I don't know, sometimes within the National List items or certification in general, I feel like we try to be consistent, right. And I think that this is an area where there's a lot of nuances to how these materials are used, especially within livestock with having to incorporate other regulatory requirements.

So I just don't want us to like lose sight of that when we're trying make things

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

consistent, that there's like other factors at play.

MR. POWELL-PALM: For sure, yeah. I think that was also reflected in the comments by how many comments there were for handling and crops. I would say there's a lot less specifically aimed at livestock. So I think that nuance kind of shines there.

MR. ELA: Yeah, I'll just jump in with a comment. I'll probably say the same thing for crops and handling, but you know, our community continues to ask us for more prioritization and decisionmaking on this, and yet this is one of those topics where OFRA collides head-on with FSMA, and it's kind of an ugly fight.

But I, you know, when Joelle came on the Board with my group and then unfortunately had to resign, but her, gosh, her comment on the -- that there was -- you know, every specific use has a specific use for those various sanitizers. And I'd kind of hoped that there would be a more overarching view that, you know, you could take

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

some of these off or you could add some of these for emergency use.

And you know, her main profession was food safety, and I just took to heart so much her comment that everything is nuanced and you can't really make an overarching construct that says, you know, here's the priority list and here's, you know, what should and shouldn't be used.

It's just so variable and so ever-changing. So I think Asa has always said it kind of drives us nuts that we have all these things that normally I think we wouldn't approve, but yet we are really compelled to approve just based on what you said, Nate, we have to apply with -- comply with FSMA, we have to comply with these food safety things.

And the last thing we want is a food safety issue from organic food. So I think it's a real tension and a real dilemma, but it's -- I don't know that there's going to be a way to solve it, but except just to continue the conversation.

MR. POWELL-PALM: Yes, thank you for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that.

MR. ELA: And I do want to stress to the Board I probably have misspoken a little bit.

This is a -- I shouldn't say questions, comments.

It really is a Board discussion time, so don't hold back if you don't have a question or something.

This is our brainstorming session, especially because taking these comments or stakeholder comments, the Board perspectives is what the lead is going to take back to write the subcommittee discussion on the sunsets that we will then vote on in the fall. So I just want to make it clear it's a little different than some of our other sessions.

I don't see any other questions, so Kim, we'll jump it back to you for the next sunset.

MS. HUSEMAN: Okay, thank you. Make sure I -- okay, thanks, Michelle, I wanted to make sure that I had lumped hypochlorous acid into the chlorine materials, and our books did have it listed separately. So I'm glad I put that all

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

together as combined.

So then that means we move to kaolin pectin. And kaolin pectin is listed under 60 -- I'm sorry, 205.603(a)(17), use -- for use as an adsorbent antidiarrheal and gut protectant. And that is actually one of my materials.

So I think in the livestock industry, having -- this is going to maybe be an overused term, but the tools in the toolbox in order to correct different livestock ailments. Kaolin pectin is definitely one that is used in those particular situations. It's not used as a preventative or all the time, but just in moments when you need to be able to prevent -- or to correct scours and have an alternative to activated charcoal.

There's a little over a dozen comments regarding kaolin pectin. Overall, the sentiment from stakeholders in the public comments was to re-list kaolin pectin. A few comments to the review or to the comments.

Pectin itself can be synthetic or

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

non-synthetic. And if only the non-synthetic were to be allowed, then it would not need to be on the National List. However, in saying such -- being the way that it is written and then it is on the National List.

Furthermore, just the comparison of the contrasting between activated charcoal and pectin, kaolin pectin, you know, activated charcoal is an absorbent organic carbon that can draw the toxins out, kind of whisk them away from the digestive tract. Whereas kaolin pectin just more or less coats the stomach and gut lining to help dry up that excessive fluid.

So being able to have I think both options is very important from the livestock industry. Additionally, not all producers may be familiar with charcoal. Or also, depending on where you live may not have the availability of one versus the other.

Other comments, again, they were supportive of re-listing, but there were a few comments around having synthetic versus

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

non-synthetic pectin.

That pretty much sums up the both written and then a couple of the oral comments. Are there questions, comments?

MR. ELA: You're getting off the hook, Kim. I'm not seeing anything, so -- oh, wait, Amy jumps in here at the end. Go ahead, Amy.

MS. BRUCH: Yeah, thank you, Steve. Kim, just a quick question for you. You mentioned that there are synthetic and also non-synthetic varieties of this kaolin pectin. Is there a limitation with availability on the non -- or on the synthetic or the non-synthetic route --

MS. HUSEMAN: I'm glad you brought that up. I'm hoping we have stakeholders that are listening to this component to help to draw more conversation. That's not something I really had even looked too intently at until I started researching some of our comments that were given. So I really don't have the answer to that one today.

Kyla, do you --- I mean not to put you

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

on the spot, but anything from your perspective that you know of?

MS. SMITH: No, but I am not recalling really seeing that when I was reading through the comments myself, so --

MS. HUSEMAN: It was more, I would say not really boilerplate, but a few entities listed the exact same language. So I can, you know, we can look at that as we proceed forward too.

I do not see where there was any kind of limit or the, I don't know if it's brand-recognized as far as which is synthetic and non-synthetic and how -- how that's even delineated from a allowable perspective. But very good question, Amy.

MS. BRUCH: All right, thanks, Kim.

MR. ELA: Brian also has a question for you, Kim.

MR. CALDWELL: Yeah, thanks, Steve. Kim, I'm just trying to sort of differentiate between the activated charcoal and the kaolin pectin.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And what I would sort of gather is that the activated charcoal is for really acute cases of poisoning, whereas the kaolin pectin would be for scours and maybe you know, just kind of mild upsets. It's probably a gentler product. Is that a fair way to differentiate between those two?

MS. HUSEMAN: Not a veterinarian, and I know enough about animal nutrition to be not even close, slightly dangerous. I think having multiple tools in the toolbox to assess the situation and having the allowance to utilize one versus the other given the symptoms is very important to the livestock industry.

MR. CALDWELL: Great, that makes sense. Yeah, I don't want to act like I'm a vet either, because I certainly am not, I'm not even close, so.

MS. HUSEMAN: It was clear in the comments that activated charcoal did have more to do with toxicity from moldy feeding perspectives. Sue, you might have some comment here too. Whereas I mean, antidiarrheal could be a slew of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

different aspects that created the onset.

MR. CALDWELL: Great, thanks.

MR. ELA: Looks like we've got Kyla then Nate.

MS. SMITH: Yes, so Kim, I don't know -- I don't know if the comment that you were sort of thinking about in regards to the non-synthetic was the one that was talking about kaolin pectin containing amidated forms of pectin versus non-amidated and the use of non-organic crops used to produce the pectin.

So that was -- I'm not sure if that was the comment that you were sort of referring to.

That's the only one that I really saw that was like digging into that.

MS. HUSEMAN: So -- and that was -- so Beyond Pesticide --

MS. SMITH: Yeah.

MS. HUSEMAN: I think uses that verbiage, and then NOC had verbiage as well around pectin can be synthetic or non-synthetic and would not need to be on the National List if only the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

non-synthetic were allowed. So I think that's the origin of the pectin.

MS. SMITH: And then to answer, or to maybe answer Brian's question, again in Dr. Karreman's comments, he was talking about some of the uses, and he was saying that not all producers may be familiar with charcoal in place of kaolin pectin. And also I think Kim covered this, availability may play a role. So anyway, just wanted to comment on that as well.

MR. ELA: Thanks, Kyla. Nate has a question or a comment.

MR. POWELL-PALM: Yeah, it was just sort of a, yeah, a bit of a comment. Just coming from a cultural practice, Kim, I know that ranchers in my community have always sort of kept activated charcoal around for sort of acute grain toxicity poisoning.

So if we got into, you know, the vomitoxin or something in some grain hay, versus kaolin pectin being more oriented towards sort of routine, mild microbial infections like in calves.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So I think -- I think it was Brian who said, you know, that difference between acute, you know, poisoning events versus more general just fighting off microbial infections.

MS. HUSEMAN: Yeah, I agree. I think that the underlying sentiment is having the tools in the toolbox to be able to assess the situation and determine the origin of, you know, the cause and then be able to treat accordingly.

All right, Steve, I think it's back to you, and you are on mute.

MR. ELA: Thanks. I just -- I'm taking lessons from Sue lately. But thanks, Sue, for being a mentor.

Kim, great discussion, and we will just -- actually back to you, so --

MS. HUSEMAN: Okay. Well speaking of Sue, up next we have mineral oil. And mineral oil is listed as 205.603(a)(20), for treatment of intestinal compaction. Prohibited for use as a dust suppressant.

Sue, I'm going to turn it over to you.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. BAIRD: Thanks, and thanks, Steve, I do need accolades for some things.

Mineral oil is used for impactions normally in the ruminant's third stomach. This happens many times in pregnant cows during cold winter months when the cattle consumes less water and is fed lower quality roughage. Mineral oil is applied as an oral drench at a rate of one to two gallons of -- every 12 hours until the mineral oil action lubricates that impaction and it passes on through.

We asked the question -- oh, and by the way, we did ask for a limited TR and we received that in March of this year. So that gave us a lot of insight.

We asked a question of our audience, our public, and asked what their differences of interpretation amongst certifying agents on when and how mineral oil could be used. And we did get several comments on that particular question.

The certifying agents material working group discussed their differences and said there

was confusion as to whether this material is permitted orally or rectally. NOC also said that they received feedback that producers and veterinarians may not even know that they're allowed to use it. And others have been using it for a long time without it ever being put on the National List.

Overall -- oh, the TR listed several different methods for that could be used in place of the mineral oil, and yet the conclusion was that mineral oil still seems to be the best method for this kind of emergency situation.

I always appreciate comments from public, and especially the veterinarians who have a lot of scientific knowledge of why and when materials should be used, and we did get several of those.

And of course not missing our favorite vet who used to be on NOSB, but everyone knows who he is. But he said that it was indispensable to him as a practitioner to quickly reverse digestive upsets.

All the comments that we received on whether it should be allowed were positive. There were no negative comments on whether it should be removed. We did get a comment from another group, Beyond Pesticides, that said there was difficulties of course in -- on some interpretation or mis-correlation between FDA and the NOSB, and that we should get clarification maybe by adding a specific pass number to the mineral oil that would be used for this purpose. And yet we know and they know that we can't address annotations at this point.

Allowed by our international family on all -- on all the countries. Again, not specifically addressed, but by we're interpreting their annotations that we can't allow animal suffering. And this would be certainly one way that would cause animal suffering. When this stomach gets impacted, it causes intense pain for that cow.

Any questions?

MR. ELA: All right, are there

questions? Questions, comments, discussion?
All right, Kyla.

MS. SMITH: Sorry, yeah, I did notice that even within the comments there were some inconsistencies among certifiers about whether or not there was inconsistencies. So you know.

MS. BAIRD: I would agree. I've seen it as an inspector, yeah.

MS. SMITH: Yeah. So I did try to seek clarification on that, and from my understanding from certifiers that were on the ACA, the CARES working group, that most -- I'll say most because I don't want to include anybody that shouldn't be in there -- are allowing both orally and rectally.

However, I do believe that it was stated within that working group that it would be more clear if that was clearly annotated in some way or explicitly noted some way in the listing. But my understanding is that in the actual review process, that certifiers are pretty aligned.

MS. BAIRD: I think -- I think most

certifiers and most of the public would want us to err, when we have a cow that's down and in intense suffering, we want to be able to alleviate that suffering.

MR. ELA: Nate has a question. Nate, are you on mute?

MR. POWELL-PALM: Sorry, can you hear me, Steve?

MR. ELA: Yeah, now we can.

MR. POWELL-PALM: Okay, apologize about that. I was just going to throw a quick comment to Sue that I couldn't agree more with your last statement. I think that my foray and journey into organics was as a young cattleman.

And so when I was nine and my 4-H steer had a compaction issue and mineral oil was deployed, I don't know if I'd be here and farming today if that animal had died and I had been scarred that early on, so.

MS. BAIRD: Right.

MR. POWELL-PALM: I think that is a good point, so I thank you for that.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. BAIRD: There were some comments or suggestions that perhaps we could use other types of oil. And it was clarified both in the TR and then I think Hugh made that comment as well is that other types of oil actually break down and does not alleviate the obstruction like mineral oil, which does not break down in the gut.

So I think that's important point for us to remember, other oils are not effective. Mineral oil is effective.

MR. ELA: Anything else from anybody?
Asa.

MR. BRADMAN: I just want to highlight that the other place where we have mineral oils being used for horticultural oils used in crops.

And just, you know, two places where we have petroleum products used in organic directly, going into the environment and going into soils.

And this is one of the challenges here. In both cases I think these materials are important, but perhaps just one of the challenges to think about when we think about other

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

petroleum-derived materials.

MS. BAIRD: And to make that even more unclear, we have it listed twice for livestock, the one that we're reviewing today, which is 603.820. But it's also approved in 603(b)(7). So you know.

MR. ELA: Yeah, continuous improvement, right?

MS. BAIRD: Exactly.

MR. ELA: And Sue, I want to say we give you accolades for many things, so.

MS. BAIRD: I know, I just had to say that, Steve, thank you. Because you're right, I always forget to unmute.

MR. ELA: Well I have the same problem, so nothing intended on this side.

But Kim, we'll send it back to you.

MS. HUSEMAN: I think it just helps to keep all of us on our toes, who could be first tell somebody else that you're on mute. Maybe that should be, Michelle, next time we should have t-shirts made.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Okay, going forward our next material is nutritive supplements. Nutritive supplements is 205.603(a)(21), injectable supplements of trace minerals per paragraph (d)(2) of this section, vitamins per paragraph (d)(3), and electrolytes per paragraph (a)(11), with excipients per paragraph (f), in accordance with FDA and restricted to use by or on the order of the a licensed veterinarian.

And that is Nate Powell-Palm.

MR. POWELL-PALM: Yes, it is. And the themes continue as we talk about tools for farmers.

And you know, dovetailing right into Sue, what do we do to help acutely sick animals? I think that, you know, activated charcoal, mineral oil, nutritive supplements.

It means that we have, you know, more tools in the toolbox to actually be able to provide aid to animals in critical, acute periods of illness.

I think one of the great comments that we received, there was a lot of really impactful

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

comments. I, as an inspector, have observed the, ultimately the power of injectable electrolytes, other injectable nutritive supplements.

And the comment said the whole reason for the injectable electrolyte is for sick animals to be treated and rehydrated and boosted to fortify their immune system in the face of an infection or other malady. If this category were removed, we'd go back to the Dark Ages.

And I think the balance that organic livestock folks have to keep -- to keep such complex beings as livestock, especially cows, healthy, alive, and well is a challenge. And it's a, it's, you know, when you see a healthy herd of cows, it is a real representation of incredible husbandry.

Cows don't stay healthy easily or without a lot of consideration and due diligence.

And so this -- the comments were resoundingly consistent that nutritive supplements are widely used and very necessary.

And just to kind of close up the toolbox

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

example, that they're something that would be sorely missed and really put farmers in a difficult position to keep those animals healthy and ultimately keep the welfare of animals at the forefront in organics.

Any questions?

MR. ELA: I don't see any, Nate, so thank you. And I just really want to say thank you to the ASL interpreters. We get into this kind of jargon and I enjoy watching you as you struggle with some of these things. So thank you for bearing with us on this, I'm very impressed.

But Kim, we'll turn it back to you.

MS. HUSEMAN: Thank you, Steve. Next we have propylene glycol under 205.603(a)(27), propylene glycol only for treatment of ketosis in ruminants. And that is going to be Mindee please.

MS. JEFFERY: Thank you, Kim. An updated TR has arrived and is posted for everyone's perusal between now and the fall meeting.

One group noted that the derivation from petrochemical feedstocks in propylene glycol

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

is also part of an exception we're making with this substance. Experts, the same stakeholder referred to experts saying that prevention with high-energy diets contributes to the not needing to treat ketosis because it doesn't arise.

There weren't a lot of comments on this subject, but one of note. Before this, farmers were administering bottles of dextrose intravenous, which is not only a subpar treatment for the disease, it's also dangerous for both the farmer and the cow.

Intravenous dextrose causes blood sugar spikes, preventing the cow from regulating her own blood sugar levels, and it also causes abscesses under the skin when administered improperly.

Cows can be aggressive when ketotic, making IV administration difficult and dangerous.

Propylene glycol is the easiest route to successfully rehabilitating ruminants who suffer from ketosis. That's all a quote from a stakeholder.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Another producer mentioned oral apple cider vinegar and molasses as extremely effective treatments. They also commented that this substance is available in farm stores and veterinarian clinics and is considered very effective.

Dairy producers reflected that they support the continued listing of propylene glycol. And a large animal vet commented that propylene glycol is the gold standard for treatment of ketosis.

MR. ELA: All right, thanks, Mindee, are there questions, comments, discussion? I am not seeing any, so we'll send it back to you, Kim. Thanks, Mindee.

MS. HUSEMAN: Thanks, let's see here. Okay, so next we have two left. The next one is sodium chloride, acidified, reference 205.603(a)(28). Sodium chloride, acidified, allowed for use on organic livestock as a teat dip treatment only. And 205.603(b)(9), reiterating the same, allowed for use on organic livestock as

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a teat dip treatment only.

I would say that there were few comments written and none that were presented orally. There are -- there are certified -- there are organizations that do list this in their OSP.

I think from a, you know, all of that that did list, that's less than five, said that they did support the re-listing to use sodium chloride, acidified, as a teat dip. Do you feel that it is very important in the dairy industry?

I think from a house cleaning perspective, it seems that it was listed in both (a) and (b) as a overscope, or just to put it all underneath one umbrella, cover all the bases. But I think as a work agenda item, we could look at cleaning this up and just having it listed once versus twice.

And we did ask stakeholders for any alternatives, and you know, if there are changes in the availability of iodine, would that reduce the need? Those questions were not answered in the public comment that I saw.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So with that being said, that's hopefully we'll get -- we'll generate some more comments before the fall. And that's really all I have for this item. Any questions?

MR. ELA: Kyla has a question for you, Kim, or a comment.

MS. SMITH: Just a comment. I didn't take note so I'll have to do a quick search here, but I did make a note that there was one comment that said that iodine availability will not reduce the need for ACS, but I don't remember what comment that was. So I'll try to find it.

MS. HUSEMAN: I might have missed that. If you did, can help to reference for me?

MS. SMITH: You bet.

MS. HUSEMAN: I wonder, I might have -- maybe the way that I was searching for those two, but I did not grab that. So yes, thank you for making that comment.

MR. ELA: Asa has a comment also.

MR. BRADMAN: I just have a question in the review. You know, Beyond Pesticides

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

submitted very thoughtful comments on chlorine compounds and also ASC, and I was going to talk about some of this tomorrow when we get to handling chlorine materials versus livestock today.

But I'm curious what your response to those comments are? And, you know, maybe what discussion in the Subcommittee going forward about chlorine alternatives. And, you know, I also see of course in the comments that there's a number of folks that are very supportive of this material, and think it's essential. But I'm just curious what your response to those comments are?

MS. HUSEMAN: To be honest with you Asa, I'm not exactly sure how to answer you.

MR. BRADMAN: Okay, which is okay. I mean this is, these are complex issues and there's, you know, as we kind of said earlier, among the food safety people I've talked to, you know, again chlorine materials seem essential. But, you know, how do we look for alternatives?

And maybe this is one where there's not, or, you know, it's hard to think about, but -- I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

don't know if anyone else wants to chime on. Or maybe these are things we can also discuss as we lead up to the Sunset voting on the law.

MS. HUSEMAN: I, yes, I honestly hadn't looked at the application here in consideration with some of the other chlorine materials. I looked at them very very independently, but I see the link that we're making. I just looked at this more narrow scoped.

MR. BRADMAN: Sure, yes, yes, and I could have brought this up moments ago, and I certainly will bring it up tomorrow when we talk about chlorine materials in the context of handling.

MS. HUSEMAN: More valid, okay.

MR. ELA: Do any other Board Members want to chime in on that question? It doesn't just have to be Kim commenting on this. We don't need to put the leads completely --

MR. BRADMAN: Yes, I didn't mean to say, you, individually and single you out, but rather, how many you all --

(Simultaneous speaking.)

MS. HUSEMAN: I think I used the --

MR. POWELL-PALM: Could you repeat the question one more time, Asa?

MS. HUSEMAN: -- for sure.

MR. BRADMAN: Well, just that, you know, I think there's some really thoughtful comments about chlorine materials in the written public comments. And, you know, we talk about foreign materials is the challenge.

And again, I'll bring this up tomorrow with handling, but ASC is kind of a special case.

It's not a handling issue. So I'm -- it'll be discussed tomorrow and there's, you know, are there alternatives?

And, you know, perhaps this a very specific type of need, and not, you know, doesn't have the broad environmental, occupational implications of other chlorine materials. But this is a kind of special case foreign material that we only discussed today.

And I'm just curious about, you know,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

your response to those comments and how do we think about it going forward?

MR. POWELL-PALM: Yes, I think, one thing I think about in the application of livestock, especially teat dips, say for mostly dairy cattle, is that we -- dairies are so different. Each, you know, you could have a small dairy that's just from a, you know, sort of microbiome context, is wickedly different. But they're all ultimately needing to make a safe food product.

So, I think the issue you run into with livestock is you have a really, really, you know, acute threat of food safety problems with milk.

And how do you have, you know, as big of a toolbox as possible to make it so that you can have this same federal rule apply to all dairies equally?

I think that's just sort of in the livestock context, I couldn't speak to handling.

And it's more nuance in handling, I think. I think that is one issue when we're looking at addressing how do we find alternatives? It's how

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

do you find alternatives, but also alternatives that work for this really crazy broad spectrum, with every state having some amount of dairy in it.

And I know that doesn't answer your question. I just wanted to sort of throw that out there.

MR. BRADMAN: Right and I just think that the same chloride is kind of special case material specific to livestock with teat dips. And I'm, you know, my sense from the review and the people actually using the materials is they see it's a necessary, in the toolkit.

And I guess I'm just asking you, is that, you know, is the committee reflect and agree with that? Or is there a place for discussion about other alternatives that, you know, don't rely on this material, which may be more toxic than other teat dips?

MR. ELA: Sue, and then Kyla have comments.

MS. BAIRD: Fine, there are very few

teat dips that are performed -- a sanitary issue.

We have teat dips that are used maybe as a medicine when the teat is, opting glycerin, when the teat is cracked and those type things.

But if you have a milk product with high, a cow that has high somatic counts, which is high bacteria in the milk, your milk is going to be dumped, which it should be. We don't want those kinds of things. Or it goes into the cheese processing arm of distribution.

There's so little chance of environmental issues, because it's applied directly through some method. Whether very small, as Nate alluded to, with a small farm that's got 10 cows. And he just takes a rag, and he dips, you know, washes down the bag.

Other methods may be in larger operations, but it's just, you can't allow those bacteria from when the cow lays in the manures or whatever, or muddy fields that they're walking through in spring time. You can't allow that bacteria to impact that milk. That's just my take

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

on the thing, and.

MR. BRADMAN: Yes, of course, definitely.

MR. ELA: Kyla, one last comment.

MS. SMITH: Yes, I found the comment.

It was, so OTA does produce our surveys. And it does look like in the producer survey that they submitted to the question -- the producer who was responding to the survey said -- responded to the question of have there been any changes in the availability of iodine that would reduce the need for sodium chloride? And the answer was, no. So, they didn't like, you know, go into detail about that.

And then the last comment, I would just say is that, that same respondent to the survey, did say, certainly iodine is the preferred method.

But the, but ASC seems a necessary option in a rotation of pre and post, to provide against pathogens.

And then many certifier comments noted small number of products reviewed and approved,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

or even operators using them. And one even, one certifier even said that they had several but it wasn't commonly used. But it does seem to be, you know, good to have in the back pocket should the need arise where you really do need something, you know, stronger or more effective, or in a rotation.

MR. ELA: Great. Amy, very quickly.

MS. BRUCH: Yes, sorry. Kyla, just to note in that response or that comment that you were referencing, it looks like there was only one response to that question on, is iodine, you know, available?

MS. SMITH: Correct.

MS. BRUCH: So, just kind of very limited reactions --

MS. SMITH: Yes, yes.

MS. BRUCH: Okay.

MS. SMITH: And going back through too, I realized a lot of the comments did not include acidified, which narrowed some of my scope. So, going back, sorry Steve, I just jumped in, I apologize.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: No, that's, you're fine.

MS. SMITH: Going back through the message that I heard by widening the scope was very similar though.

MR. ELA: Well, one more Sunset. We were scheduled to finish at 4:30 but we usually set aside until 5:00. We could have cut the NIFA people short, but I really wanted to get the full discussion from them.

So I apologize to our ASL people and anybody out there that needs to be done by 5:00.

But I felt like that was, while we had them on the line, we wanted to make use of them.

So, we have one more Sunset, and then one more thing the Board wanted to bring up.

So, go ahead Kim, with Zinc sulfate.

MS. HUSEMAN: Okay. So the last item under the Livestock Committee is zinc sulfate. Reference 205603 (d) (11) for use in hoof and foot treatments only, and Brian, you are up.

MR. CALDWELL: All right. Thanks, zinc sulfate basically for use, used in foot baths

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

for hoof rot and other foot issues. I think there's legitimate concerns about zinc sulfate's manufacture and disposal. You know, mining and processing of zinc is pretty toxic all the way around business.

And, but it doesn't have the same kind of buildup in the soil potentially as copper sulfate, which is the main alternative. And another issue with zinc sulfate, compared to copper sulfate is that sheep are really sensitive to copper toxicity.

And so, I don't think you can just run sheep through a copper sulfate foot bath. I'm not sure about that. We used to have sheep and we didn't do that. But anyways I think there's definitely issues with toxicity in sheep.

So, zinc sulfate would be the kind of the preferred alternative there. That said, in terms of the written comments there were 10 in favor of keeping it. Two with annotation, basically because of the environmental drawbacks. And our question was, has zinc sulfate reduced the use of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

copper sulfate in treating foot disease?

And it really seems like it probably hasn't. One of the certifiers said that they have zero zinc sulfate use on their organic farm plans, and almost 100 copper sulfate uses. So, it doesn't seem like a popular alternative.

So, I guess -- and the other answers, again, were that only small numbers from the certifiers, only small numbers of farm plans included zinc sulfate. So, I think there's a question about whether it's necessary.

There are alternatives but again, a couple that were mentioned, peracetic acid and H2O2 had variable, said they had variable results. Amazingly to me, vaccines evidently have some efficacy against some of these foot organisms, but again it sounded like it was more experimental.

I didn't get a real clear signal that any of these alternatives was really great. Formalin is I think, was the old fashioned approach. But formalin is quite toxic and so both either zinc sulfate or copper sulfate were

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

preferred over that, and copper sulfate is the main alternative and is mostly used.

So, I guess, my feeling is on this, is I guess we aren't going to do any annotations now, but that might be an avenue that we'd want to pursue in the future.

MR. ELA: Are there any comments? Kyla, go ahead.

MS. SMITH: Yes, I have a couple. So, zinc sulfate is relatively new, right? So, it was only allowed, I think the final rule came out in January 2019. So, I do recall seeing some comments from certifiers, or one, saying that they had difficulty getting info from manufacturers.

I'm not sure if that's our experience.

I'm trying to reach out to staff on that. One producer group indicated that product development is slow. So, again I don't know because, I don't know, anyway, just making -- whatever.

And then the other thing too, is that there's no restriction on the use of copper sulfate, or like annotation. Like saying that one

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

has to use zinc sulfate before they use it, so anyway just all things to think about, but --

MR. ELA: Great, thanks Kyla. Anything else to discuss on the Board on this? All right, that will conclude our Sunsets for Livestock.

Michelle, if you want to go to the next slide. All right. Nate, would you, do you want to introduce this?

MR. POWELL-PALM: Yes, I do. I'm just going to pull mine up real quick to get a little bit bigger, so I can read it a little easier.

So, we as a community, and I'm excited to sort of speak for the whole community because in 2017, April 21st, 2017, so almost nearly exactly four years ago, the National Organic Standards Board unanimously voted to pass a resolution requesting for the implementation of the Organic Livestock and Poultry Practices Rule, OLPP.

And I'm going to refer to as OLPP, so you'll know what I'm saying, but Organic Livestock and Poultry Practices Rule, which I think probably

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

everyone on this call is familiar with it. But we wanted to just reiterate that the community is as unified today as we were four years ago.

So, the National Organic Standards Board recognizes that consumers trust our organic label and industry growth depends on the strength and consist application of the organic regulations.

NOSB has an integral role in advising USDA in its promulgation of these voluntary standards, and strives to seek consensus among organic stakeholder in its recommendations to USDA and the Secretary.

The Organic Livestock and Poultry Practices Rule finalized in 2017, subsequently withdrawn in 2018 was based on a unanimous NOSB recommendation to the USDA in 2011. The NOSB recommendation was the product of a decade of public NOSB meetings, lengthy discussions, public comment periods, and consultation from organic producers, processors, consumers, and the veterinary scientific community.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Both the NOSB recommendation and the final rule issued by Secretary Vilsack in 2017 defined appropriate requirements for space, density and outdoor access in organic poultry production. Support for this rule has been expressed through public comment by major and growing organic brands.

The rule is supported by organic producers, consumers, the industry, and the NOSB.

The policy received over 120,000 supportive comments in the federal register, representing over 99 percent of commenters. The NOSB stands by its 2011 recommendation to USDA on the Organic Livestock and Poultry Practices Policy question.

So, therefore, we have a resolution.

Be it resolved by unanimous vote today, the National Organic Standards Board as USDA's federal advisory board on organic issues, and representing organic farmers, ranchers, processors, retailers, and consumers urges Secretary Vilsack to reissue as final, the Organic Livestock and Poultry Practices Rule with policy considerations related

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to outdoor access and space requirements as established in 2017, without further delay.

Though it's been four years, since it passed in 2017, the Board, and I say the community as a whole remain unified in our call for the implementation of OLPP.

Today, we vote again, as a unified Board and ask for the immediate implementation of the Organic Livestock and Poultry Practices Rule.

MR. ELA: All right, thank you, Nate.

Is there any discussion on this?

Okay, hearing none. Nate, made the motion. Would somebody like to second that?

MR. GREENWOOD: I can second it, Rick.

MR. ELA: Okay, Rick, seconded. We will move to a vote. Sue, we're going to start with you and go ahead with your vote.

MS. BAIRD: Yes, love it, thank you.

MR. ELA: Asa?

MR. BRADMAN: Yes.

MR. ELA: Amy?

MS. BRUCH: Yes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Brian?

MR. CALDWELL: Yes, thank you.

MR. ELA: Jerry?

MR. D'AMORE: Yes.

MR. ELA: Carolyn?

DR. DIMITRI: Yes, yes, yes.

MR. ELA: Rick?

MR. GREENWOOD: Yes.

MR. ELA: Kim?

MS. HUSEMAN: Yes.

MR. ELA: Mindee?

MS. JEFFERY: Yes.

MR. ELA: Logan? Are you there,

Logan?

We may have lost Logan, but Nate?

MR. POWELL-PALM: Yes.

MR. ELA: See here, Kyla?

MS. SMITH: Yes.

MR. ELA: Wood?

MR. TURNER: Emphatic yes.

MR. ELA: The Chair votes yes, so we
have one absent, so it would be 13 to zero.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

All right, thank you so much for presenting that. And I know Jenny talked about this earlier today as well with some of the issues.

But I think it's really great to reemphasize that with all the new Board Members, we still stand united and wanting to see this implemented. And it truly was something that all our stakeholders came together on well, and are really asking us for.

So, with that, we are done for the day.

I really apologize for running ten minutes over time to all our stakeholders, but we are going to recess until tomorrow at noon Eastern Time.

And tomorrow we will be going to the Materials Subcommittee, Compliance Accreditation Certification Subcommittee and Handling Subcommittee. So, we'll have a full day of it.

So, thank you everybody. We will see you tomorrow at noon.

DR. TUCKER: Thank you to the Board and the staff for a terrific day. I appreciate it.

Give a round of applause to all of you.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. POWELL-PALM: Thank you, Jenny.

(Whereupon, the above-entitled matter
went off the record at 5:11 p.m.)

UNITED STATES DEPARTMENT OF AGRICULTURE

+ + + + +

NATIONAL ORGANIC STANDARDS BOARD

+ + + + +

SPRING 2021 MEETING

+ + + + +

THURSDAY
APRIL 29, 2021

+ + + + +

The Board met via Videoconference at
12:00 p.m. Eastern Time, Steve Ela, Chair,
presiding.

PRESENT

STEVE ELA, Chair
NATE POWELL-PALM, Vice Chair
MINDEE JEFFERY, Secretary
SUE BAIRD
ASA BRADMAN
AMY BRUCH
BRIAN CALDWELL
JERRY D'AMORE
CAROLYN DIMITRI
RICK GREENWOOD
KIM HUSEMAN
LOGAN PETREY
KYL A SMITH
WOOD TURNER

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

STAFF PRESENT

MICHELLE ARSENAULT, Advisory Committee
Specialist, Standards Division
JARED CLARK, National List Manager, Standards
Division
DAVID GLASGOW, Associate Deputy Administrator,
National Organic Program
ERIN HEALY, Acting Director, Standards Division
DEVON PATTILLO, Agricultural Marketing
Specialist, Standards Division
DR. JENNIFER TUCKER, Ph.D., Deputy
Administrator, National Organic Program;
Designated Federal Official

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

CONTENTS

Call to Order and Opening Remarks 5

Materials Subcommittee (MS) 7

 Discussion Document: Research
 Priorities 2021 7

 Discussion Document: Excluded Methods
 Spring 2020 22

Compliance, Accreditation, and
Certification Subcommittee (CACS) Update 47

 Proposal: Human Capital: Strategy for
 Recruitment and Talent Management -
 Organic Inspectors and Reviewers 50

 Discussion Document: Human Capital
 Management - Supporting the Work of
 the NOSB 71

Handling Subcommittee (HS) 79

Proposal: Ion Exchange Filtration 85

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

2023 Sunset Substances Reviews:

Agar-agar	138
Animal Enzymes	139
Calcium Sulfate - Mined	148
Carrageenan	154
Glucono Delta-Lactone	169
Tartaric Acid	176
Cellulose	180
Chlorine Materials (Calcium Hypochlorite) Chlorine Dioxide, Hypochlorous Acid Sodium Hypochlorite)	182
Potassium Hydroxide	201
Potassium Lactate	203
Silicon Dioxide	205
Sodium Lactate	209
Discussion Document: Zein - Petitioned ...	211
Discussion Document: Fish Oil Annotation	218

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

12:00 p.m.

MS. ARSENAULT: Welcome, folks who have joined us already, to day two of the National Organic Standards Board meeting.

I have opened the chat feature. You guys should all be able to chat. It looks like you can't choose an individual person to chat to, but you can chat to all panelists, which are the NOSB members and staff that are on the call, or all panelists in the attendees, if you would like to chat amongst yourselves.

I've add the phone numbers. If you have any issues, then you need to dial into the meeting. The Zoom phone numbers are in the chat box now.

And I'm going to turn it over to Steve to get day two started.

MR. ELA: All right, Michelle.

Rick or Nate volunteered to lead the meeting today. So, I'll just turn it over to them.

(Laughter.)

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

No, we'll be nice.

Welcome, everybody, to day two. I really thought yesterday was a great day and lots of discussions. Sorry we went a few minutes over, but that's what happens sometimes. We really want to take the time to make sure we maximize the use of our panelists and everybody in the meeting. So, we'll try to be a little better at staying on time today, but we've got some great topics that will make our heads scratch a little bit, but, hopefully, we can work through them and have some great discussion.

So, with that, we are going to start with the Materials Subcommittee. After that, we're going to go to Compliance, Accreditation, and Certification, and then, spend the afternoon with the Handling Subcommittee.

Well, I do want to say one other thing before we start. At this meeting, I think every Chair is a first-time Chair. Just the way the Board rotation is set up, we, basically, had to ramp people up very quickly, but they've all done

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

a great job through the lead-up to this meeting.

But I just want to recognize them for their willingness to jump in with both feet into the water, and so far are doing a great job.

So, Wood, it is all yours as the Materials Subcommittee.

MR. TURNER: Well, thanks, Steve, and thanks to Kim for getting us initiated yesterday.

Again, that was a fabulous opportunity to have somebody to follow.

And just a reminder, I'm very happy to be in the leadership role in this Committee, and yet, I still lament that we lost Dave a year early.

So, I'm learning and getting my feet wet here a lot faster than I expected. So, I hope the community will be patient with me and bear with me, as I navigate this new role.

So, we have a couple of items on the agenda today, and I think we have about 45 minutes total to talk to a couple of discussion documents that we have. One is on our research priorities, and the other one is something that Mindee is going

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to lead on excluded methods.

With that, I'll go ahead and dive right into the research priorities. It was really a learning experience for me to listen to the NIFA presentation yesterday and to really understand kind of how these priorities sort of interact with OREI and sort of really help to frame, I think, a core set of priorities which are lingering questions that I think so many of us in the organic community are trying to sort of understand. And we are constantly sort of in need of getting more data on, more content on, sort of more clarity on.

And it has been really interesting to me to sort of think about kind of how these priorities have evolved over time, how they have kind of started some sort of, years ago, started sort of a much smaller list of priorities into more nuanced priorities, sort of deeper, more granular thinking on some of these issues.

Part of our job with this Subcommittee is to coalesce kind of the ongoing priorities of the different subcommittees in just sort of one

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

common document that we can then submit on behalf of the Board to the program.

And it's really interesting to think about some of these things. I will quickly go through the summary part of the discussion document, and then, kind of, again, quickly try to give you a sense of some of the feedback we've gotten from the community so far. We're certainly expecting and excited to hear more from the community as necessary and as the opportunity presents itself. I think it is clear to me there is a lot of opportunity, frankly, to improve the document, given some of the feedback that we have seen from some of those folks in the community.

So, getting into the summary document that I think a lot of you have, for the Livestock Committee, we have several, I think four, pretty straightforward, or reasonably straightforward, priorities focusing on the efficiency of natural parasiticides and methodologies, more research on the efficiency of a variety of tools and programs that are available there.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Another one is on evaluating natural alternatives to DL-Methionine in a system approach to organic poultry feed programs.

Another one is evaluating ways to prevent and manage parasites and livestock, examining breeds, geographical differences, and the like.

And then, researching and developing livestock breeding programs resulting in livestock that are adapted to outdoor life and living vegetation.

I guess, to be honest, I won't go through these. As I am doing this, I'm realizing I shouldn't just read you this summary document, as you all have it. And you have all had a role, obviously, in articulating these priorities.

So, there is a lot more focus in the Crops Subcommittee on crops priorities. We have about 12 priorities there that range from the role of organic in addressing carbon sequestration and climate solutions, conservation tilling and cover-cropping practices, questions about nursery

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

stock, a number of issues that I think have continued to persist for this Subcommittee.

I think -- and it's no surprise to everyone here -- that under the handling part of the priorities list, we have a couple that are focusing on chlorine materials and sanitizers. We've got a lot of feedback from the community on those, and it appears to me there's an opportunity to kind of distill those comments, distill those priorities into something a little bit more cohesive and clear.

Another one is focused on suitable alternatives to BPA. I know that's been a concern for a lot of us.

And then, a core set of priorities as well on genetic engineering and coexistence with genetic engineering and organic. I think some of what Mindee will talk about in her excluded methods document will kind of push that even further. I think that is an ongoing area of research that I think we're all aligned on.

And then, a couple of general

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

priorities: examination of the factors in influencing access to organically produced food, which is something very important to me personally; and two, production and yield barriers to transition into organic production to help growers in their transition period.

So, I just wanted to just remind folks, I know you've seen some of the comments, but there have been several suggested topics. We've heard from some of the community that there needs to be more of an opportunity to look at, to research things like heavy metals in baby food; a lot of comments, as I mentioned, on sanitizer research and sort of even the interplay between kind of our sunset process on certain sanitizers and the role of the sort of research priorities pathway in really trying to kind of clarify sort of where we are on the sanitizer question. So, I think there is a lot of feedback from a lot of different points in the stakeholder community on that topic, in particular.

And again, I'll just candidly say I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

think there are some opportunities to refine the document between now and our fall meeting, given some of that feedback. Some were just very clear that -- we even heard some feedback from folks.

I think one of the things we tried to do in some of our sunset documents was to begin to include some of the draft framework that came out of the Sanitizer Panel. And there was some clear feedback from some folks in the community that, using that draft framework that followed that Sanitizer Panel as a guidance to the sunset process was in some ways inappropriate and, in fact, we need to be asking those questions more broadly as a part of the research priorities workstream.

We got a lot of feedback from certain folks, certain parts of the community on bio-based mulch; issues on that ecosystem service evaluation on organic farms; looking for guidance, you know, looking at cover crops from more of a horticultural perspective than a crop perspective; feedback on plant management system research and organic planting stock research; some good feedback on ways

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

to think about nutritional value of organic crops, and ways to think about how you look at side-by-side material trials. So, a lot of good feedback in that regard.

And also, a lot of positive support for the research priorities as they currently exist.

A lot of folks took the time to give us a vote of confidence on the research priorities, and then, give us some guidance on which ones of those priorities that we've articulated that they consider to be the highest priority. A lot of feedback in some cases that we have a long and growing list as organic becomes more and more mature and more sophisticated over the years. We've got a lot of different ways to look at these issues. And so, are we getting too diluted in looking at so many research priorities versus really narrowing that list down?

I was really heartened by some of the feedback on sort of the way we've articulated the research on organics relative to climate solution.

We talk about the ways that organic can sequester

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

carbon and help drive solutions for climate change, but there's very real needs among the farming community and the agricultural community on how to adapt to climate change. And I think that's something that many of our stakeholders are dealing with and could benefit from some more research on that regard. And I heard that from several folks, that same idea.

And I think, with that, again, I think that's a pretty good summary of sort of some of the comments we received. And I want to just open it up to the group and see if there's any questions that came up for others as you were reviewing comments and had thoughts on how to advance this document. So, I'll pause for a minute to see if there's any questions.

MR. ELA: Thanks, Wood.

Sue has a question for you. And before we jump in here, I neglected to do a roll call at the start, and I do, just for the record, want to note that all 14 members of the Board are on the call at this point, just to get that read in.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

But go ahead, Sue.

You are muted, Sue.

MS. BAIRD: If you want to do roll call first, that's --

MR. ELA: No, we don't. We don't need to do a roll call. I just wanted to note that everybody is present.

MS. BAIRD: Right. Okay.

Just a comment, because we did have a few comments on the research saying that perhaps it was time to remove some of them.

MR. TURNER: Yes.

MS. BAIRD: Some of them have been there forever. I really, really enjoyed the presentation by NIFA, but I think that, if nothing else, they answered that question and saying, "Give us all these broad things; give us more. Don't take away."

And kind of a specific comment because, for the livestock, it almost appears as if one efficacy of natural parasiticides and methodologies might be redundant to No. 3,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

"prevention and management of parasites".

MR. TURNER: Oh, yes.

MS. BAIRD: But, in terms of No. 3 -- and we're not numbering them now in priorities, according to NIFA --

MR. TURNER: Right. Good point, good point.

MS. BAIRD: -- but the No. 3, "prevention and management of parasites," would be an overall -- especially for other types of livestock.

No. 1, "the efficacy of natural parasiticides and methodologies," was specifically added for our poultry industry because we did not approve fenbendazole as a parasiticide because there were comments that they were finding the worms in the eggs. So, we added that one specific for poultry, in hopes that some of our universities, research facilities that are interested in parasiticides would really pick that one up and run with it. We have heard from our poultry industry that they do have a problem.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

We're not allowing them to use fenbendazole products in solutions for our poultry industry.

MR. TURNER: Thanks, Sue. Those are great points and great clarification. And I also share your view that, coming off the NIFA presentation, more may be better at this point.

We need to know a lot more. So, that's a good point to raise.

MR. ELA: Yes. We have Brian, and then, Rick.

MR. CALDWELL: Yes, thanks, Steve, and thanks, Wood.

Yes, I was going to say the same thing as Sue about combining No. 1 and 3 under livestock.

But, on a different sort of take on that, I'm amazed that we're still asking for research on parasiticides. I was involved when NOFA-New York first wrote its standards in 1985, and we were working on that then. And I just can't believe that the research either hasn't been done or isn't known, or whatever, about some of these topics.

I'm wondering whether we could somehow

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

ask for literature reviews on key topics. And that's really what our technical reports sort of are. And maybe there's no reason to ask for academic ones as well, but that might sort of consolidate a lot of the literature into places that were easy to find.

MR. ELA: Great.

MR. TURNER: Great thought.

MR. ELA: Yes. Let's go to Rick.

MR. GREENWOOD: I don't want to be like Sue. First of all, I wanted to actually mention something that Brian did. When we talk about human capital, one of the things that would really be useful would be to have a current literature review of each of these topics, because we put them on the list and they stay there, but we really don't know what's actually happening. And so, it would be a good use of someone's time, rather than having TRs, but to go through the current literature and see if some of these things maybe have already been solved. You know, that would be very helpful.

The other thing is, I really applaud

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

everyone for bringing the NIFA people in. So, I've been on the Board, I'll be on for four years, and I don't think I ever quite understood the linkage between NIFA and how we presented things to them.

So, I thought that was really a worthwhile effort.

So, I think I really applaud everyone for bringing that in. And for the new people, in particular, you got a real head start over where I started on it.

MR. ELA: Yes, thanks, Rick.

Kyla is next.

MS. SMITH: Hello. I just wanted to sort of echo the thoughts of Rick and Brian. It was somewhere in the public comment, I believe, or I saw it somewhere anyway, but that point in the part that sometimes seemed to be the theme is getting the information to the people that actually need it. So, that link is like missing. And so, if there is a way to facilitate that in some way to get that information to the folks that are actually needing to use it, whether that be farmers or Extension agents that are working with farmers,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

or consultants, whatever, just to sort of link that up, I think that would be helpful for everybody.

MR. ELA: Sue, you have another comment?

MS. BAIRD: Just a response to that, because I think that was a wonderful comment and thoughtful. And I know that we North certifiers can serve to provide specific information, but there are a lot of state organic associations -- and I'm thinking Missouri and Montana specifically because we're both MOA -- but I would assume that all state agencies have or all states have an organic association; that maybe we could help them to then disperse to their participants. That's what we do in the MOA, is anytime we get some kind of information like this that would help our members, then we disperse that out. So, I think that's a great point, Kyla, and I really appreciate that.

MS. BAIRD: All right, then, Amy. And then, we probably should move on to excluded methods.

So, go ahead, Amy.

MS. BRUCH: Sure. Thank you, Steve.

Just kind of a general comment. I know all these research priorities, they're relevant and it's a very comprehensive list, but some of the topics are actually in our current work agenda.

And I know the commentary was maybe we shouldn't prioritize. But, to me, having some of this information more immediate would actually help us make better decisions in some of the other subcommittees, such as on biodegradable and bio-based mulch. That would be tremendous to have additional research on, the chlorine materials, et cetera. So, I can kind of see the idea of just providing a very comprehensive list, but I also think there's some immediate research we need to address sooner than later, too.

MR. TURNER: That's a great point, Amy.

I don't know, Steve, I mean, to that point, I don't know that, to be honest, the interaction between these near-term needs and sort of this research priorities cycle that we're in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

with RAI and NIFA -- I don't know how to respond necessarily to Amy's feedback there, because I totally agree. And then, I'm agreeing with what Rick is saying, too, about kind of the near-term -- Rick and Brian are talking about sort of the near-term literature reviews, as to how we can all benefit from sort of a better flow of information here.

But, anyway, it's a great point, Amy, and I think it's worth considering it as we continue to refine the document and think about what goes where in the list of priorities.

MR. ELA: Yes, very much agree. As I said yesterday, I was very heartened to hear that this isn't an esoteric exercise, but that that direct link from NIFA to relevancy, I found quite stunning, actually. I've had no expectation that there was that much use of it and instantly declaring relevancy, based on our list, for an application.

Carolyn, did you have any -- I saw your hand up and it went down. We need to move on, but

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

if you have one quick last thought, we'll recognize you.

DR. DIMITRI: Just a very quick thought. It's just about the research priorities regarding handling. It is, I wonder if we could get information from NIFA on like where to send that, since I don't think that really fits very neatly into the OREI research priorities.

MR. ELA: Yes, good point. Make note of that, Wood.

MR. TURNER: Yes, yes.

MR. ELA: Thanks, Wood. Good job. Go ahead.

MR. TURNER: Sorry, Steve.

So, moving along to the next part on our panel, our Materials Subcommittee, Mindee has been working on that discussion document on excluded methods, which I know is an issue of great importance to a lot of the community. And I want to turn it over to Mindee to lead us in that discussion.

MS. JEFFERY: Thanks, Wood. Thanks,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

everyone.

Just a tiny bit of context from myself.

I spent 15 years in a retailer really committed to organic, the foundation of organics. And then, as we were confronted with the GMO issue, we were, as a staff, given a great degree of education about what a GMO is and how they were entering the marketplace, and a highly educated consumer base that we sort of viewed ourselves as being a society of great debate in which customers would come in and try to stump us on our own standards. And so, the ability to communicate what the organic system is doing, and how the incursion of GMOs as excluded methods was affecting the organic system, was our everyday dialog within and without.

And so, that's where I come from on this issue, and as a Board member, took it upon myself to try to educate myself on everything that this Board has said on this issue and the history of this issue, and it's a doozy.

So, this discussion document is meant as a "how can we reset ourselves as a Board on this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

conversation?" because it's a big issue. And we want to make sure that we understand as much as we can at the current state of the union on organic and how excluded methods are interacting with our supply chains.

So, that 2016 document is the appendix.

Thanks, everybody, for taking all the time and energy to read all this material. And I can't appreciate the stakeholders enough on the level at which they are educated and they pay attention and help us understand what to do next in this work.

So, the way I'm approaching this is mostly to just take the public comments and contextualize them, and try to just do as little editorializing as I can. So, I put them in buckets. I took what the major reflections were from the stakeholders and put them in five buckets, so that we can look at it from the major feedback perspectives from the stakeholders, given what we said and what we asked in the discussion document.

So, those five buckets, I'm just going to go over those and give you a couple of quotes from

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

stakeholders to emphasize what they said back to us.

The first major point was the request to move forward on the 2016 recommendation by this Board for the criteria in evaluating excluded methods. The request for guidance and reflection in the Policy and Procedure Manual was pretty much -- it was all major stakeholders mentioned the importance of this course of action, emphasized the history of unanimous decisionmaking by the NOSB on excluded methods proposals. And these are some Steph Curry statistics. I love the unanimity of the reflections on how excluded methods are important to this community and that we're very united on our positions around this. So, that was the first major bucket, were the requests from stakeholders to take that 2016 criteria and the following documents forward through guidance and the Policy and Procedure Manual potential.

And the second major bucket was the seed community. And seed use in organic has long been tethered to the excluded methods conversation, and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

stakeholders have been clear in public comment that the organic seed issue is also a standalone area of our organic system that needs the support and attention of this Board.

One stakeholder encouraged the NOSB and the NOP to continue to focus on strengthening organic seed availability usage and enforcement among growers. As long as the loophole in the organic seed usage regulation exists, organic growers will continue to source conventional, untreated seed of varieties that may have been developed using excluded methods, but remain undisclosed.

Another stakeholder, "rather than attempting to police unconventional, untreated varieties for which a regulatory mechanism is infeasible," and another stakeholder suggested that success will come from regulating organic seed and to put our energy into the development of organic seed production and organic seed breeding.

So, the seed is where, as a Board, I think we have two ways of kind of looking at the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

impact of excluded methods and, also, looking at helping support and bolster organic seed usage in our community. That's the second bucket.

The third bucket, response to that TBD list. So, the TBD list terms are the terms that we have not determined whether they fall into the excluded methods category.

In those questions along the TBD list terms in this third bucket, public comments established that we're doing a good job of naming technologies of concern to the organic system. There are some techniques on the horizon in development -- and this is me editorializing -- I see them as being harder and harder to maintain our prohibition on excluded methods when we start having to deal with field sprays and insects out in the field and out in the world in a way that might make it difficult for us to protect our supply chains from how that interacts with organic farms. So, that was there in public comment.

The clear and consistent request to act on the TBD list in the fall meeting with a lot of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

information about how those decisions will affect farmers. That was the big push from a lot of stakeholders, that the TBD list needs to be dealt with in the fall of 2021.

And let's see, one quote from a seed producer asked the NOSB to make recommendations clearly and conclusively upon the TBD breeding approaches, and within 2021, a burgeoning young generation of breeders needs to know if and how they can serve the organic community.

And there's some great information from a seed group that outlined how our recommendations on this TBD list will impact farmers and farmers' toolboxes. And that's a big subject, and I look forward to Materials tackling the seed issue, in particular, and deciding how to treat it, both as an excluded methods issue and a standalone issue in organic systems that could use our support.

So, the fourth bucket is emphasis from stakeholder feedback was transparency, what I'm looking at is, transparency and protection of the interagency collaboration requests were

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

ubiquitous.

One group said, "We encourage the NOSB to continue to request information about emerging technology from the U.S. Department of Agriculture and the U.S. Food and Drug Administration."

Another stakeholder reflected that, "Biotech is largely unregulated by the USDA's Animal and Plant Health Inspection Service, APHIS."

Updates to these regulations establish even less oversight by USDA over the introduction of new genetically engineered organisms. Manufacturers of new GMO products now have the authority to determine if their products should be regulated at all. USDA's voluntary, non-regulatory approach to evaluating and commercializing new GMOs is unacceptable and further burdens certified organic growers and handlers. This relates directly to the organic community's ability to exclude genetic engineering.

The NOSB has a timely opportunity to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

use its authority as an advisory group to the USDA to hold Secretary Vilsack accountable to his commitment to coexistence as well as the agency's mission, which is to support the success of all forms of agriculture, including organic and other markets that rely on exclusion of GMO products.

USDA APHIS has a responsibility to collaborate with the NOP to protect the organic market.

These are quotes from public comments from this meeting in this discussion document.

One group emphasized the notion that "The (audio interference) EPA requires virtually no assessment of the environmental (audio interference) they involve plant pests or are themselves pests."

"The FDA has no mandatory requirements for food safety assessment and technically has the authority to assess gene-edited animals, but the standards for doing so are unclear. Once they are on the market in the U.S., gene-edited products may not be identifiable to consumers or retailers."

(Audio interference.)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. ARSENAULT: Mindee, you just froze.

MS. JEFFERY: -- "in food and the momentum in the international regulatory" --

MR. TURNER: Mindee?

MS. JEFFERY: Yes?

MR. TURNER: Mindee, you froze for about 20 seconds.

MS. JEFFERY: Oh, that's okay. I think you got it. there's a lot of emphasis on the need for transparency and the need for interagency collaboration to establish clarity for organic producers to protect ourselves from emerging technology. Got that, Wood?

MR. TURNER: I did.

(Laughter.)

MS. JEFFERY: Okay, great. Making sure.

And then, my last bucket is kind of how I look at the urgency factor. So, you see comments from individual consumers and retailers and retailer association groups in the public comments

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

emphasizing that their experience on the ground with consumers is that, when organic shoppers are passionate about keeping GMOs and genetic engineering out of their food, and when they say, "No GMOs," they mean it.

And this is the space that consumers see as the place where they can rely on transparency and rely on us doing our jobs to help them make sure that they can eat in a way that they understand.

So, I think that's good. Those are the buckets. I can say them again, if anybody wants me to. It's a big subject. We have lots of time in Subcommittee to kind of go over all of this feedback together, and I'm happy to hear if I talked too fast.

(Laughter.)

MR. ELA: It's a giant piece of work, Mindee, and I just really want to acknowledge your passion and your efforts to get your head around the issue. It feels like we're in good hands with you leading this process.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. JEFFERY: Thanks. I definitely feel like I don't know if I covered all the ground. So, thank you.

MR. ELA: Steve, do you want to --

MR. TURNER: I will.

Thanks so much, Mindee. I know that, yes, this is a huge topic, and thank you for taking it on.

We're going to head down the list of questions, comments, discussion. We'll start with Brian, then go to Jerry, and then, go to Kyla.

So, Brian, go ahead.

MR. CALDWELL: Yes, thanks, Mindee. I think you did just an amazing job of condensing all those comments. It was way more than I could assimilate.

I had a couple of thoughts. I really appreciate that Jenny spoke at length a couple of times to us about excluded methods. And one of her points was that the existing definition under the regs really does cover a lot of ground with excluded methods. And so, maybe trying to capture

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

all the new forms of genetic modification that may come out and gene editing, and everything like that, isn't as important as enforcing kind of what is already known; and that maybe what we need to work on is a mechanism for disclosure. Of course, I'm thinking about seed varieties mostly here, but I'm sure you could extend it to components, you know, materials used in organic products and processing.

But, in terms of seeds, the TBD list that we have, one of the question is whether cell fusion -- you know that's in the TBD category, and yet, it is actually specifically named in the definition of "excluded methods" that it is excluded. And so, I don't know the history of all that, but I'm really kind of surprised that it would sit there when it's specifically in the regs. So, to me, that seems like kind of a straightforward one, at least to make the decision on in terms of TBD.

And then, the question is, how to retrieve varieties that have been in use for a long

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

time, and that sort of thing. And that's pretty thorny. I think we have to sort of realize that we live in an imperfect world and we may not be able to get everything.

On the other hand, I am aware that the Demeter Certification Program does have -- they have never allowed cell fusion, and they do have a list of varieties that they've compiled. And this was from an article in 2008. So, at least we have the old ones that sometimes people are wondering about. I don't know if Demeter has kept up with this.

But, anyway, what I'm talking about, my main point here is that maybe enforcement of the rules that are actually in the regulations is a way to start on some of this. And then, sort of moving forward from there, rather than trying to specify all the methods that are coming along -- they should be captured already -- if we can ask for information, and that transparency part you talk about, from the seed companies. It evidently totally works for GMO corn and soybeans.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Nobody has any question that Roundup Ready products are not allowed in organic production, even though they are conventional and untreated, right? So, we should be able to do the same thing with other vegetable varieties with excluded methods.

So, thanks a lot.

MR. ELA: Great, Brian.

We'll move on to Jerry, and then, Kyla.

MR. D'AMORE: Hi. Jerry here.

I can't go into the detail that Brian just did, but I'd like to acknowledge your really great and thoughtful work on this. I think it's an enormously important subject and complicated.

And I personally believe this is a path that we have to go down with vigor.

Thank you.

MS. JEFFERY: Thank you, Jerry.

MR. ELA: All right. Kyla?

MS. SMITH: Yes, thanks for your work, Mindee. This is great.

I have one comment, and then, one

question, actually, that maybe is more directed at the program. So, I just wanted to make it known that the ACA Materials Working Group did develop together and advocated for excluded methods. It's mostly used for handling ingredients. I know a big focus of this is around seeds. But, anyway, that does take into account the technologies that have already been voted on by the NOP and lists them specifically on the affidavit from manufacturers to say whether or not they've used any of those. So, I just wanted to make that be known.

And then, my --

MS. JEFFERY: Give me one second, Kyla.

MS. SMITH: Yes.

MS. JEFFERY: I just wanted to say I do think that handling is extremely important, especially given the developments in synthetic biology. I think we have to really just stay vigilant about that this is so much farther past seed, while we press on how important the seed part is at the same time. So, thank you so much for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

the affidavits are so important.

MS. SMITH: Yes, you bet.

My question that's more maybe directed towards the program is, Mindee, you had talked about in your first bucket, and that I also saw in the public comment, just urging the program to move forward with the previous recommendations.

And based on, Jenny, your presentation around sort of packaging things together, I just wondered if that would behoove us, as a Board, to like move forward, so this could all get packaged together and get pushed forward into one whatever, rulemaking, guidance, whatever path, as opposed to be taking them sort of piecemeal.

DR. TUCKER: Yes, I think it's a really important conversation and really insightful comment of what is kind of the content governance on this. Because the Board has continued to work on this, and, okay, let's have this, and this is an emerging -- and this is going to continue to emerge. I continue to really encourage the people to really read the regulations. So, we can frame

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

whatever the Board recommends into the "We think this is already prohibited because the regulations say this." So, these are merely implementation guidance to enforce it.

So, to Brian's point, what we're doing is enforcing the existing regulations. So, it's not modifying existing regulations, which are really quite strong and quite broad. That's what I say to consumers when I get asked about GMO, "It's a very broad definition of what is excluded." And I think that's good. It's a very solid umbrella.

And so, I think, thinking through how are we framing this to avoid confusion as to what we consider allowed and not allowed -- it's not allowed. So, do we frame all of these examples in a way that doesn't say, well, somebody says, "Well, this isn't on the list. So, therefore, it must be allowed."? Well, no. No, no. It's a very broad definition of what's not allowed here.

So, it would help, at some point, it always helps to kind of have pencils down, so we can take an inventory of here are all the pieces

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and think through how do these pieces fit together into a package that's either guidance or it is implementation instructions for certifiers. We're actually the ones that have to check all this on a daily basis. What do we most need in a practical way to uphold integrity and give certifiers a practical tool, while not seemingly open all these loopholes because something isn't explicitly on a long list? And then, how do we update it as needed, and what does that, quote, "calendar" look like? I know that's all very boring nuts and bolts, but it really matters in terms of framing a work process moving ahead.

MS. SMITH: May I just follow up with one thing? So, I'm new to process here as well, but I've heard previously, as an audience member, like maybe making it very clear on our cover sheet like what we want the program to do with this whole big package. Would that be a helpful path forward?

And I know that there hasn't been a lot of movement in guidance in the past couple of years, but I'll just reiterate that, as a certifier, we

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

like really rely on guidance and would like to see more things put through guidance. So, anyway, I just wanted to sort of put a plug in for, yay, guidance.

(Laughter.)

DR. TUCKER: Well, in hearing that, you know, this is not an esoteric discussion. These are decisions that certifiers have to make every day, and these are oversight steps that they have to take in enforcing the regulations. And so, yes, connecting that to, therefore, what do certifiers need to do is so, so important in this dialog because that's where we build consumer confidence, is that certifiers are out there doing the right thing at the right time with the right operations every single day.

So, it's a really important conversation. I want to help move this along, and trying to figure out, okay, what is it that we're actually trying to package and in what format, and for who? And, gosh, we have these regulations. So, let us remember how strong our existing

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

regulations are, our regulatory definition, and use that, rather than having people question it as, well, if we're doing all this extra work, that must mean the regulations aren't very strong. They are strong. These are prohibited. These are excluded. Let's always put that first.

MR. ELA: Thanks.

Nate?

MR. POWELL-PALM: I apologize, I've raised and lowered my hand like a dozen times during this period, mostly because so many great things have been said.

I want to echo everyone who noted how great this document is and the work that Mindee did over this last semester.

In sort of tacking onto Kyla's point, I think I just wanted to say to Jenny, it's not boring at all, this calendar of how we figure out the nuts and bolts and minutia of managing this practice. And I think that we're really excited for it.

I think the consistency is something

that, as both an inspector and someone close to the certification community, is needed. So, I just wanted to upvote what Kyla said about wanting those guidances and to move forward with past recommendations on seed especially for this topic.

So, thank you, Steve, for humoring me and the many ups and downs of trying to decide what to say.

MR. ELA: I was going to call on you regardless.

(Laughter.)

MR. POWELL-PALM: Okay.

MR. ELA: Once you went up and down twice, it's like you were on the cue.

I have something to say, but go ahead, Mindee.

MS. JEFFERY: Thank you, Jenny. I appreciate that.

I think part of the pressure just comes from this overwhelming development from the biotech into the food and ag industry. And so, I think it's important to remember for myself how

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

good a job this community has done for how long in supporting this issue, and also, the great partnership on working on this issue; and that we have to remember that we're playing against a really big basketball team and the game is not going to stop. And so, that's, I think, good to just in my mind go, oh, yeah, like the pressure is coming from outside, and we're doing great working on this issue.

MR. ELA: Yes, good point, Mindee.

And I just wanted to say, I mean, I think crops are certainly one aspect of this. And you mentioned the other aspects that I think are probably moving even faster than we know that really concern me. And, you know, it's just like on biodegradable mulch the arguments over the definition, I guess, where we said "not derived from excluded methods." And a lot of people said, "Well, that's already in OFPA. We don't need to specifically say that." And I think, to Jenny's point, that is true, but we also know in fermentation products we see that very creeping

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

use of excluded methods that is much more subtle than in crops. We keep bringing up the question of, if the product doesn't include excluded methods, is it okay? I personally would tend to argue, no, it's not if it's made from an excluded method. But, then, how far back do we look?

So, I think you've got your work cut out for you, but I really applaud what you're doing.

I think it's critical. And I think we, as has been said, we need to not just focus on definitions, but focus on larger issues, filters that we can run things through to say, is this or isn't this an excluded method, rather than just specifically naming them.

I think it's going to be a real tough go to keep the prohibition as a prohibition without something sneaking in, but I am so glad you are working on it, because if nobody works on it, I think we're in trouble. So, thank you.

All right. Anything else, Mindee, before we move on? Or, Wood?

MR. TURNER: That's all we've got, I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

believe, Steve, for our Subcommittee.

MR. ELA: Great.

MR. TURNER: So, I would like to turn it back over to you.

MR. ELA: Great. Well, weighty topics again. Yes, thank you to both of you. Materials waxes and wanes, but you've got a heavy lift right now. So, thanks for biting that off and moving forward.

With that, we're going to move on to Compliance, Accreditation, and Certification Subcommittee. I'm so glad that Michelle spelled that out on the agenda because I always say, "CACS," and I can never remember all the words that go into it.

But we're going to turn it over to Nate, as Chair, and let you proceed with some of the human capital things.

So, go ahead, Nate.

MR. POWELL-PALM: Thank you, Steve.

I just wanted to kick this bit off with a little bit of history about myself. I know I

sit in the farmer's seat, but, for about 10 years now, I have traveled around the country working for a lot of different organic certifiers conducting organic inspections. I started as an organic farmer, and my first inspector was Margaret Scoles, who is the Executive Director of IOIA. And I had initially decided to take an inspector course, the basic crop course, because I just wanted to get better at my own paperwork. I wanted my inspection to be less scary when I was trying to prepare for my inspection.

But after taking that course and, ultimately, going through the training process to become an inspector, I realized there's this just incredible, somewhat quiet, somewhat under-the-radar world of organic inspectors that really make all of the work we do on NOSB, as a community, possible by making sure that it's being done right.

And so, when Jenny came out with the memo on human capital, I think that the whole community -- I mean, it came out in a really timely

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

time when we were in a pandemic -- but the whole community took a deep breath and said, yes, this is something we really need to be addressing. This is something that we've gone from inspectors scrapping it from state to state looking at farms, helping make this industry a reality. And now, it's \$60 billion, and we need a lot of people to do this enforcement work. And we need a lot of really qualified, really professional folks out there making sure that the integrity of the seal is protected.

And so, my first shoutout before we get into the meat and potatoes of the document is to Jenny for taking the time to give us this opportunity to recognize the important work of inspectors, reviewers, and the entire certification community, and how we go forward with resilience in mind and growth and professionalization.

But I also wanted to give a bit of a shoutout to the folks who have done this work, both training, like IOIA -- and I have to just sort of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

wax for a moment to say how cool I find it to be that we have an organization that is recognized by the entire world as the standard bearer for excellence in organic inspector training, in that most of the folks in our greater community have in some way interacted with either being inspected by an IOIA-trained inspector or taking a training themselves.

And I think that when the human capital document memo from Jenny came out, a lot of people really kicked into high gear. And I wanted to, I think from our comments last week, also give a shoutout to folks like Oregon Tilth, who made a pretty big jump to say we want to change how things are done, and we're going to make a move. It's not necessarily the move that everyone made of taking on staff and inspectors, but I think folks who heard the deficits that were noted in the community and the working conditions, that's the sort of leadership that I really commend. I think I'm excited about these more novel groups, like the Organic Inspectors Coop and other folks working

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

on how do we make this a really great profession to work in.

So, with that, I wanted to hand it over to Sue, who's going to present the document proposal for human capital.

And I wanted to give a shoutout, also, sort of retroactively, to Scott, who was the Chair before me of CACS and got us kicked off with this work in human capital.

So, Sue, I will stop talking and hand it over to you.

MS. BAIRD: Thanks, Nate.

This has been a great project, and I also want to give a lot of thanks to Jenny and the staff for recognizing some of the issues for human capital.

I'm not going to read the document because, obviously, everyone who has made comments has read it, and hopefully, the whole organic world has read the document.

But I do want to just highlight a few things that were identified as we talked with

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

inspectors, both present inspectors, long-term inspectors -- I take "long term," you know, those of us who have been around for the beginning, new inspectors, and even some who have recently, or not so recently, left the profession.

So, we asked the questions to these inspectors. First of all, what compelled you to become an inspector? So, it was great to hear Nate's reasons for becoming an inspector in the first place, because he answered one of those questions originally. What perhaps compelled you to stay in the profession? And if you have left, why did you leave? And then, we also asked the question: what are some challenges that you have identified as an inspector or to become an inspector perhaps?

And so, common points that we heard from all the inspectors was the cost of travel time.

We heard both positives and negatives on the ability to travel.

The second was professionalism. It does appear that at least some of our inspections

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

have experienced lack of recognition that they are professionals in their industry. What causes that lack of recognition? Why would that happen?

A third one was compensation for experience.

A fourth was, how do we continue education? First of all, how do we become inspectors? What are the challenges and the pros of that? And how do we continue that to build our professional image?

The other was, at this point, it kind of got down to some semantics, but the cost of our personal and errors omissions and travel insurances and how that impacts our -- and health, personal for ourselves and our families -- how does that impact our willingness to remain an inspector?

And then, lack of consistency among certifiers for pay, insurances, those types of things.

So, creating a certifier shopping, not only for our four certified indices, but for those of us who are inspectors. And how do we address all of those things?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

It was incredibly overwhelming to me the responses we got from individual inspectors, from our certified entities, from our certifiers, and then, of course, obviously, from our IOIA agency, and the thought that they put into addressing the issues that we had identified in this paper; and the fact that they put out a survey to their certifier list, their inspector list, was amazing to me and how they quantified that into a survey.

I think that there was some really, I know that there was some really interesting responses to that, and how do we go about alleviating some of these challenges. All acknowledged that there is a lack of an inspector pool, as those of us who have been around for 110 years, I'll say -- maybe not quite that long -- but as we get a little older, maybe a whole lot older in my case, and don't really want to do as much travel, as we're leaving that inspector profession and moving more into consulting and review, and those types of things, and for the younger

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

inspectors who have got small families and losing that family time. Those are probably the two main identifiers of why we're having some issues.

Travel, of course, would play into that same thing. If you've got a small family with small children, you're not so apt to want to travel long distances and go places that those of us who have children out of the home, and therefore, are able to go Egypt, or wherever we want to go. So, that was a huge issue. How do we go about providing insurance because insurance is a huge issue.

All of those things were identified.

I really liked several points. First of all was perhaps we need to implement a risk analyses of those certified entities who have more of a risk factor and focus our more in-depth inspections for those entities, and then, save the lesser with people, certified entities, for a lesser in-depth inspection. That was an interesting concept, one that I had heard way back when, but I think I had kind of lost track of that. Of course, if we went that route, we would have to identify the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

parameters of what causes a risk assessment, a high-risk assessment.

The second strategy that everyone, I think, bar none, identified was, how do we apprentice these new inspectors, so that the concept of professionalism is more enhanced and increased in our certified entities and in the organic (audio interference)? How do we assure our public, our industry, that the integrity of organic products is being maintained?

So, with that, I'm just going to open it up to discussion. Again, I am old school. I have 26 pages, back and front printed, of all the comments and highlighted what I found. So, that is old school, but there it is, 26 pages, back and front. That's 52 pages of comments. So, thank you very much, Public.

MR. ELA: Are there questions? Kyla, go ahead.

MS. SMITH: Yes, Sue, thanks for your work on this. It's obviously something that's near and dear to my heart, working in certification

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

for so long.

Like some things that I saw in the public comment are, and as was in the proposal -- and I don't have an answer; I'm just sort of talking here -- but is the way that the proposal was structured is that there could be entities sort of taking pieces, doing pieces/parts of this, right, whether it be an apprenticeship program or training or career development, or whatever.

And then, some other commenters talked about a bit of a more like unified approach, you know, through some type of centralized like certification or credentialing program that would, then, take some of those elements and sort of wrap them together into one thing, so it's not so, you know, parsed out. But like this company is doing this one thing and this group of companies is doing something.

So, I don't know; I guess I'm just like wondering other thoughts from the Board members on if one is better than the other or if there's

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

an appetite from the industry to like have a more unified, centralized certification or credentialing program that would cover, I would think, like some qualifications and like tiering of, you know, entry level, mid level, expert that would have some pay and certain qualifications that would go along with it, some mentorship criteria, anyway, all those things, as opposed to it being so parsed out. So, just what's up in my head right now.

MR. ELA: Nate? And then, we'll go to Sue.

MR. POWELL-PALM: Yes, I just wanted to kind of jump on your question, Kyla. I think I've been thinking about this a lot, as we have been working on this in CACS. And I know we've talked about it really a lot since the memo came out.

I think when we look at -- and this is Sue's point -- when we look at one of those acute kind of bottlenecks being this apprenticeship program, and how do we get that practical training

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to inspectors, I've always admired how close to the community and kind of grassroots IOIA, as a training organization, has been able to remain.

You know, all certifiers use IOIA-trained inspectors and they do training. And so, coming up with, basically, an entity that is closely related and similarly grassroots, similarly with the community buy-in, making that really intense.

And Angela Wartes-Kahl and Garth Kahl both mentioned the idea of a mentorship boot camp that would still be very closely aligned with IOIA.

I think that would make it so you don't get folks operating in vacuums, and are able to make it so that we have just a really fundamentally acknowledged and accepted standard of training, but also that we can make sure that we fill that gap, that bottleneck.

MR. ELA: Go ahead, Sue.

MS. BAIRD: Yes, I agree, Nate. I did hear comments -- and I'm not sure it was in these papers; I apologize -- but I heard comments that a lot of the responding would like to see us somehow

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

aligned with secondary education.

MR. POWELL-PALM: Uh-hum.

MS. BAIRD: And it very well could be IOIA secondary education. Some of them, some responding -- is that a word? -- stated that they would like to get Continued Education Units. If they're going to spend this much time studying and learning, then they would like to get some credits from a university, or whoever, that they could then transfer to other things. So, I thought that was interesting and had a lot of validity.

If you're spending \$5,000 -- and I heard that number several times as I talked with them -- by the time you do the training, you do the travel, you do the whatever, whatever, it's going to cost you over \$5,000 -- if you're going to spend \$5,000 for training, it would be really nice to get some college credits for that. So, just a thought and just comments that I heard.

MR. POWELL-PALM: May I respond to that real quick, Steve?

MR. ELA: Sure.

MR. POWELL-PALM: Sorry, Amy, and then, I will be quiet.

I think that I couldn't agree more, Sue, and I think if I were to paint the worlds that I would like to live in as far as this pipeline flows, I would see an entity, I would see IOIA working with the university to make a standardized 2- or 3-credit course that I know as a trainer for IOIA I often find myself in a position where I'm like, oh, I mean, I could definitely fill 45 hours of lecture time with all of the minutiae that goes into being a good, observant, and impactful inspector.

And so, I think marrying the basic course with the university would be just an incredible step forward for incorporating, like you said, that more formalized education component.

I really love, though, how IOIA is able to stay very close to the active inspectors who are actually working and doing the inspections, and their trainers -- and I'm a junior member of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that team -- but like the trainers who are much higher up than me have done just thousands of inspections. And so, I really like how it's not a theoretical training. You're being trained by folks who have done a lot of this on-the-ground work and they're actually working as inspectors.

I think, though, that there's even more potential with that university component because we can start to more clearly, I think in this question of diversity and inclusion, clearly target schools that just aren't necessarily in the normal organic folds right now. So, if we were working with schools that have agricultural programs, we would make good partners, but are not necessarily in the Midwest or in the West. They're not necessarily on the radar. I think that's a way we can tap into broadening this organic tent as well.

And so, if we had the training via both IOIA and the university in cooperation, moving to that boot camp, and then, having either some sort of more standardized employment practices where

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

folks could be recognized, could have a promotion path, a path to a career.

One thing I would tap onto that, though, is, personally, I thought it was a real steal to be able to spend \$5,000 to jump into a career that paid me, you know, more than I probably would realize in any starting position for my undergraduate degree, which was much more than \$5,000.

So, I think in recognizing the professionalism of the inspector, also recognizing that we're paying for the opportunity to engage in the career in a really big way. And I think it's kind of a chicken-and-egg question, but I think to kind of start that acknowledgment train, as it were, we can start by saying the education does really lead to something very special and very economically impactful.

MR. ELA: Go ahead, Amy.

MS. BRUCH: Sure. Just a quick comment. Sue and the Subcommittee, thank you so much for working on this. I think this subject

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

matter is super important now, especially with the impending SOE that's going to be passed, and there's going to be more and more strain on inspectors and certifiers. So, giving them the support and training and education is going to be more critical now than ever. So, thank you.

MR. ELA: All right. Time is running a little bit short. The only thing I would make a comment on is how we've often started off the conversation, and again, with the new Administration, is that in this training, if we could really help make sure that we have diversity, whether color or sex or gender identification, or anything, that we not just fall into the trap of the "normal look," for a better way of saying it, of inspectors.

And I think of the black colleges and such. Could we reach out to them somewhat, so we make sure our inspectors are representative of a wide diversity, just to not reinforce the stereotypes we already have out there?

But I think this is a proposal. Is the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Board ready to go to a vote on this? And if so, I would entertain a motion.

MR. POWELL-PALM: I would make the motion.

MR. ELA: All right. Nate made the motion. Do we have a second?

MS. JEFFERY: I'll second.

MR. ELA: That was Mindee.

So, we will start down the list and we will --

MS. ARSENAULT: Steve, can I interrupt this for one second? Just for the record, could you state the motion, please?

MR. ELA: Yes. Go ahead.

MR. POWELL-PALM: Yes, let me make sure I get this all right. But motion to vote on forwarding the proposal on Human Capital Strategy for Recruitment and Talent Management - Organic Inspectors and Reviewers.

MR. ELA: All right. Okay, we will start the vote with Asa this time.

MR. BRADMAN: Yes.

MR. ELA: Amy?
MS. BRUCH: Yes.
MR. ELA: Brian?
MR. CALDWELL: Yes.
MR. ELA: Jerry?
MR. D'AMORE: Yes.
MR. ELA: Carolyn?
DR. DIMITRI: Yes.
MR. ELA: Rick?
MR. GREENWOOD: Yes.
MR. ELA: Kim?
MS. HUSEMAN: Yes.
MR. ELA: Mindee?
MS. JEFFERY: Yes.
MR. ELA: Logan?
MS. PETREY: Yes.
MR. ELA: Nate?
MR. POWELL-PALM: Yes.
MR. ELA: Kyla?
MS. SMITH: Yes.
MR. ELA: Wood?
MR. TURNER: Yes.

MR. ELA: Sue?

MS. BAIRD: Yes.

MR. ELA: And the Chair votes yes.

Mindee, the vote count?

MS. JEFFERY: Unanimous, 14 to 0. The motion passes.

MR. ELA: All right, 14 yes, zero no, zero abstentions, zero absent.

All right. With that, Nate, I'll turn it back to you.

MR. POWELL-PALM: Thank you, and it will be a quick turnaround.

Our discussion document, and then, this is, again, I don't mean to tell how great Jenny is, even though she is very great, but it's also a deep insight. We were talking about it yesterday, the impact of calling someone up to say, "You should run for the Board." I know that I, as a first generation farmer -- and I apologize if I froze. Can everyone still hear me?

MR. ELA: Yes.

MR. POWELL-PALM: Yes? Okay, great.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Right when I get off of these meetings, I'll run to my field and keep planting my fellow peas and my durum wheats, and it is a stretch for time for this sort of volunteer work. And so, I know that's true for a lot of people and we miss out on a lot of really great talent who could be serving on this Board, but feel that the lift is too much to be able to pull away from their farms or their other work.

And so, prompted by how do we ultimately support the Board, how do we make it more accessible to more people, this discussion document, human capital and supporting the work of the NOSB, is a first stab at trying to figure that out. What could we do as far as providing resources to Board members to make it so that the lift isn't so insurmountable that we miss out on really insightful folks getting on this Board and being able to make their mark without having to sacrifice their day job?

So, Steve has very kindly offered to take us through this, and I will turn it back over

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to him.

MR. ELA: Thanks, Nate.

Yes, and I really appreciate both the CACS and the program bringing this up. We often talk about the lift that it takes to be on the NOSB.

I certainly, even though I'm a fourth generation grower, have not followed the NOSB closely, even though I have occasionally submitted comments and sort of kind of diving into it.

It's a new area, and like somebody said yesterday, I was debating whether to apply or not, and I thought I would probably wait because of kids and things. But somebody called me up and encouraged me, and here I am.

But I think, just to summarize quickly the comments -- we don't need to spend a lot of time on this. Just to start off with, there were a number of comments that we should open an online docket between NOSB meetings, just so there can be a more transparent exchange of information to help NOSB members in decisionmaking processes. I think that's a great suggestion, and I would like

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to point out I don't know that we accomplished that this go-round.

But, in general, we have opened the online docket fairly soon after the public meeting just for that purpose. And I will note that that has been largely unused by stakeholders and, also, by the Board. There's no fingerpointing there.

It's something that we have thought about using more. And so, that is, again, a suggestion, trying to move more forward with that.

I will point out that it's always so difficult for the Board and subcommittees because our turnaround time is so tight. I think, for fall, our work will have to be to Michelle by mid-August in order to get it published and public comments for October. So, the time for a lot of exchange is limited, but, yet, I think it could be very important, so that proposals come out much stronger and do reflect more stakeholder comment.

Other than that, we know that NOSB independence from the program has always been a very high priority for us and the stakeholders.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

And so, we, honestly, were a little nervous in pushing this forward of how to support the NOSB without stakeholders and the NOSB itself feeling like there was undue influence from the program on this. But I was very heartened to see nearly all our stakeholders, in fact -- unless I missed a comment -- were in favor of this; that really all of you recognize the difficulties of being on the NOSB and really lauded that we could use additional technical and research support.

And I thought the comments were great, that worries about the program having too much control could be allayed through clearly outlined policies and vetting the support individuals. And a number of comments said they would like the NOSB to be able to have some autonomy in picking these support individuals, such as the program giving each member or committee a budget that, then, could be determined how to be used by that individual or subcommittee, or having a research assistant or something, one per three members, that could help. There is a fair amount of brainstorming on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

this.

I think another comment was, in addition, I think the thoughts were really of providing NOSB members with more technical support, whether it's chemistry, ecology, biological sciences, plant pathology, bioengineering, all these things where we may not be as technically versed on this because of our day jobs, but where somebody could really provide some help.

We already have the technical reports, which, hopefully, are able to provide this, but they have a fairly long turnaround time, are quite expensive. And so, somehow making something a little more accessible and quicker to the Board members would be very useful.

The other item that was brought up is to have some regulatory language development, so that our intent is captured in our recommendations.

I know in the last few years the Board has really tried to be more specific to the program about what our intent is, so that the program doesn't have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

to interpret in the regulatory language what we meant. We don't always get the regulatory language correct or precise, but at least it shows fairly clearly what our intent is. So, help with that could be very useful.

I think the concerns that people had is that they still thought -- and I agree with this -- that our subcommittees should author their own proposals and documents for stakeholder consideration because, one, it comes in from that individual member that is selected to be on the NOSB, and then, that member also has investment in those documents. So, that is part of the commitment to being on the NOSB.

Also, people said it would not be useful/appropriate to have outside people support or summarize, abbreviate, or translate the public comments. They really felt that outside people could sort them -- Michelle already does some of this for us -- but that the Board itself should read those public comments, just so there is not influence on our interpretation or the positions

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

may be nuanced in those public comments. So, there's strong feeling that we should still be responsible for those because we sometimes know who's commenting. We may have talked to them before. Over the years, we've gained experience in those nuances, which might be very important.

So, with that, I was very pleased by the amount of support encouraged for us. I know that does consume a lot of time and it does inhibit people from serving on the Board, especially maybe smaller growers or small businesses, and such.

So, with that, I think I'll turn it back. This was a discussion document. We don't have a lot of time. We're running behind a little bit at this point, but are there any thoughts from the Board at this point? Otherwise, it will go back to the CACS for probably a more formal proposal on this.

Asa?

MR. BRADMAN: I just have one quick question, not a question, one comment.

Michelle clarified for me in this part

of the OFPA that the participation on the Board is without compensation, and that came up yesterday, too, in terms of my experience with EPA.

But just to emphasize that that, also, limits the people as well, not just time, but also money. There's people I know I've suggested to participate on the Board, and they basically can't afford it. And when we think about diversity, of course, we can't contravene OFPA in that specific designation, but I think that's something to think about, how to improve diversity, and some resources to help people participate could make the difference in accomplishing that.

MR. ELA: Agreed, Asa. And, yes, we certainly know the loss of time. And whether it's an employer saying you have to do it in the evening, "We'll support you, but you still have to do it in the evening and keep up with your day job," or an employee saying, "Yes, we'll sponsor you" -- I know, just to be candid, on my own farm that I figure every meeting that I leave, and the extra people I have to hire, or the trucking I have to hire,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

probably out of pocket costs me \$1500 to \$2,000.

That doesn't count my time. It's just the alternatives that I have to put in place. So, it's not cheap and it does limit people, I think.

So, any other comments?

(No response.)

I don't see any. So, Nate, I'll turn it back to you to wind up before we go on to Handling.

MR. POWELL-PALM: All right. Well, I think no vote should be taken on this as of now.

I really just wanted to, again, thank Jenny for getting this conversation started. And I think it's something that is exciting. I mean, I see a true path forward for seeing another iteration of organic certification, inspection, and moving forward as we grow as an industry.

Yes, Jenny?

DR. TUCKER: Yes, just a very quick comment, both for the Board and for the community.

I shared yesterday that we will be issuing early next week a call for proposals. And it will have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a number of projects listed in it.

This is one of the projects. So, although this is a discussion document, and the Board will continue to work on it, I do think an agile approach in terms of learning through multiple pathways is important on this item.

And so, there is a project in the call for proposals on this item. We will not get ahead of the Board on this. And I think it's really important to know who's out there, because we're talking about what a bunch of people could do. We don't know that there are any organizations out there that are going to be willing to do this.

And so, I would really strongly encourage the community that, if you know of academic institutions that would be interested in doing this kind of a project, encouraging them to submit a proposal on how they think it would work -- you know, it's not only a demand problem; it's a supply problem. So, who's going to actually do this work and who could run it, and how would that work institutionally? There are a bunch of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

universities out there that we really have to think about this, or nonprofits, and really think about how to structure this kind of thing.

So I do encourage us to think about that as a starting point, as an experiment, but I do want to be overt about the fact that it will be in the call for proposals, given the progress the Board has made on it and given the positive public comments about it. But I did want to commit we won't get ahead of the Board in thinking about it.

MR. POWELL-PALM: Thank you. Thank you for that. And thank you for the clarity and the heads-up. I think a lot of folks are really interested and excited for this call for proposals.

I will just give a quick shoutout that I know IOIA is very excited to work with universities. And so, please contact Margaret Scoles as you're coming up with your proposals.

Because I think it's exciting how we can all move together forward on this.

I think that's it for me, Steve. And I really appreciate everyone's time, and I know

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

we went over. So, thank you for letting us dive into this discussion.

MR. ELA: That's all right. We started a little bit late anyhow.

And I probably neglected to say in my presentation there that, yes, there were quite a few suggestions of using interns or research associates from universities, so that they would get their feet wet, so to speak, and really introduce more people to the NOSB and to the process of organics. So, I think that could be a really great idea. I know how to combine technical research with technical reports is probably going to be a challenge, but I think it will be very interesting to see what this day brings up in terms of people thinking about it.

So, Nate, you had one more thought?

MR. POWELL-PALM: One more thought. I just wanted to give a shoutout to Emily Oakley, who was part of the early drafting of this proposal, and she is great.

All right. Sorry. Thank you.

MR. ELA: No, I totally agree; she really has her fingerprints on this in such a good way.

So, with that, we are going to move into the Handling Subcommittee, and, Jerry, I'm going to turn it over to you.

MS. ARSENAULT: Jerry, you're muted.

MR. D'AMORE: Oh, I am not.

(Laughter.)

Well, I'm going to start someplace that I had no intention of starting with. And I really want to acknowledge Nate and his entire team for a phenomenal job on a very, very important set of issues. I enjoyed it and was well educated. Thank you very much.

So, the Handling Subcommittee, we're going to start out with a proposal, a Subcommittee proposal, and that will be presented by Steve.

And I don't have more of a preamble than that, Steve. So, if you would be kind enough to go with it, I'd appreciate it.

MR. ELA: Thanks, Jerry.

I apologize for presenting so many things. I'm not sure how I got myself in these buckets of hot water.

But ion exchange, to give some background, was sent to us by the program to try and clarify from the NOSB some discrepancies between certifiers. And so, the program asked us to give our opinion or our recommendation back to them as to how ion exchange materials should be handled in terms of how they should be certified.

It seemed like a fairly straightforward topic. It obviously has not been. And there was a proposal at the fall Board meeting that was put forth and was voted down by the Board. So, I just want to put that in perspective. And so, this is an updated proposal that maybe is a little less concrete than the proposal in the fall, but also tries to, well, account for some of the nuances that are in ion exchange.

And just as a high-level reminder of what really is involved in this, there are really several different aspects or buckets, as Mindee

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

has noted with excluded methods, that ion exchange involves.

And the first item is really what should be on the National List. It's whether recharge materials that are used to clean these resins, so that they continue to be active, whether those should be on the National List. It's also whether the foods or the materials coming out of this ion exchange filtration, whether they have been chemically altered. And then, the final bucket, which is probably the most controversial, is whether the resins themselves need to be on the National List.

So, in public comments and such, I think it's been pretty clear there has been a little pushback, but these materials that run through these ion exchange filtrations have been somewhat chemically altered just by the ion exchange itself.

So, if you go into the filtration with a heavy metal and it comes out without a heavy metal, but some other ion, that that probably is a chemical change. It may not be all that large in terms of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the total product, but it is there. And there is pretty widespread agreement on that, although I do want to recognize that there are some comments that don't totally agree with that. So, to me, that one is fairly clear. I'm willing to be taken to task on that, if somebody feels differently.

The other thing that I think there is pretty widespread agreement is that the recharge materials that are used should be on the National List. And again, just to explain the process very quickly, you have resins that are in the column.

Those resins have some ionic points where ions are attached to them, and then, as you run the material through the column, those ions are exchanged. So, if you have -- and I'll be terrible at this -- but if you have a sodium ion on the resin and another ion comes through, you exchange that sodium for something else that you don't want in the food product.

After a time, those ions are, I'm just going to say, fully exchanged and the resin will no longer do its work, or the column will no longer

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

do its work. And so, you then have to recharge the ions that are on that, take the ions that were exchanged off, and recharge it with new ions, and then, you can proceed to use the filter again.

So, there's wide agreement that those materials that you run through the column to recharge those resins should be on the National List, and I don't think there's much argument on that. So, whether there's a chemical change in the final substance, or whether the recharge materials need to be on the list, there's pretty widespread agreement on that.

Where the big disagreement occurs is really on the resins themselves. And that, we definitely get a disparity of opinions on this.

Do those resins need to be on the National List or not?

And so, I'm going to kind of go through some public comments. It gets a little bit technical, but I'll do my best to simplify it.

So, some of it really comes down to -- people disagree with me a little bit on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

this -- but as to whether the resins are food contact substances, which would not need to be on the National List. Examples of those might be piping, tables, o-rings, and such, used in organic processing, but which are not required to be on the National List. Or whether these resins are secondary food additives and that they do contribute some things to the final product, and if they are secondary food additives, they should be on the National List.

So, the first thing is, even if they are a food contact substance, we had a couple of commenters note that in OFPA it does not say that food contact substances are exempt from review.

So, the argument is that, yes, these resins should be on the National List. And they note that, for a manufacturer to list a food contact substance with the FDA, they are first listed as a secondary food additive. And then, that manufacturer applies for that substance to be a food contact surface, and that process of vetting the food contact surfaces is not necessarily thoroughly

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

reviewed or available for public comment. So, that that process might not really align with organic principles or with OFPA.

And there's also been the stakeholders have noted that ion exchange may introduce chemicals into the food, that those resins do break down, and that, really, they are secondary food additives, which would fall under the criteria that we should list those resins.

And OMRI submitted some comments, basically, where they said that they consider these as secondary food additives and that they would require a petition in order for them to be considered. They note that, in addition to filtering (audio interference) agents mentioned some of these secondary food additives, including boiling water additives, anti-foaming agents, and certain enzymes. So, that's the argument that these resins should be on the National List.

And I guess the final comment in that is that, if we were to decide that they are permitted as a food contact substance, would that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

precedent apply to many other substances; and that we cannot justify allowing this loophole to one category and not set a precedent for all, a bunch of other categories.

On the other hand, there are a number of commenters that present evidence that these resins do not need to be on the National List. And in some ways, and as I noted in the proposal, some of this really gets into the legal issues that I don't feel like the NOSB has the experience or the capability to resolve. And I think if we pass this proposal, part of it is saying that the program should talk with their legal experts and decide this issue for us.

So, the argument on this side is that it really comes, in part, around the definition of food contact substances. FDA regulates the food contact substances, and those substances are not intended to have any technical effect in the final product. And it can easily be argued that the resins themselves are not needed for a technical effect. It's really just the ions that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

are attached to them.

So, the resins are, I'm going to use the word "inert," but that is probably not a great word. But they are just a holder, not actually change themselves the final product.

And it was noted by one commenter, in response to the fact that some of these other items do need to be on the National List, which I just mentioned, that there are processing technologies that can chemically change a processed product that do not need to be on the list. For example, cooking, baking, heating, the use of activated carbon for filtration, where that carbon has to be filtered out at the end. So, some of these things, I think it can be argued either way that some things we allow; some things we don't.

The nuance here, and this, again, comes back to the legalities. It was mentioned in the public comments, but it comes back somewhat to the Harvey lawsuit. And in that lawsuit, they included, interpreted ingredient as including processing aids. And processing aids are

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

something that is added to a food, for a technical or functional effect, but is minorly present in the finished food. So, you would think that would tend to indicate that resins need to be on the National List.

However, in 2002, the program had issued a policy that has continued to still be used about what is "still present in the food" refers to. And so, I'll just read a little bit from that document.

It says, "The NOP defines 'still present' as those ingredients regulated by the Food and Drug Administration as food additives permitted for direct addition to food for human consumption."

And it gives the various lists, but it says, "Secondary direct food additives are permitted in food for human consumption, except that substances classified by the FDA as food contact substances are not subject to this definition."

"Food additives permitted in food or

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

in contact with food on an interim basis for additional study, except that substances classified by FDA as food contact substances are not part of this definition."

So, this is the acting principle from the program, where they, as part of the definition of OFPA and the regulations, where the program could say that FDA's classification of food contact substances really does affect whether those materials need to be on the list or not.

Finally, and for the Board as we get into discussion on this, I'm happy to try and clarify this further. It does seem a little complicated. But, to me, it really does hinge, despite the comments that OFPA does not cover this situation, the program has said it does. There's been common acceptance of this. And so, a lot does legally hinge on food contact or secondary food additive.

There is, though, wide agreement, to finish up, that ion exchange filtration must be reviewed and approved in the Organic System Plan.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This is not something that operates in a vacuum. NOP policy information and the Handling Subcommittee's recommendation that ion exchange filtration is allowed, providing that the recharging materials are on the National List and approved by a certifier, and that the ion exchange resin may be allowed if it is FDA approved as a food contact substance and -- I note "and" -- approved in the certified operations Organic System Plan. So, there is disclosure of what this process is, and that is a very important thing that I think most our stakeholders agree on, whether they agree on the resins, the classification of the resins themselves.

We received a fair number of comments on this. Sue had her number of pages that she held up. This is one that I don't have a count on the number of pages I looked at, but it is certainly a topic that has been a discrepancy between certifiers. And that is the reason the program asked us to look at it. And that discrepancy is shown in the stakeholder comments.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

I personally -- and this is my own opinion -- and I guess it was the Handling Committee's opinion, that since we forwarded it to the Board unanimously, this proposal should be passed. It, basically, sends it back to the program and says get the legal opinion, and once you get the legal opinion as to whether this is a food contact surface or a secondary food additive, that will determine whether the resins need to be on the list or not. It's complicated.

I will open it up to Board discussion.

So, Brian, go ahead.

Brian, you may be on mute.

MR. CALDWELL: Yes. Yes, thanks, Steve.

And since I've been on the NOSB a short time, I am constantly astounded at how complex these issues are. And you've sorted through that.

I really appreciate you going through all that minutiae.

I have two questions. And one is that, since it sounded like you felt that the comments

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

were pretty unanimous that a substance that goes through an ion filtration process is chemically altered, what happens then? Whatever that material is, is that considered a non-organic ingredient then?

MR. ELA: That's a great question, and I think that's a little above my pay grade. I mean, the recharge materials themselves have to be on the list. So, what is added to the product, it's technically on the National List. But I guess I would leave that to the interpretations or the rule itself as to how that is interpreted. So, I guess I don't know that it really affects how we look at this proposal, but I would defer to how certifiers look at that.

MR. CALDWELL: Okay, yes. And my second one is that, speaking as I do from the consumer and public interest point of view, I understand a lot of this legal wording uses whether the intention is to have residues in the final product. But I think that, as a consumer, I'm really concerned about whether there are residues,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

whether the intention was there or not, especially when I see that styrene, which is one of the typical components of these columns, is a possible carcinogen, I'd be really concerned about that.

So, I guess I would like to hear your opinion on that. And my feeling is that I'm sorry to say, because I know you've put so much work into this, that I think it should go back to the Committee.

MR. ELA: I respect your opinion, and I'm certainly not going to try to change your mind if that's your feeling.

I think, to me, looking at this -- and I respect what you say, whether the intent is there or not -- you know, the TR did note that, and I think we've received other comments, that these resin materials, as you noted, there is no intent for them to go into the product, and that I think it's fairly unclear how much of, know, how those break down. I know one of the comments referred to by one of our stakeholders referred to how these resins break down, but when I read that, it was

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

really when these resins are used under conditions that they're not really designed for. So, whether it's high temperature or inappropriate acidity or alkalinity, or low temperatures, for that matter, if they're used incorrectly, yes, they will break down. But used according to their specifications as to how they should be used, they don't break down.

And again, I think the hard part about this, I think this argument can really be made for so many substances. If we cut fruit up on a plastic cutting board, I think the argument can be made that some of these plastics leach as well, or the type of o-rings used in dairy processing, or some of these other materials.

I agree with your thoughts, but I also think it really opens a rabbit hole of these food contact substances of how far do we go in determining this. And that was certainly one of the big comments, that we say this, even though FDA defines this as a food contact substance, but if we're going to say it has to be on the National

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealgross.com

List, where does it stop? Of other food contact substances, do we require everything to be on the National List? And that gets very bulky.

So, the intention, and I think really the action, of these resins is generally that they do not contribute. You mentioned styrene. Certainly, that is a big concern, but the way the styrene is chemically put in and how it's tied to things may make it behave much differently than as the straight styrene that is on the list for cancer-causing.

We'll go to other comments. So, Sue, and then, Kyla, and then, Carolyn.

MS. BAIRD: Steve, kudos to you for tackling incredibly difficult subject.

I'm wondering -- and I know all the work you've put into it, and I know your preference -- but I'm wondering if there's some way we can actually separate this into two different proposals. One being we seem to have consensus that all the other ingredients need to be listed, but we really don't know about resins,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

whether it should be or not.

I think the point that you made that we need some real legal counseling on this before we could even make an informed decision is valid.

So, I guess I need clarification. If we vote to move this and accept this proposal, exactly what are we voting on? Are we voting to say we're not going any further with the resin issue, but we would like to move forward on the other, or what are we saying? I apologize that I'm having to ask this question. I should know it.

MR. ELA: It's a complicated one. I guess we've asked for legal clarification from the program several times. We have not gotten it. So, I don't expect to get it.

I think what I've tried to do in writing this is ask -- you know, if we forward it to the program, we say, "You need the legal opinion." And depending on which way that legal opinion goes, it would be our recommendation for which way, what should be done. If the legal opinion is that these are truly food contact surfaces, then it would be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that, just like they say tables and these other things, they would not be required to on the list.

And if it's determined that they're secondary food additives, they would be required.

So, even though we're not making an exact specification, depending on the legal outcome, we are making that specification. Does that make any sense?

We could separate them. That certainly would be a possibility, but I think the question of the resins really is the thorny one.

If we separate them and come back, we're still going to have to deal with the resins. And I honestly don't see where we can go after this. If this is voted down or sent back to the Subcommittee, the only other way to go -- you know, we've said, first, that they shouldn't be listed.

That got voted down. If we vote this one down or send it back to the Subcommittee because we don't feel comfortable voting on it, I guess the next step is to say the resins do have to be on the list.

But there's going to be no unanimity in that as

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

well.

So, I guess one of the reasons I think we should pass it is to move it on to the program, because I don't see us, you know, where else we can go with this, quite honestly. So, I don't know that it is a great use of our time. I think we've outlined the issues, and we kick it back up to the program to let them deal with it. I know some stakeholders say we shouldn't do that, but I think we've outlined it pretty well in the proposal. And that's one reason the Subcommittee passed it.

MS. BAIRD: Thank you.

MR. ELA: Let's go to Kyla.

MS. SMITH: Thanks for your work on this, Steve. Yes, this is quite the doozy topic here.

So, I just want to say that OFPA requires us to review ingredients and processing aid, right, to put them on the National List. In my read of the definitions that we have to work with, I don't think that resins are, either. I don't think that they meet the definition of a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

processing aid or a definition of an ingredient.

I do think, as a bigger topic here, that it would really be in the NOSB's best interest to have a bigger policy determination on whether food contact substances are like processing aids, because sometimes they are. Resins I don't think are. So, I think that we need to sort of have that bigger determination or criteria, so that we know when food contact substances are or are not. Otherwise, we're going to come up with some other substance and be sort of grappling with the same issues. So, I do think that it would be in our best interest to have that, whether that's coming from NOP, or whatever. That would be helpful for the future.

I think we should vote.

MR. ELA: Okay. Let's go to Carolyn next.

DR. DIMITRI: So, thank you.

I mean, I appreciate all of the work people have done on this. It's very complicated and I'm not a scientist. So, a lot of the arguments

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

kind of go over my head.

But I speak as the representative for the consumer interest. There is something that is very unsavory about saying this is a legal definition that we should leave in the hands of FDA and the National Organic Program.

And I just think that, if we can't clearly say yes or no about resins in our minds, then, what does that tell our consumers in general?

And then, how does that put us in a position of upholding the integrity of the organic standard?

So, mine is like a more general, abstract question. I don't understand resins, but, to my limited understanding, it sounds to me like they should be on the list, for what it's worth.

MR. ELA: Sure. And, I mean, I, again, respect your thoughts on that.

I mean, I guess this is where we go down the rabbit hole, but water, for example, is used.

It's often softened, or whatever, by ion exchange filtration. We completely allow water in our

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

substances without thinking twice about it. This ion exchange is used in some other materials that we don't think twice about, I think -- God, I can never pronounce this -- pullalan, maybe citric acid. So, it's not like this is unheard of and it is widely accepted by consumers, even in their own homes.

And I guess I hear that you think it might be unsavory, and I do have those reactions myself sometimes. But I guess, also, being geologist, my knowledge of clay chemistry is these ion exchanges are quite often in soils, and whatever, and that's very normal.

I guess in my head it just seems to me that these resins are relatively inert. And I would say completely inert, but, obviously, that might be -- you know, I always hate to make statements that are complete.

So, to me, the equivalency is working with a table or an o-ring or PVC pipes that are used, rather than some of these other things. But that's my opinion and I respect yours.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Wood? And then, Nate.

MR. TURNER: Steve, I'm really hung up on this, and I'm saying that as a member of the Subcommittee. I've been on the Subcommittee now for a couple of months, since the last meeting, and I'm struggling with it newly, just thinking about the comments and this discussion.

And I'm wondering -- it is a question for you or a question for anybody who can take it -- but are there other examples where the Board, on the issue of food contact surfaces, is regulating, is making rulings on food contact surfaces versus the implication that, if it is a food contact surface, then it's out of our purview?

I just want to make sure I'm understanding that a little bit because I am a little confused on that, because we do talk a lot about other food contact surfaces and I'm just not -- I haven't been on the Board long enough to really know, have a full visibility on all those materials that might be in the category of food contact surfaces that we do make decisions on versus the implication that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

we wouldn't make decisions on resins as a food contact surface.

So, that's just a new question for me, Steve, that I didn't ask prior to the meeting. Sorry.

MR. ELA: No need to apologize. I mean, this is part of the discussion, is, as things come up, we brainstorm.

Actually, I don't think I can answer that specifically. I don't know. I can be taken for task for this answer, and I'm willing to, but I think -- and coming back to that 2002 interpretation by the program, it is that we don't -- you know, if it's a food contact substance, we have decided, as an interpretation of OFPA, to not touch those because it just would expand our work by a huge amount. I mean, anything that an organic product touched would then have to be on the list, and that would get very complicated.

So, I'm going to say no, but I'm sure some stakeholders out there are shaking their heads and going, "Oh, God, Steve, don't say that." But,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you know, it just comes down to how much in the weeds do we want to be. To me, again, my own opinion, are we in micro-regulation here, where we have bigger topics to look at, or not? So, my own opinion.

But, Nate, Asa, Kyla, Brian. I'm going to step out of the lead on this and step into the Chair position a little bit. I want to make sure we get everybody heard on this. I think it's really important, but we also don't have unlimited time. But I think it's important enough that we don't want to cut it off, either.

So, go ahead, Nate?

MR. POWELL-PALM: I just wanted to thank you, Steve, for sort of your take on where we're at, and the incredible amount of work that you've put into this.

I think that I just wanted to highlight, you know, there is sort of a goal. There's an end point for where the work -- where we can actionably move forward and keep progressing with the work.

And if I hear you right, I think it's that there's

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

not going to be a whole lot difference between what we can say now and what we could say, you know, with another semester under our belts.

And I think we have an incredible amount of work and leadership that is going to be leaving, you, you know, after another semester, and folks like Asa. So, I think, also, tying up those resources in time, when we don't have a clear path of like getting a lot more done on this topic -- so, that's why I personally think that we should vote.

I did want to just highlight, to Wood's point, Kyla I think is able to answer something real quick. So, I don't mean to jump the queue, but she was raising her hand as an answer to Wood.

MS. SMITH: I was, but I can wait. I remember.

MR. ELA: Okay. Well, let's go to Asa, since he was next. But, yes, Kyla, keep that thought.

Go ahead, Asa.

MR. BRADMAN: I just want to respond, actually, a little bit to you, and then, comment

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

on this.

There's some similarities here between concerns about BPA in canning products. I mean, there we have a situation where there's demonstrable leaching into the food and biomonitoring that validates that exposure. I know a number of organic producers have been in the news lately about taking phthalates out of -- looking at their processors and getting phthalates out of their product. I know that's come up with dairy, and then, more recently, with macaroni and cheese, although probably the dairy component.

So, in some ways, I do feel like that materials that can leach are within our purview.

I know I want to work on the BPA issue. This particular issue has been just complex to me, and I agree our document kind of outlines all the issues. Whether we're in a position to deal with those legal issues, I think it is a hard question.

I appreciate the comments today from those representing consumers. You know, I think

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

that's an important driver. I know I'd like to see this, and I also did volunteer to take it over for the fall, if we do continue it.

MR. ELA: Thanks, Asa.

Kyla, I accidentally lowered your hand, but you're next.

MR. D'AMORE: Steve, may I interrupt as a point of order?

MR. ELA: Sure.

MR. D'AMORE: Yes, I already had a note to myself at the appropriate break to ask you to take over the responsibility for keeping us on time, because I don't have the experience to do that. So, please accept that formally.

MR. ELA: Yes, I am keeping an eye on it.

MR. D'AMORE: Thank you, sir.

MR. ELA: So, we may have a shorter lunch period here, just as an FYI. But I think we're fine.

So, Kyla? And then, Brian.

MS. SMITH: Sorry, I was competing on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

muting things.

I was going to try to address Wood's comment. I know that like calcium hypochlorite, which is under quarry materials, is a -- I mean, not to get us into the whole sanitizers conversation, but that's a food contact substance.

And then, this just brings me to my earlier point of like why I think it would be in our best interest, because there are some food contact substances that are processing aids, and we would be required to review and put them on the list. But, again, I don't believe that resins fall into that definition of processing aids, but, again, it's not a one-to-one match, right? Some food contact substances would, and we would be required to review and approve them and put them on the list.

MR. ELA: Thanks, Kyla.

Brian?

MR. CALDWELL: Well, I guess I really appreciate all this back-and-forth, and I'm sorry to prolong it. But, Steve, you outlined that,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

essentially, the third option, which has not yet been a proposal, is that we could require that the resin component be on the list, is that right?

MR. ELA: To me, that would be the next step after this.

MR. CALDWELL: Right.

MR. ELA: We're kind of working down to the approaches. Personally -- well, I'll say what my opinion is -- go ahead -- after you're done.

MR. CALDWELL: Yes, well, my thought is that that makes sense to me to do that. If these materials are pretty benign, then they can be on the list and there's no issue. And I think that it could be done with a sufficient read period, so that it didn't disrupt people's processing plans for the next couple of years. It wouldn't destroy the processed food, organic food industry.

So, I guess I would like that to be a possibility to be entertained. And the way I understand it, the only way that that could be done would be to send this back to the Committee. Does that seem right?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: That is correct, yes, if it went back to Subcommittee. But, you know, I guess I would, again, very much respect your opinion, but I think if you look at the comments we have received, I am going to guess that we would receive pretty much the same comments and end up in the same quandary, that a number of people would argue against that they should be listed, and again, a number of people would argue that they should.

Part of this issue, too, and it gets a little complicated, is that secondary food additives were identified by FDA a number of years before food contact substances were. So, there was a period of time where things were listed as food contact substances, and, in fact, some of these resins fall in that category. I'm sorry, I said that wrong. There was a period of time where things were listed as secondary food additives because there was no listing or food contact substances as a definition did not exist. And so, once food contact substances became a definition, resins approved after that were put in the food

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

contact substance list, but the FDA didn't try to look back and say, oh, things that you find as secondary food additives are now moved forward to food contact substances.

So, because of the way the regulatory process worked and the timing, we do see some discrepancy of how they're listed, but those originally listed as secondary food additives might have been listed as food contact substances if that category had existed.

And I guess I'm nervous, if this kind of comes back to a List 4 inert discussion, where we had a huge pushback from the industry -- and I don't know how much you listened to that, but there was a huge concern that, if we voted to delist List 4s, or if we -- I'm going to say the analogy is, if we say you have to list resins, that the disruption to the industry would be huge.

And I don't know -- I guess this is a question for Jenny -- but I really don't know if the program has regulatory authority to say we're going to have an extensive time period where we

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

can review these things. It sounds like a great concept, but I'm not sure, while they're being petitioned for listing, that they could continue to be used, because we haven't specifically put them on the National List.

So, Jenny, do you want to chime in on that?

DR. TUCKER: Sure, I'm happy to chime in.

And it takes us right back to the very beginning of this process. So, this process came to the Board because there was a conflict between certifiers, since certifiers have the same struggle that you guys did in thinking about this issue. And it led to different decisions.

And this is my chance to do a huge shoutout for certifiers, because the things that you guys have been struggling with on this issue, they struggle with every day. And so, certifiers have made these decisions as to whether to allow this or not. And they were mixed on that.

And so, that's why it came to the Board,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

was because it came to us through a certifier conflict. Certifiers had made different decisions in good faith, just like with paper pots.

So, the status quo right now is that certifiers are arguing this. This is a source of inconsistency. They have interpreted it differently. We, however, did not issue a Notice of Noncompliance to the certifiers, to any certifier on this. So, the certifier that was more liberal in their allowances or provided more allowances on this topic, they did not receive a Notice of Noncompliance.

So, that kind of tells you that we believe that the decision that the certifiers have made, particularly the ones who have provided greater allowance, that we don't believe they did something illegal, because if they did, they would have gotten a noncompliance.

And, in fact, sometimes material conflicts are handled just that way. A certifier may an error; they made an illegal decision, and we give them a Notice of Noncompliance, and they

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

have to fix it. And everybody has to change their practices accordingly.

That's not this case. So, at this point, you have certifiers doing it both ways out there, and we have not indicated that one of those is noncompliant because, similar to paper pots, people made these decisions in good faith. And these are really hard decisions and have very compelling arguments on why they thought it was legal.

So, that leaves us in either a position like paper pots, where if the Board were going to work on it, we would -- we're not going to change something that's going to have an economic impact without rulemaking. And so, we would continue to allow the status quo while the Board was working on it.

Or, if we did rulemaking, if you send us a recommendation on this and we do rulemaking, then there would be a lengthy public comment process and likely an implementation period. So, if a rule was finalized to change the current status

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

quo, industry would need time to adjust practices and equipment, and they would be given an implementation period.

So, those are the two ways the timeframes provide, either a continued allowance because people made decisions in good faith, and certifiers have a hard job and no one did anything wrong here as far as we're concerned legally. They make different decisions, but that doesn't mean somebody was wrong and somebody was right. So, that's one path, would be to continue the allowance that's already in practice. Or the second would be to do rulemaking, and then, provide a long implementation period.

Does that answer the question? It's a little bit more context, but I think that's important because we haven't given you that many of these material conflicts. And I think it's really important to remember that certifiers are making these decisions every single day. And so, this has been a very public process, which is great.

Sometimes there are conflicts and this is what

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

happens in good faith.

MR. ELA: Jenny, I know Sue has got a comment, and I know we're going to need to move on, but I have a question on that. With paper pots, you -- the program, not you personally -- were going to disallow use of them because they were not using -- because they did not meet the newspaper definition. And you didn't have authority to allow use of them, once you all determined that they were not technically allowed.

The only way we were able to get around that, so that they could continue to be used, was that note that, if the plant was taken out of the paper pot, the paper pot then could be recycled and put back in the ground. And that seemed like a pretty important thing to the program to give you regulatory cover to allow their continued use until we decided that issue.

I don't quite see the difference between that and this. If we say resins need to be listed, just being technical, how do you within your authority continue to allow them to be used?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

DR. TUCKER: Well, you could make a recommendation. Right now, they are allowed to be used. So, the status quo applies. They are allowed to be used because certifiers have interpreted -- again, we believe in good faith, and looking at that decision process, or else it wouldn't have come to you in the first place. We would have issued a Notice of Noncompliance. Based on our analysis of the certifier conflict, we determined that those certifiers had a legally justifiable position, and that's why it came to you.

So, given that that interpretation was made by the program in sending it to you that we thought the interpretation the certifiers made was valid, that's why we wanted you to weigh in on it as far as we're concerned. Therefore, it is allowed until a rulemaking made it prohibited. So, your recommendation would not change that decision.

And again, I think certifiers made reasonable decisions here that even this group has

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

articulated in terms of, well, we're not sure we think that these should be, need to be listed. And so, this is just a really hard topic.

MR. ELA: Well, I don't fully understand, but I trust your interpretation of this. So, I don't need to question it.

So, we've got Sue, and then, Mindee. And then, I know we're starting to become time-constrained. So, go ahead, Sue.

MS. BAIRD: Right. I heard, Steve, your comment that sometimes there may be contact, maybe not, depending on the process of the ion exchange of the resins. And I hope that that's what I heard, interpreting what I heard.

Is this somewhat analogous to boiler additives? Because sometimes boiler additives never have contact with the product. Sometimes they may be in a jacketed system. Sometimes they would. But, nevertheless, the certifier is required to look at those boiler additives and determine whether they're compliant or not. Now I'm asking the question. I don't know. So,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that's the reason I'm asking.

MR. ELA: Sure. No, great question.

In fact, we've personally run into that because we have a steam kettle that we use on our handling side, but the boiler avenues and the steam kettle are just completely physically separated from the product. So, there's no interaction. So, our certifier interprets that as, you know, they don't need to be added to the list because there is no interaction.

But boiler additives where the steam does potentially come in contact, yes, they do need to be listed. And I think those fall in the secondary food additive category.

MS. BAIRD: Exactly, exactly.

MR. ELA: They're not defined as a food contact surface.

MS. BAIRD: That's right.

MR. ELA: So, here, that's the break right there: secondary food additive/food contact surface. I apologize, we've used food contact substance versus surface, and I believe

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

surface is the correct term.

MS. BAIRD: Right, right. So, is there a way that we could move forward with that type of differentiation? If it has contact, it's the process, which they would submit to the certifier. If it's determined to have either direct or indirect contact with the food, then they must be listed. But, if not, then they are allowed. And again, I'm asking a question because I have not done research on these that you have.

MR. ELA: The resins would have contact with the food because that's how the ion exchange occurs. The product goes over the resins and the ions, and then, they are exchanged. So, the question is, like you say -- there is no question that the recharged materials that affect that ion do need to be on the list. But I guess the question is, do the resins have a technical effect on the food or are they just there to hold the ions? And my sense is they're just there to hold the ions; they do not have a technical effect on the food -- but, coming back to legal definitions

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

again.

So, let's finish up with Mindee, and then, we will go from there.

MS. JEFFERY: Thank you.

A dense subject and I appreciate your relentless, Steve, and everyone else pursuing this one.

I think, for me, I'm a little both ends on do we go back to Subcommittee or do we vote on this. I love Dave for pointing out that we're doing a weighted sensitivity analysis all the time.

And I feel like, in the sense of representing what a consumer would say to me on this subject, I feel like when I'm able to land it for the consumer that the FDA has authority over something like this, and that's how we move, it really works for them.

And so, I like that ethos of really clear understanding around what the resin subject is.

And I see the path that you're making, Steve, in that if we vote this -- correct me if I'm wrong -- if we vote this through, that we are going to get some more information back about the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

resins, and then, be able to move forward on some clarity.

Because I do want to stay in touch with the stakeholder feedback to stay in touch and stay involved in the decisionmaking around this, and that our process is really important to them and being involved is really important to them.

So, I feel like we have a really clear consensus from the community on the recharge, and we still have this question on the resins. And so, if we could make short work in this one last semester of making a proposal that clearly lets us vote on the recharge isolated from anything else, and then, either in the time interim be able to hear back on the resins questions and have that be like an FDA call, or a direction from the program call, and then, we vote on that, I feel really comfortable that I can stand there and say to a consumer, "We did our due diligence. We know what the legalities are. This is ours and this isn't."

Somehow, that's where I would want to land. And so, if going back to Subcommittee gets

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

us to that, then that's what I would want to do.

If not, I'm ready to vote.

MR. ELA: I guess my, again, personal response as a Board member -- I don't want to represent anybody else -- is that I think I haven't heard anybody in the certification community grouse about the recharge materials needing to be on the list. I think certifiers, as far as I can see, are in agreement on that. In some ways, do we need to reiterate that? No, there's consensus on that one.

It really is the resins issue. I mean, there's no doubt that, to me -- I mean, some of these resins are listed on the food contact surface list. That is clear. So, I think, then, it becomes legally, again, how the program takes that and runs with it.

So, I'll just say again I would have written this proposal differently if I didn't come down on the side of it is beyond our capability.

It really is a technical/legal definition at this point as to which way they fall. I think the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

certifier discrepancy is part of that, you know, that some feel one way; some feel another. And Asa has offered to take it over, which I'm fine with.

If we sent it back to Subcommittee, I think we're going to end up in the same debate.

If we say, okay, resins need to be listed, then we're going to be back in the same scale of justice that one side is going to say yes and one side is going to say no, and we're still stuck.

I don't see a way to create an unanimous vote either way on the Board, honestly. But I don't know if that answers your question at all.

MS. JEFFERY: Well, I mean, I think it's a process, not philosophical question, that I'm driving at right now. I do agree with you that we're pretty agreed on the recharge across the Board, and that in the sense of going back to Subcommittee, is it going to be functional in the process and help us with both the stakeholder concern that this Board stays in touch with the process really clearly and the concern of the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

consumer that we're representing? I feel really good about like letting go of the resins being on the National List if we have that clear statement.

And so, I think it would be functional to go back to Subcommittee if we think we can get that. Because we're okay with status quo operations right now, and I think it's okay for us to really get this right, given the level of complexity that we're dealing with and how much energy are putting towards this.

And so, for me, the question is, if we go back to Subcommittee, can we get that umbrella from the FDA and/or from the program, so that when we go back to our stakeholders, we're like, "Yeah, this isn't ours. We're clear on that. So, the resins aren't on the National List." Or, if we can't get that clarity, then I don't know what the answer is.

But I do like this notion of like we're clear on recharge. Let's clearly vote on recharge, and/or can we get it in any more clear form from a regulatory standpoint about whose the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

resins is?

So, for me, the only functionality of going back to the Subcommittee is, can we get that and land it in our one more semester of the collective intelligence who's been involved with this conversation for so long on the Board?

MR. ELA: Yes, and I hear that question, and my short answer would be no. I don't see that we're going to get that. The TR said, essentially, there's no known or no literature saying that these break down and adulterate food.

Some of our stakeholders have said, "Yes, they do." Others have said, "No, they don't." I don't think we're going to get science/scientific articles that are going to clarify that one way or the other. I think, if so, we would have already gotten them.

So, again, my feeling to your question is, no, we can send it back and there's going to be no quick fix. We're going to be right back in the same --

MS. JEFFERY: I think my question is

more towards regulatory clarity, like in the sense of interagency help, than it is towards the science on the resin issue, you know.

MR. ELA: FDA has made their position clear. I don't think they're going to change it.

We could go to them and ask them these questions, but they're just going to point to their list and say, "Well, it's there."

So, again, personal opinion, I don't see that we're going to get any more clarity on those issues by waiting. I don't think anybody is going to go further on that. So, again, my interpretation.

But one last thing, Kyla, and then, we should move forward.

MS. SMITH: Yes, I mean, yes, the status quo is fine, but, ultimately, it's not a great place for us live in, right? So, I do think we need a direction one way or another, so that certifiers can be aligned at some moment in time, whenever that is.

And so, I don't know. I guess I'm just

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

wondering -- I know we've talked about this, and it seems to be that there is some appetite to take it back to Subcommittee if we can get some help.

So, I don't know, Jenny, if you're able to speak to that at all. Like is that a possibility? What's going on there? Or not? Like can we count on that? Can we not count on that?

DR. TUCKER: I mean, I think, yes, when we sent our original notice to the Board that actually constrained this, we did share a specific interpretation. And all this was in the Board agenda that you got. We got responses back from the certifiers that said that they disagreed with our interpretation. And we, in reading their explanations, they did seem to have a legally defensible basis.

And so, I don't know if we're going to get more clarity from FDA or not. And so, I think it would be helpful to know, if you do send it to the program, what do you specifically want us to do? Are there sort of specific questions you would

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

like, and then, have it come back to you? Or are you kind of punting it to us for good and saying, "Just be clear on whatever the decision is and what the basis for that decision is."

I'll be honest, if we made a decision that was more constrained, because that's what we tried to do the first time in making the decision, that would require a rulemaking. Essentially, in telling the certifiers our very first thing, our first response, the feedback indicated that there would be an economic impact if we constrained it.

And so, help us in your cover, if you send it to us, help us in your cover sheet. Do you want it back after you learn certain things and tell us what you want to learn, or do you just want us to do the best we can to come up with the best legal determination and just be very clear on it, which would probably mean some type of notice to certifiers with sort of an interpretative analysis. But, again, making it more constrained than it currently is would require a rulemaking.

So, we would really have to look at

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that. I'm not going to make a commitment on the phone on that. There's an awful lot -- I think I would place inerts higher on the priority list than this, and we only have so many people who are working on materials. We've got a lot of people working on materials, and I don't see this as something -- I'm going to be honest -- that would be a high priority right now, given competing items. As Steve said, there's only so much attention we have.

MR. ELA: So, I'm going to cut off discussion. I think it's been great. Yes, I think it's all been brought up. You've heard what Jenny said.

So, we have two paths here, just to be clear to the Board members, especially the new ones. I can entertain a motion to send it back to Subcommittee. If that's seconded, we can vote on that. If a majority of the Board votes to send it back to Subcommittee, it goes back to Subcommittee, and then, we have the next three or four months to try and come up with something

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

different, or I guess the same, and send it back to the Board again as a proposal.

If the vote to send it back to Subcommittee fails, then we would proceed to the vote on the proposal as is. If nobody wants to vote to move it back to the Subcommittee, we will move to the vote on the proposal as it now stands.

So, does that make sense in how the process works?

(No response.)

I guess, as I'm thinking about it, there is one other process. We could defer the vote until tomorrow and let it kind of sit overnight for people, not to complicate things.

Brian, you have your hand up. Is it a procedural question?

I'm not hearing you, Brian.

MR. CALDWELL: I said that we vote tomorrow.

MR. ELA: We can just, as consensus, say that we're going to move it until tomorrow.

Okay?

Carolyn?

DR. DIMITRI: I was going to suggest that we give ourselves another night to think about it.

MR. ELA: Okay. Does anybody on the Board object to deferring the vote until tomorrow? This is your chance to say yes or no.

MR. BRADMAN: I was going to, but if people feel they need the time, I won't.

MR. D'AMORE: Go ahead, Asa.

MR. BRADMAN: No, I would like to get this done with, but if people -- you know, it's complicated and it's new to a lot of people, and we can wait until tomorrow.

MR. ELA: Okay. What I'm hearing is that the Board will defer this vote until tomorrow at the end of the day.

So, with that, Jerry, I will move on. We can move on to the next item, and I will try to make up the time as best we can.

DR. TUCKER: Hey, guys, every meeting needs some kind of cliffhanger, right? So, this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

will be the cliffhanger of the meeting.

MR. D'AMORE: Okay. So, our next item is the sunset of agar-agar, reference 205.605(a), a food additive. And it will be presented by Kim Huseman.

MS. HUSEMAN: Do we want to go ahead or are we going to take a lunch break first?

MR. ELA: We will go until -- oh, gosh, I've got to look at this.

MS. HUSEMAN: I can do the substance, and then, we can --

MR. ELA: Let's do --

DR. DIMITRI: Michelle is sending us to lunch.

MR. ELA: Say it again?

MS. HUSEMAN: Okay.

MR. ELA: Let's do two. Let's do agar-agar and animal enzymes, and then, we'll go to lunch.

MS. HUSEMAN: Okay. So, agar-agar. Reading through the public comments -- okay, this one I thought would be pretty straightforward and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it's got a few complications to it.

So, agar-agar, the overwhelming undertones coming out of the comments were that, in some form, agar-agar is supported to be relisted, but there's some depth in background here to talk through. And I'll talk through it via public comments.

So, it has to do with how agar-agar is derived. Most importantly is where there seems to be a little bit of contention amongst some of the commenters. There's two forms of agar-agar.

It can be made from Gelidium species, which is nonsynthetic, while agar-agar made from Gracilaria species is synthetic. And it's how the curing process, how the product is derived, and then, put into its final state.

So, there were comments made that are supportive of the nonsynthetic species, but we would like to see annotation stating from Gelidium species processed without alkaline pretreatment, and then, opposing to the listing of the synthetic one.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

And some commenters said that, no, there is not enough commercially available nonsynthetic or organic form of agar-agar, where others said that there was. So, there's multiple sides of those comments that was seen. One certifying body mentioned that they have five operations that are actually using a certified organic agar-agar.

Beyond that, I would say, to go back to the beginning component of this, it's that agar-agar products that contain it include dairy-free shredded cheeses, breakfast cereals, rice snacks, pudding, personal hair products, amongst many more.

And then, just to finally close with opening up the can of worms around the broader scope of marine materials, where agar-agar falls under a marine material, what's the Board's stance on that broader, overarching component and how does agar-agar fall into that?

So, that's pretty much the roundup of the public comments in its entirety, but an

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

underlying tone that I'm seeing here is there is support for agar-agar to be on the National List, but there needs to be some work on how it's worded and annotations accordingly as we go forward, maybe as a work agenda item.

MR. ELA: All right. Are there questions or comments, discussion for Kim?

(No response.)

All right. Let's move on, Jerry, to the next one, and then, we will break for lunch.

So, Jerry, if you would introduce animal enzymes and read this for us?

MR. D'AMORE: Do you think unmuting would help?

MR. ELA: It might, yes.

MR. D'AMORE: Yes. A second sunset, animal enzymes, reference 205.605(a), and also presented by Kim.

MS. HUSEMAN: Thank you, Jerry.

Animal enzymes such as rennet have been used in the manufacturing of various cheeses and other dairy products for centuries. In order for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

milk to coagulate into cheese, enzymes must be added to cleave milk proteins and cause the required coagulation.

Across the board, there's support for animal enzymes remaining essential for organic food production and support to relist. There are, also, some comments that discuss the availability of organic rennet. So, products that conform with organic livestock and the feasibility of utilizing only product that has been derived from organic animals. There is clear understanding that this may not be commercially available today, but challenge what are the barriers and how can we overcome those barriers in order for organic rennet powder to be organic. There is a known entity that does have organic animals utilized in their rennet processing, but it's very, very small-scale.

One commenter said they use animal enzymes in the form of lipase in the production of their blue cheese, and to the best of their knowledge, there is no lipase formulation available direct from organic livestock.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So, these are considerations to the stakeholders, that since the last review, have organic animal enzymes become commercially available? And the answer to that right now is, no, but can we challenge these barriers?

And then, if we go into the ancillary substances that are used in animal enzymes, it was noted by one of the commenters the TR did not fully investigate different ancillary substances; that it was very restrictive to just rennet and egg white lysozyme; that the details around catalase and trypsin are not readily available through the TR and needs to be evaluated.

And then, I guess lastly is that, is there an environmental impact? And although the TR states there isn't, there was a commenter that wanted to challenge that understanding saying that solvents, acids, and bases are used in the extraction formulation, and that disposal method and releases are in them.

Again, animal rennet, the underlying message is it's used for cheese and there's not

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a substitute, but can we challenge that with organic livestock production being required to use as a possibility or have the research to understand that a little bit better?

And that's all I have, Jerry.

MR. D'AMORE: Thank you. Well done.

MR. ELA: And any questions?
Comments? Discussion?

(No response.)

It looks like you're off the hook, Kim.

MS. HUSEMAN: Thank you.

MR. ELA: Oh, wait. Sue has one. Sue has one. You're not off the hook.

MS. BAIRD: No, just a comment. I know that the challenge for organic animals is not so much that they couldn't raise the animals, but that there's just not sufficient enough processes that are certified organic or really, at least in the Midwest, have an economic reason to become certified. So, it's not that there would not be organic animals. There's just not an organic processor for those animals.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. HUSEMAN: I think that's very valid, Sue. And the economic component to it is a huge piece of that. What's the overall incentive? It seems fairly random for production.

MR. ELA: Now you're off the hook, Kim. I figured I'd help you get your two done before lunch. So, you wouldn't have to be stressing or anything, not that you are anyhow.

So, we're going to take just a half-hour lunch break now. If everybody can come back at, it would be 12 after the hour. We will continue to work through handling things.

So, thank you.

(Whereupon, at 2:42 p.m., the foregoing matter went off the record for lunch and went back on the record at 3:13 p.m.)

MR. ELA: I think we will restart since it is 12 after the hour.

Michelle, are you ready?

MS. ARSENAULT: I'm ready, as is Jared and Devon.

MR. ELA: All right. We will take up

where we left off. Jerry, it is in your court to start.

MR. D'AMORE: I don't have visibility to the full screen, but I'm assuming we're all here then?

MR. ELA: We will have Michelle do the count, but this is when we said we would do the start. So, go ahead with calcium sulfate.

MR. D'AMORE: Well, I see Wood. So, I'm heartened that we can continue.

MR. TURNER: I'm here.

MR. D'AMORE: Yes, I see you.

MR. TURNER: I'm ready to go.

MR. D'AMORE: Good for you.

So, our next sunset is calcium sulfate, mined, reference 205.605(a), and it's presented by Wood Turner.

MR. TURNER: Thanks, Jerry.

So, we have calcium sulfate, mined. And the reason it's called out that way is because it's listed as the natural sources of it from a mining perspective. It can be produced through

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

synthetic sources. It is mined or a natural form of calcium sulfate.

It is not annotated currently, and it will come up in a second when I give you some feedback from the stakeholders. Its primary use is as a coagulant in tofu manufacturing. It is considered essential by some to soften silken tofu types. It's also used as a yeast food in dough conditioner or water conditioner. It's been using as a firming agent in canned food, a gelling ingredient. It's been used in baking powder, and interestingly, it's used in industry for bone regeneration.

As I said, it can be obtained from natural or synthetic sources, and the listing is restricted to those mined sources, of which gypsum is the primary source. You know, gypsum is mined in an open quarry or via deep mining. It is ground and separated and it can be sold in a pure form.

It may contain some impurities of calcium carbonate and silica. Interestingly, it can form as a byproduct from many different kinds of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

processing, including emissions from fossil fuel power stations. The material is generally recognized as safe. Again, we are talking about the mined version of calcium sulfate.

It does have some restrictions internationally in terms of how can be used. In other words, some annotations and minor other international bodies for how it can be used, specifically on the coagulation side of things.

I do want to flag that there are environmental questions related to the mining of calcium sulfate. A lot of calcium sulfate, as far as we understand, comes from very specific areas and has exposed several public land areas, one that's been the source of a lot of debate back and forth, political debate, over the last several years, Grand Staircase-Escalante National Monument in Utah.

It's very unclear whether the activities related to calcium sulfate are having landscape damage, but it does beg the question whether there's an opportunity to potentially look

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

deeper at some of these environmental issues as a result of the fact that there has not been a TR on this or any kind of technical report on this in 19 years. And we are specifically talking about the mined aspects of it.

A lot of feedback in the past from the community. In some ways, it's kind of similar to what we're hearing today. Some suggest that they would like to see it retained. There may be some other materials that are available for use. Others have asked in the past for annotation related to coagulation of bean curd and the like, that kind of feedback. Ultimately, in 2016, the Subcommittee advanced it for relisting and the Board upheld it, obviously.

Current feedback, we have certifiers and stakeholders who are suggesting that there are fairly limited numbers of folks in the database, members and certified clients who are using calcium sulfate. Some have actually reported that there's zero who use calcium sulfate, but, again, that may be a geographic distinction more than anything.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Some organic farming organizations have supported relisting pretty clearly. And again, I want to take that certification, sort of limited numbers, zero numbers. Many members, I mean there's a big variety based on sort of where, obviously, processing locations for tofu and other materials are occurring. It may be a reason why some of the certification varies from certifier to certifier.

Again, another fairly strongly worded support for some of the environmental considerations, urging some people to look at some of the environmental concerns, either through a TR or another means, and a strongly worded concern that we should go ahead and annotate this listing for coagulation in bean curd specifically.

So, that's the general feedback I hear today. I would just suggest to the community that there is information out there that could give us a clearer sense of some of the real implications from a landscape damage perspective on the mining side of things that would be really useful.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So, that's what I have at the moment,
Jerry.

MR. D'AMORE: That's good.

Steve, are you there or shall I ask for
questions and comments?

MR. ELA: I'm here.

MR. D'AMORE: Thank you, sir.

MR. ELA: Are there questions,
discussions, comments?

(No response.)

I am not seeing any. So, we'll turn
it back to you, Jerry.

MR. D'AMORE: Well, the next sunset is
carrageenan at 205.605(a), and it's mine to do.

I'd like to start by saying that a
stakeholder, through written comment, pointed out
that my opening statement under "use" is
misleading, and I actually agree. And I will state
that carrageenan is not Irish moss, but, rather,
an extracted form of Irish moss. To be clear,
there are other edible red algae from which
carrageenan can be extracted. I need to make this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

same distinction in the second sentence in our discussion document.

On this one, considerable space in our discussion has been devoted to environmental issues, and I'd like to give the following summary:

The vast majority of source material is farmed outside of the United States. And I would ask, what can we realistically do to influence farming practices?

Two, while earlier farming practices in specific regions did have measurable negative impact on neighboring habitats, these impacts were noted, along with specific remedies. Again, what can we realistically do to monitor and measure such progress?

Three, this is a food source requiring no fresh water or chemical inputs. There is good reason to believe that properly placed production sites could actually yield significant benefits to the environment; i.e., remove impurities from the water, buffer against wave action, help stabilize marine pH, et cetera.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Concerning international acceptance, none of our six commonly referenced international organizations bans carrageenan, and IFOAM actually allows carrageenan as a food additive without annotation.

The next issue has given me a bit of problem because I've had some late, i.e., posts written and oral comment, petitions, if you will, to relook at that. And I'll get to that at the end of this report. So, what I'm reading to you now is what I had before the interest groups showed themselves.

So, quite arguably, internally for us, we have discussed human health concerns more than anything else. The largest part of this Subcommittee review is devoted to the long history of the debate. It appeared to me that the original studies were confused by evaluation of poligeenan rather than carrageenan. Poligeenan is a degraded form of carrageenan.

Be that completely true or not, I take comfort in the 2014 Joint FAO/WHO position that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

says, quote, "New studies allay the earlier concerns of carrageenan, which is unlikely to be absorbed, may have direct effect on the immature gut." This was in reference to carrageenan's use in baby formulas.

Going to the questions we asked and stakeholder responses, it's what I would consider rather light. We had somewhere around 15 responses, written and oral. A full 70 percent were in favor of relisting. Two just reported as not using. But the naysayers, again, had some compelling arguments.

So, to our stakeholder questions, the first one I answered already, which is, "Should there be an effort to outline best management practices for seaweed farming?" And just because I answered it, I'm not at all suggesting that my answer is right. I just don't know how we can control it, and so, how much weight should we give to that at all.

The second which was, "Do seaweed farming practices for carrageenan production

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

conflict with the proposed marine rules/guidelines passed by the NOSB last year?" On this question, no stakeholders responded at all. And I guess my short answer to that would be it could, but not yet. And that's from my reading, which, again, you may need to help me with. I see the guidance focusing mostly on sustainability and whether marine inputs should be given organic certification. So, the document more seems like a thought piece for future guidelines, rather than something that would impact our decision on this now.

The third question, "Is carrageenan essential for production of organic products? If so, which?" And I'm pulling them all together here, and I think I'm taking care of the stakeholder group with this explanation. Carrageenan is not necessary for the production of any organic products, but it is highly desirable, as it improves emulsification and mouthfeel in a good number of dairy and plant-based dairy food replacement products.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

"Are carrageenan alternatives available to replace all current uses?" I would suggest that guar gum and xanthan gum appear to be somewhat interchangeable, but, again, you get back to some of the subtleties of functionality on that one.

"Would lack of carrageenan availability limit the opportunities to produce vegan products?" No, but it may, again, come back to increasing the appeal of really alternatives in terms of emulsification and thickening.

So, this is the one where I gave an answer based on public written and oral comments.

And the question is, is there new information on the safety concerns of carrageenan? And my original answer was the claims about carrageenan health impacts are increasingly likely due to confusion between carrageenan and poligeenan.

I, myself, as I go forward with this, have been counseled by several folks that I respect that I need to look at this more carefully and take into consideration the sources of the yeas and the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

nays on that issue.

So, that's the report, folks.

MR. ELA: All right. Discussion, comments, questions for Jerry?

(No response.)

Jerry, I'll just ask one. Oh, wait, Asa is first. Go ahead, Asa.

MR. BRADMAN: Sorry, go ahead, Steve. I'm having --

MR. ELA: That's fine. Go ahead.

MR. D'AMORE: You're on, Asa.

MR. BRADMAN: Okay. Well, one thought I have from this material -- and this is maybe kind of a more philosophical issue -- but kind of the idea of, I think it's called stare decisis, which they use to grill Supreme Court nominees about precedent. And, you know, a prior Board recommended removal of this. And what level does it have to get to for us to potentially go against that decision? I guess that's something I'm just putting out there to the Board.

Of course, with sunset reviews, we're

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

always reviewing them every five years, but this was unique where there was a recommendation to remove it, which did not take place, and we're deciding on it again. And I almost feel at some levels that we have to respect the earlier decision. When we review a new sunset, there's potentially new information available, and we do sometimes reconsider things. But this was a fairly concrete and large majority recommendation that did not get followed up on, and that's caused issues with us on other votes in my tenure. And I just put it out there about where people feel about that.

MR. ELA: No, and thank you for that comment, Asa. Would it be fair to say that what you're referencing did deal highly with the human health concerns of the material?

MR. BRADMAN: Well, the decision, the last recommendation.

MR. D'AMORE: Yes. No, the one where we voted to reject and we were overridden. I mean, the rejection process, then, was that, to your

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

recollection, a human health-generated concern or is there broader --

MR. BRADMAN: I think human health was the driving factor. That was a little before my time. So, I've just seen the older materials. I didn't actually participate in that.

MR. D'AMORE: Yes, Asa. Yes, so when I made reference to sort of late-hour comments from people I respect, it's all around that. And I've already committed to myself and to this group that I will look at it or we will look at it, and we'll have discussions on that.

MR. ELA: All right. Amy?

MS. BRUCH: Sure. Thank you, Jerry.

There was one comment that stood out to me on this. Well, there were several, but the one was that maybe we need to look at considering this as a synthetic substance --

MR. D'AMORE: Uh-hum.

MS. BRUCH: -- instead of a nonsynthetic. I know that's a little outside of the sunset process, but I just wanted to bring that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

up.

MR. D'AMORE: Yes. And thank you for doing that.

In my reading, looking at the entire back-and-forth, I sort of blew past that and respect your thoughts on that. But it appeared to me to be fairly well considered on the last go-around, but I'll put synthetic on that list, too.

MR. ELA: Other questions?

(No response.)

And I'm trying to remember, Jerry, that came on right after -- well, it was just preceding when I got on the Board, and I know it was a little bit of a hot-button topic because people were still talking about it when I came on.

And I think it was human health, and it's been noted to me that it was also essentiality as to whether there were alternatives available for it, in addition to the human health.

And then, I believe in rulemaking, or I don't know if it got to rulemaking, but it was

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

we can't consider cost, but the program has to consider cost in rulemaking. And so, I think that may have, the cost impact may have derailed it, just as an FYI.

MR. D'AMORE: Yes, I would concur with that last statement entirely. As it went through the process, it was, to me, anyway, quite evident that the cost impacts did come in at the NOP level.

Essentiality surprises me. As I've gone through it, I think that's one of the things that pretty clearly is demonstrated that there are other things that could replace it, but, in terms of functionality and essentiality, that one seemed to be pretty clear to me.

But, again, that's why we're doing this. So, we've got three areas that I think we should be looking at. And for me personally, the human health concerning one is back on the radar.

MR. ELA: Fair enough. I guess I'd like to see as part of the discussion for this summer -- and I think you may have covered it -- but a number of manufacturers have removed carrageenan

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

from their products, just kind of based on our recommendation before.

And so, I guess, are we down to the products that absolutely require it or has the removal of it kind of demonstrated that it's not essential? And I don't expect you to answer that.

I would like to see that covered.

MR. D'AMORE: No, but you've given segue. I actually have individual comments, too.

And to that particular point of human health concerns, and the fact that it's coming up again, and specifically, Steve, to the fact that, you know, that we should be discussing it, the quote was, "Hey, it takes a long time to overcome bad press." And it was the bad press at the time that prompted people to take it off of their inventory.

I also have one other one concerning functionality: you've got to trust that the functionality is there because nobody would eat this stuff -- they didn't actually say, "stuff" -- because it is delicious.

(Laughter.)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Fair enough.

Mindee has got a comment.

MS. JEFFERY: Yes, thanks for all the work on this subject.

I definitely talked to a lot of consumers about this one five years ago. And I think mouthfeel and how a product stabilizes on the shelf impacts consumer perceptions. And I think there's an interesting tension of, do we keep carrageenan because it makes things feel nicer in your experience and because we don't want to keep shaking up this kind of issues? And so, I kind of want to just hear a little bit more on that front, as we go into the next meeting and, also -- I'm sorry, I just lost my train of thought there.

MR. D'AMORE: That's all right. While you're thinking about it, I mean, that piece of it started with chocolate milk back then.

MS. JEFFERY: Yes.

MR. D'AMORE: And so, you're raising, in my mind, the question from pure mouthfeel to what are our responsibilities, and I agree with

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that.

MR. ELA: Mindee, did you think of your other --

MS. JEFFERY: Well, no, I just like the contemplation that Asa brought up, too, in that a previous Board voting to delist. It has an impact on me. And so, I think I was just mulling that one over, too. So, thank you.

MR. D'AMORE: Thank you.

MR. ELA: One last thing for Kyla.

MS. SMITH: Yes, I appreciated your comment, Steve, about are we down to just, you know, whatever. Yes, there are a lot of products that don't include it, whatever. But there may be some, like vegan marshmallows, or something like that.

I don't know; would those just turn into like vegan marshmallow soup or something? I don't know. I would rather have a marshmallow that I could make a s'more with.

So, anyway, just try to think about what other things like really do need it. One could argue vegan marshmallows don't need to be made as

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

an organic, but I would argue against that. I have lots of friends and family that are vegan that would prefer a vegan marshmallow, or an organic vegan marshmallow than a non-organic vegan marshmallow.

MR. D'AMORE: Well, you so closely mirror one of my call-ins on this one with exactly what you said. And they actually said, "marshmallow soup". So, you're on target with that.

MR. ELA: Well, I personally really dislike marshmallows in any form.

(Laughter.)

MS. JEFFERY: I thought of my other point, if you don't mind.

MR. ELA: Go ahead, Mindee.

MS. JEFFERY: The commenter that said something about, if it's in ice cream, it might not be on the label, I don't know, I can't remember exactly who that was, but that's a point I'm interested in.

And from my long research in retail, I've never seen an organic vegan marshmallow, and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I think it's the gelatin.

So, Nate, can you work on some organic gelatin for us?

(Laughter.)

MR. POWELL-PALM: Got it coming.

MR. D'AMORE: So, you're specifically asking about labeling and the identity of the product on the label?

MS. JEFFERY: Yes, because I thought I heard that in like oral public comment maybe, that like if they're using it as a processity, it might on the label. And I don't know if this is accurate. So, I'm sorry, my recollection is nebulous here.

But if that's an issue, I find some validity to the health concern folks because I do think there's a contingent of folks that do react negatively. I don't know if that's a reason for me to prohibit it. I mean, I'm gluten-free and I don't expect the rest of the world to be gluten-free, but I do love how much market development there is on gluten-free. And so, if

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

there's a transparency issue, I would love to substantiate that and understand it really clearly.

MR. D'AMORE: Yes, and that's fair, Mindee. I said at the beginning of the public comment piece that 70 percent were clearly in favor of it, but they were just in favor of it. The 30 percent that weren't in favor of it were adamantly not in favor of it. They were strongly not in favor of it. And human health concerns, and now tying it into whether or not they can even identify it on a label, I think is extremely valid.

MR. ELA: Yes. Well, and I want to be clear to all the marshmallow lovers out there that my personal opinions will not cause me to discriminate against you all. So, the more you all eat, the fewer there are for me, and that makes me happy.

(Laughter.)

All right, Jerry, let's go ahead and move on.

MR. D'AMORE: Okay. The next sunset,

glucono delta-lactone, reference 205.605(a), and, Wood, you're up again, sir.

MR. TURNER: I am, and I'm going to, for the benefit of the ASL interpreter, I'm just going to refer to this as GDL.

(Laughter.)

MR. D'AMORE: I wish you would have helped me out with that.

MR. TURNER: It's a material similar to my previous material, calcium sulfate. It's something primarily used in the production of tofu, particularly silken tofu. And it's generally, while we're talking about mouthfeel, it's generally thought to be the only material that can produce the physical sensory components favored in that particular type of tofu, unlike some other materials like vinegar or lemon juice.

It serves as a coagulant. It can also be used as a curing or pickling agent, a leavening agent, or a pH control agent. It can also be used in feta cheese. It's less tangy than citric acid. And it's generally recognized as safe.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

There are a variety of ways it can be produced. The most common form has gluconic acid production. It's called the Blom, B-L-O-M, process in which gluconic acid is produced by the fermentation of glucose syrups. Sodium hydroxide and calcium carbonate can be added to it to produce a gluconate salt. It's isolated via evaporation and crystallization, and then, converted, interestingly, via ion exchange. And that's what produces GDL.

It's considered to be a product that's greater than 99 percent pure. It has no other substances present.

Unlike the calcium sulfate -- again, I don't really know enough to distinguish between the different uses of calcium sulfate and GDL -- but GDL is not a material that is accepted internationally. It's not a listed substance in Canada, the EU, Japan, the Codex, or IFOAM.

We found a little bit difficult to document any meaningful well-documented environmental or human health issues associated

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

with GDL. There's been some consideration that it might cause minor bladder discomfort or back pain.

So, there's been currently no elevated risk within this body under previous consideration related to environmental considerations.

The original petition was this substance was for the coagulation of tofu, although it's not annotated as such or it's not classified as such. And so, there are several other coagulants that have been indicated as potentially having similar uses as GDL. So, it's unclear about the essentiality here.

One of the things that in the previous cycle the Handling Subcommittee sought to understand was whether there were other uses of the material. And we have heard, as a result, that it can be used in feta cheese and other things.

I think the lingering question is sort of -- I think from the community as a whole, there's really strong feedback to continue to include GDL on the list. We need to make sure there's no GDL

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

being produced via synthetic means, and that's been fairly strongly worded.

There's other organizations that have considered this to be -- and I would say more strongly worded than the previous material, calcium sulfate. Folks consider this to be nonessential in that there are other alternatives that could meet this same expectation, the same sort of sensory expectation. Again, that's one of the situations where one may say one thing; the other may say another thing. So, I'd love to hear more from the community on that.

And again, similar to other materials -- and again, I'm quickly realizing that this is a hard thing to base decisions on -- but some certifiers say that a lot of their folks use GDL, and others say that very few, if none, use it.

We've asked questions of the stakeholders. We haven't gotten really as many direct responses to these questions as I would have expected. And that may be an indication that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

they're aware that concern lives on this particular material. But we've asked how widespread the use of the material is and gotten sort of a tepid response.

I am wondering if there's any evidence that there's any excluded methods associated with the production of GDL. So, that goes to that question of annotation, which I know lives outside of this sunset process, but the idea of annotation that would indicate that there's no synthetic production involved in GDL.

And then, finally, getting some clarity on the alternatives of GDL and whether they deliver the same product quality and functionality. And again, nothing definitive yet in this cycle of comments, but I would just ask those questions of the community again.

That's what I have at the moment, Jerry.

MR. D'AMORE: Thank you. Nicely done.

MR. ELA: Okay. Amy has a comment.

MS. BRUCH: Wood, thanks for reviewing that.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I did find one comment, in particular, that mentioned maybe the annotation was a bit limiting when it just says it's prohibited with bromine water; that there might be other ways to produce this that maybe need to be annotated as well.

And then, it also, in your reference to excluded methods, says that some of the enzymes that go into produce GDL may be genetically engineered.

MR. TURNER: Yes.

MS. BRUCH: So, I did find one instance of that, too.

MR. TURNER: That's a good point. Sorry. Thanks for elevating those comments, Amy.

MS. BRUCH: Uh-hum.

MR. TURNER: I noted those as well. And I should have been a little bit more clear.

I should have been clearer in the annotation about the production by the oxidation of D-glucose with bromine water. It is prohibited under the rules.

Sorry about that. Thanks.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. BRUCH: Oh, no problem. Yes.

MR. ELA: Kyla?

MS. SMITH: Yes, I just wanted to maybe explain a little bit about why some certifiers may not have reviewed these. I know PCO doesn't certify nearly as many handlers as some certifiers do. So, we just may not have any operations that are making silken tofu or just other types of smaller certifiers that focus more on farms and not handling operations. So, I think that that would explain the difference of which certifiers are reporting and which are not.

MR. TURNER: That's what I was trying to say fairly clumsily. Thanks for telling us that from the frontlines. I appreciate that.

MR. ELA: I don't see any others. So, back to you, Jerry.

MR. D'AMORE: Okay. Our next sunset, tartaric acid, 205.605(a), Steve, that's you.

MR. ELA: Yes, I just perked up my ears.

MR. D'AMORE: Can you keep it under an hour, do you think?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(Laughter.)

MR. ELA: Yes, I'll try on this one.

I was like, oh, no, that's me. I can keep this one short, though.

Tartaric acid, really the notice of comments are that it's essential because it is important to adjust pH without the use of a synthetic chemical like sulfur dioxide. The alternatives are not sufficient because there are times when we do not need to adjust the pH, and if the material were prohibited, it would injure people because they've spent years perfecting a synthetic-free wine.

But most of the comments really came down to, is there an organic alternative available?

Tartaric acid is made from wine. And so, the question is, is there enough supply of organic wine available now to be able to make this product organically?

One person said that there's not enough market demand yet for it. So, it does not exist.

But a number of people also said, you know, this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

is the chicken-and-the-egg thing of, until you delist it, there won't be enough organic tartaric acid to meet the demand.

So, I think really the organic supply question is the biggest one on this. And so, I would hope for next fall's comments that that could be fleshed out a little bit among our stakeholders or from our stakeholders. You know, when is the time to vote to delist something to encourage the organic market in this? Certainly, one person said to is there is any reason that tartaric could not be made from organic wine, they said absolutely not. It's just it would take some time for manufacturers to develop an organic version at the necessary scale.

So, that's it. Did I come in under an hour?

MR. D'AMORE: Well done, yes.

MR. ELA: Kim has a question.

MS. HUSEMAN: Yes, I'll make it relatively quick.

I just wanted to point out I saw in one

of the comments here that the tartaric acid is used to adjust the pH and avoid the use of synthetic chemicals, but that at times they don't need to adjust the pH. So, I think just going back to the stakeholders, you know, how often does that pH need to be adjusted? I mean, what's the overall use of tartaric acid holistically? So, just a comment about that component.

MR. ELA: Yes, and that's a great point. As I was just presenting this, I hadn't picked up, as I read this, until just now, of course -- you always pick things up in the moment that you don't want to do that. I mean, one of them said, you know, it is to adjust pH. And somebody else said they don't need it to adjust pH. So, that is a little conflicting. I guess I would like to know more about that as well. But it certainly seems like, for most winemakers, it is a very useful ingredient and certainly helps make better wine. But I think that's a great point, Kim.

All right, Jerry, back to you.

MR. D'AMORE: I'd like to make a quick comment to that. I would suspect that the bricks of the incoming grape might have a lot to do, and it might be sporadic or it might be in geographies quite necessary most of the time.

MR. ELA: Yes.

MR. D'AMORE: I don't know.

MR. ELA: I'm guessing that, too. It's probably specific starting points with the wine or with the grapes.

MR. D'AMORE: Well, with our next sunset, which is cellulose, 205.605(b), we have a first-time presenter, but I have no concerns about that.

Carolyn, you're on.

DR. DIMITRI: Oh, I was going to thank Steve for giving me such a straightforward and simple product. Well, I was wondering with the tartaric acid -- it's made me panic for a second.

So, in terms of whether this product is essential for organic production, the certifiers and the end users indicated that it's

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

not widely used, but for the people who need it, it's essential for their process for those three allowed uses.

Okay. And then, the next question asks about ancillary substances, and one group reports glycerin or glycerol is used, but it's not on our list.

And for three, basically, all of the comments indicated that cellulose from sources other than wood pulp just don't perform quite as well.

And no one was able to answer Question 4.

And I would say, overall, everyone, except for one or two people, indicated that this should be relisted. And then, one group said it's not essential, and then, another group pointed out that, at the very least, sourcing should be done in a way that minimizing environmental impact.

And that's my report.

MR. ELA: It takes me a minute to get off mute here.

So, any questions, comments,
discussion for Carolyn?

(No response.)

The Board's being nice to you, Carolyn.
Next year, you get a little harder one.

DR. DIMITRI: Okay. Thank you for
this year of grace.

MR. ELA: You will be in the full thick
of it. But great job. Thanks for getting your
first one under your belt.

Next, Jerry.

MR. D'AMORE: Steve, the next one,
broadly spoken, is chlorine materials under
205.605(b). Asa is taking care of that, but he's
taking care of four things under that general
heading, and we'll do them one at a time. So, the
next one up is chlorine materials, calcium
hypochlorite.

Asa?

MR. BRADMAN: Actually, maybe we
should talk about them as a group here.

MR. D'AMORE: Okay.

MR. BRADMAN: Just because there's, I think, an overlap, if that's okay.

MR. D'AMORE: You know, I guess I can't answer the okay in terms of what we have to produce. I mean, if it's okay, it's okay with me.

MR. ELA: Yes, I'd do it as a group, Asa.

MR. BRADMAN: Yes, okay. Of course, this is in some ways a complex topic. I hope we don't spend too much time on this. But, of course, chlorine materials overlap with many of the issues that we're talking about with respect to disinfectants and sanitizers.

I also want to clarify, you know, when we talk about disinfection, there's different stages. There's basic cleaning, which doesn't require a sanitizer or disinfectant. And then, there's sanitizing, which is kind of -- somebody will correct me for this -- it's 99 percent, or maybe it's three 9s, 99.9. And then, when we get up to disinfection, we're talking about five 9s in terms of reduction of pathogens. So, we should

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

be careful to distinguish between those uses.

Chlorine materials, as we know, are used as disinfectants and sanitizers to control pathogens in food processing environments. In many ways, I think we're going to come through this and say they are essential. Certainly, if we look out in community comments, there's demand for them.

They're one of the most effective tools to comply with FSMA, but they also raise a lot of concerns both in terms of hazards to human health and the environment. And I think that's where we have to continue to do deep thinking about the use of sanitizers, which are very powerful pesticides and much more toxic than many of the materials we might, for example, allow for field use and things like that.

There's, I think, a remarkable level of comments by stakeholders in this round of public comments. I mention I thought really thoughtful comments by Beyond Pesticides. Also, there's great comments from OWPC and CROPP Cooperative, and others, just to call out OEFFA, OMRI. Just

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to call out, all of us, there's some great reads in the current public comments with respect to sanitizers, chlorine, in particular, but also sanitizers in general. And I know we're supposed to be talking just about the sunset here, but, of course, this is lodged in a much bigger issue.

When we talk about chlorine compounds, they have hazards. And I would really like to emphasize that they are hazardous to the environment and human health. I've said this before when I've been working in the Salinas Valley. Many workers, agricultural workers, in processing facilities complain bitterly about bleach and other chlorine exposures. I've also reviewed exposures in a shrimp processing facility, and people were essentially the indicators of overexposure with severe respiratory and ocular and other kinds of facts.

When we talk about this use for contact with food, we're usually talking about levels that are at the safe drinking water standards. But these materials are used in a lot of different

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

settings in food processing environments. You know, it could be a fruit dip, surface cleaning, and other uses.

Many facilities I've gone into, you know, you have to walk through a pan of water with bleach in it. Those are usually up at 100 parts per million, and you can smell bleach in the room.

Of course, the odor level is probably below the adverse health effect level, but it's just an indicator that we're being exposed, and often, I believe those exposures exceed an occupational health threshold.

Getting back to that, though, I have tried to review occupational exposures related to these materials and there's surprisingly little out there. There was one comment about the safe use of these materials being governed by FDA and EPA label, and I think that's true in some cases, but I've just had enough experience with pesticides, that sometimes even the label protections don't protect people from adverse health outcomes, particularly if other factors are

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

to be considered, like ventilation and personal protection.

So, in general, I think these do raise concerns about use and there's a need for better assessment of human health impacts, both in terms of their use directly in processing, like contact with food and equipment, but also elsewhere in food handling environments where we're talking about floors and boots, and things like that.

There's one comment that we should be listing higher concentrations if they're being used in other settings, in other mechanisms, other than just at the safe drinking water levels in water. I think it would be interesting to include some of those references that are available through international standards for sanitizing/disinfection with these materials.

There's a lot of interest in the discussions around sanitizers and chlorine. In particular is what are the alternatives. And we've talked about on the Board and other settings that there are a number of materials evaluated by

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

EPA and are in the design for the environment, Safer Chemicals List, and some of those may be valuable alternatives.

But, in talking with folks in the field in this, including Joelle, our plumber member here, and others, it's kind of a Wild West environment in some ways. It's not clear how different sanitizers and disinfectants meet the goals of food safety. And therefore, when there are products that are known to address specific contamination problems, there is a tendency to rely on those and to beware of experimentation.

So, for example, if we were to suggest citric acid or some other approach, if there was a food outbreak, food disease outbreak, where an alternative material was being used, even if it was approved, that could open up lots of liability and other concerns that really obviate any food manager to make that choice, to kind of go out of the ring on that.

So, there's not just what's out there, but there's the kind of status quo and tradition

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of using materials that we know are safe. And also, when we look at pathogen reduction, like whether we're looking at three 9s or five 9s, often these evaluations don't consider things like biofilms or other kinds of agglomerations of pathogens that might not be reachable with some materials. And so, the relative efficacy for unique pathogen population differences would be a concern, particularly around biofilms.

Another piece of this, you know, there's a lot of interest in microbial ecology.

And we asked these questions of the panel, you know, could there be an approach to pathogen control that kind of fosters healthy pathogens at the expense of pathogenetic, and just not healthy pathogens, healthy microbial populations that are not pathogens, and therefore, discourage colonization by pathogenetic bacteria? And the information that I've gotten back on that, at least verbally, is the answer is no.

In soil populations, yes, when we look at populations of pathogenetic bacterial in soil,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it seems like there are ways to encourage nonpathogenetic bacteria. But, in a food processing place, given the colonization and recolonization, and the need to constantly even simply clean, and then, follow up with disinfection, that there's really no way to try to allow a population of microbes to exist, to try to outcompete a pathogen, just because the pathogens sometimes are just as good at competing.

So, in many ways, I feel like we're kind of stuck with the chlorine materials, but there seems to be a real consensus, too, even among people I've talked to who are responsible for HACCP plans, Hazard Analysis Protocol Control Point Plans, that they like to minimize chlorine use to the extent possible. And it is mainly because of the human health concerns. But, to meet FSMA criteria, that they are an essential and needed tool.

So, my sense with this, and as we go through it, we're probably going to relist these.

We're talking about sunset, not necessarily annotation here. But, again, I would suggest that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

we all kind of read through the comments that have been submitted. I think there's great thinking that went into the comments this time around.

I was also going to highlight a little bit the OWPC comments of concern about our framework for sanitizers, in that we really should be withdrawing that concept. And I think I agree if there's some sort of formal framework for evaluating sanitizers, that has to go through review, but I do think that our panel helped us think about these materials.

And just a reminder, too, we have two materials coming up for evaluation, including CPC and there's a new petition for peroxy-lactic acid that will be coming up this fall, and beyond my time on the Board, for discussion and voting. So, just a reminder that, beyond just the chlorine compounds, the sanitizer issue is front and present in many ways.

MR. ELA: Thanks, Asa.

Are there questions, comments, discussion?

Kyla?

MS. SMITH: Thanks, Asa.

So, when I was reading through the comments, some of the things that popped out to me, and I hope will help us as we move forward in the broader review, although it may take us a bit of time to get there, but I think that there's still a call to really do that, have that like wider review. So, anyway, some comments that jumped out to me that were along the same lines were from OTA and OMRI, and then, in OWPC's comments, oral comments mostly, but talking about more robust practice standards to really put that framework on how sanitizers and disinfectants are used and not be just reviewed out of context, but sort of part of that whole systems approach.

So, whether or not that's just a hierarchical approach like other parts of the regulations or not, but sometimes just how the sanitizers, and when and where, and whatever, are used, it's really hard sometimes to figure out what the practice standard is that goes along with that.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

So, that could be a way for us to move forward, is to consider that.

And then, also brought up in some of those same comments that perhaps having a whole separate part of the National List would be also in our best interest because, currently, these are listed on the part of the National List with other ingredients that are used in or on, like as ingredients, and obviously, these materials are not ingredients. So, just also something for us to consider as we move forward.

MR. BRADMAN: Yes, I mean, I think those are all great. The use of these materials raises a lot of issues for organic integrity, food safety, and they are powerful chemicals. And I definitely agree with a lot of that.

And then, there's this tension, of course, as for reviewing the chlorine compounds right now. We're looking at a narrow sunset review, but it raises all these larger issues that are part of an ongoing discussion.

MR. ELA: We've got a question or a

comment from Rick, and then, Wood.

MR. GREENWOOD: Yes, yes, nice presentation, Asa. And a couple of things that you mentioned I'd like to talk about.

One is the bar to get someone to adopt a new disinfectant is very high. I've been involved in a number of food-borne outbreaks and lawsuits, and no one wants to be up on the stand where they have people that have died because of E. coli 0157 and they used a new disinfectant. So, I think it's going to be very hard.

The other thing that always interests me is two of the outbreaks I worked on -- one was hepatitis A and the other was an 0157 -- both produce products had been washed in chlorine, in a chlorine wash. And as strong as it is, it's not perfect. So, I think there's still room for other kinds of items because, obviously, you can't make the chlorine wash so strong that you destroy the food product. So, I think there's room for new things in the field. So, it's an interesting problem, and I don't know how we solve it, but we

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

certainly have to look at it.

MR. BRADMAN: Yes, and there are some new technologies coming out that actually might be very appropriate in our setting. One that's kind of under evaluation is something called nanobubbles. And I think the word "nano" here should not freak people out. But I think that we'll need to look at it carefully. We're talking about nanobubbles, not nanoparticles, but it seems to be a way to perhaps deliver and more effectively remove bacteria.

The other thing is like whole-room ultraviolet light bathing. You know, there's a lot of work going on with COVID right now and hospital control. I've been evaluating some of these things in other contexts, and I don't know quite their applicability to a food environment, but I think that could be promising, and done right, actually, is not chemical, and if done right, does not pose any risk to people.

MR. GREENWOOD: Yes. I think one of the things that I sort of like, and they use it

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

in spices, is irradiation, but, obviously, the concept, people hear that word, and they're afraid that their food is going to become radioactive.

But there are other things. There's some cold plasma fusion that's working actually on COVID. It works very well in rooms. So, I think there's new things coming, but, right now, I don't think anybody is going to want to change.

MR. ELA: Wood has a comment.

MR. TURNER: Yes, I have a question for Kyla or any sort buyers who want to jump in here.

Are you suggesting in your comments, Kyla, that there's a possibility that this could be, that one way for us to handle this might be it's almost like lifting a sanitizing protocol?

In other words, I realize I'm opening up a can of worms as I say this, because I'm sure that's not within our scope, but it almost feels like that's what is necessary here. Like how do we help guide the standardization conversation in the context of sort of material recycling or sort of best practices? And I'm curious about your

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

question on that and one other question I'd give for you or for Asa.

And I'm asking this more because you've basically presented for me, and to some extent Asa, the Crops Subcommittee version of the same question. But I'm curious. I think one of the things that feels lacking in the comments, we are focusing on this primarily from a human health perspective, but these materials can be incredibly toxic to aquatic systems. And I don't see enough of a conversation about that issue happening among stakeholders or whether there's evidence to suggest that the use of these materials is so responsible and so contained at processing facilities, around farms, that we're seeing no associated damage to aquatic systems.

So, I don't know if you have any thoughts on that point, Asa, but I guess I'll start with the question to Kyla.

MS. SMITH: Yes, Wood. So, there were several comments that referenced how the Canadian standards are actually set up. And so, take a look

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

at OTA's comments on that, but I think that others referenced that as well. And so, they have that divided up for materials without a mandatory removal event, with a mandatory removal event, or, you know, things along those lines.

And some of the other comments there were talking about like the facility pest management practice standard that's currently in the regulations talks about preventative measures, and then, mechanical and physical and biological controls, and then, materials that are on the National List, and then, materials that aren't on the National List. So, like there's this whole like stepped approach. And so, there could be something that is similarly developed for sanitizers, cleaners and sanitizers.

MR. BRADMAN: I think, also, perhaps caution that we have to be really careful not to try to develop kind of a top-down management approach. Reading the OWPC, I think they lay out examples of many different environments where these materials are used, and there's not a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

one-size-fits-al discussion by the CROPP Cooperative comments, but the written and oral presentation, and the issues around tank sanitizing, for example, just kind of represent a lot of the challenges on how to operationalize both a food system that's safe and has to meet FSMA and other criteria. And not just meeting these regulations, but the regulations are there because people can get sick and die from these pathogens.

So, I think this is just challenging because it's complex, both in terms of materials, but also in terms of individual business practices that may vary by industry and, also, within an industry.

MR. ELA: All right. We have another question from Sue, and then, while it's an unusually important topic, we probably need to move on.

MS. BAIRD: Yes, maybe more of a comment than a question, but kind of responding to Rick and I think Asa, who will mention other very effective methods such as ozone irradiation.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Of course, irradiation is not allowed in organics, but some of these methods that are very effective, and yet, I guess I have to represent my small farmer/processors world. And many of those persons/facilities, including my own little food hub here, would not be able to implement those methods. So, remember that we are an industry of both large corporations and of very small facilities.

MR. ELA: Very good point, Sue.

Any last-minute comments before we move on?

(No response.)

All right. Thank you, Asa. You picked off a tough one on this, and all the others on the various committees. So, obviously, a very poignant question as we keep moving forward.

So, Jerry, back to you.

MR. D'AMORE: Well, Steve, I'll give you an opportunity to manage time. You're up next on potassium hydroxide, reference 205.605(b).

And I'm going to actually read one piece

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of it because I find it telling. "Prohibited for use in lye peeling of fruits and vegetables, except when used for peeling peaches." That one always fascinated me.

MR. ELA: Yes, I can speak from experience that peeling peaches, the pit causes immense problems.

(Laughter.)

But, yes, potassium hydroxide, you know, one of the comments was it's a wide-open listing, except for the prohibition for peeling.

And so, several stakeholders noted that they would really rather have it listed for what it could be used for, rather than for what it can't be used for. But that's just a note on annotations, which we really can't change now, but read that into the record.

There certainly are health hazards from it because it's very highly corrosive and can cause severe burns to various body parts, just like a strong acid would. A strong lye is the same problem.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And then, also, environmental concerns just in case there is a spill or a disposal of large volumes of water with potassium ions in it.

Also, I mean, just kind of reflecting on what we just talked about, sanitizers, but it is a hazardous material and it is toxic. So, the question is, is it essential and are the various uses for it essential?

Other commenters did say it was essential just as an anti-foamer and pH adjuster, and that other products or other alternatives aren't sufficient just because potassium hydroxide is more soluble than some others. And if we prohibited it, we would really need to identify something in the same role for standardization and product stability and pH adjustment along with peeling peaches.

So, that's a very quick summary, but I will open it up to questions or comments.

(No response.)

All right. Take that, Jerry.

MR. D'AMORE: Hey, well done.

Okay. Our next sunset, potassium lactate, reference 205.605(b), is mine to do.

It's used as a microbial agent and pH regulator. It comes in a liquid and may be added to meat as an anti-microbial agent. Confirmed that it is generally recognized as safe. The FDA does not authorize its use in infant foods and formulas. It does not appear to cause human health concerns. Environmental concerns have been discussed and seem to pose no real concern. The EPA adds to that that it has low potential to persist in the environment.

Of note for me, anyway, is that it is not accepted by the Canadian Standards Board, the European Economic Community, the International Federation of Organic Agriculture Movements, or IFOAM, and the Japanese Agricultural Standards, JAS. Potassium lactate has been allowed for use in organic handling since 2004.

Between both oral and written comments, there were less than 10 responders regarding potassium lactate. Most were in favor of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

relisting.

In looking at the uses table provided, it does not appear as though this is a heavily used material.

We had one single question of our stakeholders: "What distinguishes potassium lactate from sodium lactate in terms of functionality, and is it important?" The sum total of the responses, which again were not much, would be summarized as potassium lactate offers similar anti-microbial function as sodium lactate, but without added salt or a salty taste. It is attractive to consumers looking for less sodium intake.

And that's it.

MR. ELA: Questions for Jerry?

(No response.)

I am not seeing any, Jerry, and it was just pointed out to me that we skipped silicon dioxide.

MR. D'AMORE: Oh, well, you know, that's interesting. In my book, silicon dioxide

is next.

MR. ELA: Okay. Well, it is officially because that's the way it works out.

MR. D'AMORE: Because that's what I did to the poor candidate here. I beg your pardon, but, for me, it is in sequence. And I think that was done deliberately so I didn't have to present silicon dioxide right on top of potassium, and it would demonstrate that I am saying actually just about the same thing. So, thank you for the interlude.

Silicon dioxide, reference 205.605(b), a sunset presented by Kyla.

MS. SMITH: Yes, the agenda and the binder were a little bit out of order, but that's okay.

Okay, silicon dioxide, I was laughing when I was given this material. I was like, of course, the certifier gets the material that has a commercial availability annotation, our favorite thing.

Anyway, silicon dioxide is used as an

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

anti-caking agent in several foods. It's a stabilizer in beer production. It's used as an absorbent in tableted foods, a carrier, and as well as a defoaming agent.

Most of the public comments were in support of relisting. I will say that there were some comments that urged the Board to look at the original annotation that was passed because there is a difference between the annotation that is listed on the National List and what was originally passed. So, there was an explanation in rulemaking as to why the program went that route. But, anyway, I just wanted to bring that up.

As for the questions, the first question, "Are there organic alternatives to silicon dioxide that are more suitable to the uses described above in which rice hulls are not viable?" There were a couple of comments that said that there are limited applications where organic substitutes might provide acceptable performance, but that these alternatives do not achieve suitable functionality in all organic applications where

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

silicon dioxide is currently being used.

And there was quite a bit of comment in regards to just the percentage and the ratios that needed to be used, that it's not a one-to-one.

And so, that creates problems in having to use more organic rice hulls, and then, that results in -- which affects like the taste and things along those lines.

So, the second question was about, "Is there a reliable and consistent commercial availability of rice hulls for the applications in which it performs well?" I didn't really see a response to that particular question. So, if I missed any specific responses to that question, please let me know.

The third question was, "How prevalent is the use of silicon dioxide as a defoamer?" I would say that one certifier commented that one out of five materials that they've reviewed was specifically as a defoamer. And then, OTA did have, like I had talked about before, they sent out a survey, and like two respondents had replied.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

And of those two respondents, they had only mentioned the use as a defoamer.

And then, the last one about, "How prevalent is the use of silicon dioxide for other allowed purposes?" So, there was quite a lot of comments about being used in the production of supplements, beverage mix powders, beer. It's used commonly as an ancillary anti-caking ingredient in flavors, nutrients, vitamins, and minerals, lots of, again, just an anti-caking agent and float agent in the spice industry, and then, in powdered flavors.

And that's what I got.

MR. ELA: Good job, Kyla, your first sunset, even though you've heard many.

Are there any questions for Kyla?

(No response.)

All right. You got off easy. Thank you.

We'll go back to you, Jerry.

MR. D'AMORE: Well, thank you, sir.

The next one, sodium lactate, is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

205.605(b). Used as an anti-microbial agent and pH regulator. That may sound awfully similar to you.

And then, just to save time, and assuring you that virtually every word that I said about potassium lactate is essentially the same all the way through to the questions, I'll get down to the last part of the report.

Between both oral and written commenters, there were less than 10 responders regarding sodium lactate. Most were in favor of relisting.

And looking at the uses table provided, it does not appear as though this is a heavily used material.

Our single question to stakeholders was, "Why has JAS, IFOAM, and the Canadian Standards prohibited the use of sodium lactate?"

And the responses were pretty uniform, the few that there were. It is that it is a synthetic material and there are nonsynthetic and naturally derived alternatives.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

That's it, folks.

MR. ELA: All right. Questions and comments?

(No response.)

Sounds great. Jerry, you were so fast, I couldn't get off mute. So, all right, you can move off sunsets into the next section.

Just as a time check, we're at 25 after the hour. We're supposed to finish at the top of the hour. I know we've got a couple of things here that may take up that whole time. So, we could go just a little bit over, but we'll see how these next two discussion documents go. But just as a heads-up for folks.

All right, Jerry.

MR. D'AMORE: Okay. Well, the next one is mine to do as well. It's a petition, material discussion document. It's zein. And that's probably the hardest thing about this whole discussion document, is the pronunciation of the material itself. So, zein.

The NOSB received the petition in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

February of 2020. The TR was requested in 2020 and delivered on the 21st of January this year.

The Subcommittee has reviewed this position and the TR, and it was deemed as sufficient on the 2nd of February.

On 16 February, a discussion document was put together to request comments from the stakeholder community for this spring session. The response was light with less than 12 total comments from both the oral and written commenters.

Eight of the comments came from two entities, as they contributed both to the oral and written sessions. There was not one single comment in favor of the position. One responder did not take a position regarding yea or nay, but gave a lengthy and thoughtful comment regarding how we should look at this petition.

Of particular interest to me was the most strongly against the petition, but did not comment to the petition material itself, but, rather, to the use of any product of any particular kind; i.e., the general use of preservatives to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

extend shelf life. All the comments given on this one were detailed and thoughtful.

Specifically, to our stakeholder responses to the questions presented in the discussion document is as follows:

One, "Zein is made from" -- excuse me, this will be brief -- "Zein is made from cornmeal that is wet-milled. How much, if any, sulphur residue is left in the final product?"

And the answer is the wet-milling steps of the corn -- excuse me -- the wet-milling steeps the corn in the hot water solution for 24 to 48 hours. The solution has been held at between somewhere between 0.1 to 0.5 percent sulphur dioxide in mix. None of the responses had any precise numbers to share, saying mostly, "Not much, if any."

The best answer came from an organization that put a long and thoughtful paper regarding this petition. However, they, too, did not have any specific data to answer the "how much" question, but concluded with, "Given the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

specifications of zein and its labeling requirements, presumably, any residue left in the final product would not have a technical or functional effect."

The second question, "What are the hurdles to achieving organic zein?" The short answer appears to be sufficient quantities of organic cornmeal.

With that taken care of, the question of inputs would be next. The organic ethanol, as perhaps the best candidate to replace sulphur dioxide, is also itself in limited supply. Here, one of our reoccurring dilemmas come into play.

Would we be stifling innovation by proceeding with this petition?

After months of looking at this petition, there's only one thing I'm confident of; namely, that unless seriously incentivized, the wet-milling of conventional cornmeal and the use of sulphur dioxide in the process will remain the method of choice. However, with that said, I am not sure that the demand for the product organic

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

zein is strong enough at this point to push production.

No. 3, "What sectors of the organic food market would benefit the most from the addition of zein to the National List, and how much shelf life would it improve?"

The question is in itself a little bit leading and provoked what I referenced earlier to a well-thought-out or lengthy document talking about the need for anything that produces shelf life. So, the petition itself is not specific to shelf life. It includes shelf life, increasing shelf life as part of its petition, but has, in my mind, stronger points; i.e., it's hydrophobic and is the best, in my reading, available product for things like pharmaceuticals, pills, keeping water in and keeping moisture out. It's a barrier.

The most common response to this question was, "I don't know anybody who wants it."

And part of some answers was, "We don't know until we try." Two pretty opposing answers.

There is good evidence that zein is,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

or could become, the best alternative for vegan consumers, given some stated functionality characters vis-a-vis other coatings.

Further, as it is hydrophobic, zein appears to have a strong following in the pharmaceutical industry.

The last question, "Do we need to revisit the classification as a nonsynthetic or is it the established precedent?" This question provoked strong comments both ways, some saying that there is no precedent to keeping it as a nonsynthetic; others saying just the opposite, citing the long and contentious debate over corn steeps that occur.

I have a last paragraph that is mine.

And it deals with the push and the pull of what we're trying to do. If this product isn't brought forward -- let's start with the fact that there is no commercially available organic zein today.

So, what does that mean to us in considering this petition?

There is no market for it. If we allow

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

it to go forward, will a market be created, and will that be good for the people we represent? So, that, to me, will become one of the questions that, in my opinion, needs to be answered. And I think I probably already gave away my leaning on that particular issue.

So, that's all I have for that product.

MR. ELA: Okay. Questions, comments, et cetera, for Jerry on this as a discussion document?

(No response.)

Jerry, I am not seeing any, and I guess --

MR. D'AMORE: That's sort of like our stakeholder community. Okay.

(Laughter.)

MR. ELA: Yes.

MR. D'AMORE: Thank you very much.

MR. ELA: I'm guessing you're going to get to write a proposal next meeting on this one, but --

MR. D'AMORE: I would say you're right.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: We are going to move on to the last one, Jerry, if you want to introduce it.

MR. D'AMORE: Sure. Hold on. I already know what it -- okay, the next Handling Committee discussion document, fish oil annotation, a discussion presented by Asa.

And you're muted, sir. Asa?

MR. BRADMAN: Okay. Can you hear me now?

MR. D'AMORE: Uh-hum.

MR. BRADMAN: This is kind of another complicated marine materials issue, but this came up with the sunset review of fish oil, I think it was last fall, a year ago last fall. No, last fall.

And the Handling Committee felt like, to renew the sunset, there needed to be some explicit consideration of environmental concerns around harvesting products from fish from the ocean, or fish in general, and using them as an ingredient in organic products.

The sunset did pass, a very large margin. So, people weren't opposed to that.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

There are some objections to the actual listing of fish oil on the National List. And I apologize because I did make a comment in the review that I hope wasn't interpreted as being snide, that the objections to the listing I felt like weren't relevant to this review of how do we protect the ecology of fish for use of this. But I agree, certainly, if we eliminated fish oil from the National List as an ingredient, that would make this whole discussion moot. But it was relisted, and there are some challenging issues here.

Last fall, Tom had prepared a suggested annotation to the listing, and that's what we're talking about here, an annotation to modify what's acceptable for fish oil material. And basically, what he came up with was a review of the definitions of fish stock exploitation by both the U.S. NOAA, the National Oceanic and Atmospheric Administration, and then, also, the FAO. And based on those definitions, those could guide what was -- that as long as oil was extracted from fish from populations that were sustainable or not

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

endangered, that that would be the basis for the sanitation.

And then, there were a number of comments in response to that that raised concerns about inconsistency for certifiers, that there were different standards used by FAO and the NOAA; and that, also, there are fish populations, some of which may be very sustainably exploited, but are not necessarily covered by any of those. And so, there was kind of a general sense that the proposal as it stood wouldn't work.

And those comments came from, you know, some people, industry groups, and also some others as well. The industry groups are DSM and GOED. You can see their comments both last round and this round.

So, I inherited this and have had a number of discussions with folks in different parts of kind of the marine ecology arena, including NOAA, scientists from the NOAA office in Monterey Bay; also, the Monterey Bay Aquarium Seafood Watch Program, and also from the Marine Sustainability

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Council, which is kind of like a third-party certifier around integrity of use of marine fish populations. And that is kind of what has formed this discussion document.

And we came up with these kind of three alternatives, some based on comments last spring, and then, others based on conversations both with MSC and the Monterey Bay Aquarium folks. And these were also both reviewed by the NOAA scientists.

Basically, it would be changes to the proposed annotation by adding "sourced from fishing industry byproduct only and certified sustainable by a third party". So, that's the simplest option.

And then, a more specific one that would have the same requirements for sourcing, but certified against the International Social and Environmental Accreditation and Labeling Alliance, ISEAL, Code-compliant or Global Seafood Sustainability Initiative. These are groups that, basically, kind of vouch for the certifiers.

And then, a second option to rely on the Seafood

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Watch criteria.

So, we've gotten a number of comments on that, and they have varied. Also, actually, this is an important point. A couple of commenters I think were conflating the term "byproduct" versus "bycatch". In the proposal, we have a source from the fishing industry "byproduct".

And there, we're talking about fish oil being a secondary product from harvested fish. So, we're not talking about fishing solely for production of oil -- and I want to make that distinction -- versus "bycatch," which bycatch would be deriving it from unintended species that were captured and killed versus the target species.

So, if you're harvesting tuna and you're killing turtles and sharks, we're not talking about deriving the oil from the turtles and sharks. We're talking about as a byproduct of processing tuna, say, for canned tuna. We're talking about if that's a sustainable harvest, then a byproduct of that would be extracting oil from those tuna and making that a product that could be used in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

organic foods.

I just want to distinguish that. We're not talking about bycatch, and it's clear that, if we move ahead with the proposal, we need to have a very clear definition of what "byproduct" is.

In terms of the specific proposals, there were concerns for all of them, although there was the strongest support for No. 1 and No. 2. And then, in a way, I think No. 2 was considered more specific. People tended to prefer No. 1, but I think No. 1, which is just a simple third-party certifying choice, is too vague and leaves too much room for problems.

And we've outlined some of the issues in this proposal. And I think these are all kind of concerns for us to consider when we're talking about this: that by relying on third-party certification, we're outsourcing a standard that's outside the USDA and that's outside in some ways even control of the United States. So, that's something to consider. We outlined those three concerns about being outside the U.S. There also

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

could be a concern for green-washing if there are third-party certifiers that don't meet a viable standard, you know, that are kind of there for show.

And also, the possibility of excluding smaller-scale producers that can't afford a third-party certification. I think some of those limitations still remain, even if we choose any of the options we have, although I think they are least possible with the No. 2 option.

There were some concerns about the Seafood Watch one -- that's our No. 3 -- and the possibility of allowing fish that meet their green or yellow standard. If you're familiar with Seafood Watch, they have green, yellow, and red.

And yellow is perhaps more marginal, and perhaps that would be not acceptable because there's too much uncertainty.

In terms of comments, a group from PCC, many of you know from the Northwest market, they felt that they were all inadequate, and that No. 2 was too broad and larger-scale. However, when we looked at comments from other certifiers like

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

QAI and, also, the CROPP Cooperative, and then, also, comments from DSM and GOED, two of the producers, they lean towards No. 1 and 2. And I think they're willing to live with No. 2. QAI was the least comfortable with option 2, that it would be unenforceable. However, there were other comments that really felt that 1 and 2, and particularly No. 2, is workable.

There was a bit of a complaint, I think, in some ways from a smaller group called Friend of the Sea, World Sustainability Organization. I think they felt that they would potentially be excluded because they represented smaller groups and wouldn't be able to fit into maybe what was viewed as kind of big league sustainability certification. And some of these sustainable certifiers are businesses. Like we have in the organic world, many of the certifiers are for-profit companies.

So, I'm going through my notes here.

And then, a final comment, too, is that we need to have a certified aquaculture standard. And if

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that were the case, then we would be able to easily point source material to actually organic fish.

And that would, again, actually, make this potentially moot because we would have an organic source.

And that was another common comment.

And CROPP Cooperative actually said, if we had organic fish and it was sourced from organic fish, we would absolutely go in that direction.

So, I think I've hit on the major points here, and I look forward to discussion.

MR. ELA: Great, Asa.

It looks like Kyla has a question.

MS. SMITH: Thanks, Asa.

I'm on the Handling Subcommittee, and this didn't occur to me until now, in reading the public comments. So, what I was thinking about, anyway, is, right now, these three options are focused on like the certification part. And I just wondered if there was an overarching accreditation scheme that would sort of wrap all of these up into like a certification. Like it would be one, like

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

option 1, basically, by a third-party certifier accredited to some particular ISO standard. I don't know if that exists or not.

And that brings me to my second point with one of the comments, or maybe it was a couple of comments, but talking about having specific certification schemes called out maybe gets us into a sticky wicket, like we are with the inerts thing, down the line should they -- I don't know -- change the name of their certification thing, or we don't agree with it anymore, or whatever. And then, that is like tied in the annotation.

And so, I understand that being vague leads to some inconsistencies, but being specific also has been challenging for the Board to grapple with. So, anyway, I don't know if there's like an overarching accreditation that would cover these things.

MR. BRADMAN: Yes, I think that's a great point. I think that was some of the idea behind the suggestion of No. 2, that the ISEAL and the GSSI kind of provide that broader validation

and accreditation to marine sustainability certification organizations, and that No. 1 was too vague.

But I think it's also possible that those could change. Some of their components are mandatory and some are voluntary. And we would probably have to limit it to the mandatory, which still wouldn't, I think, address concerns here.

But, you're right, I mean, this is a situation where we're outsourcing a standard or a criteria to an outside organization.

At the same time, there aren't the resources here to deal with it. And maybe this can be considered also interim until we have an aquaculture standard, so we can have organic fish.

MR. ELA: Carolyn? And then, Wood.

MR. BRADMAN: And just one last thing. I don't believe there is an ISO standard for this.

MR. ELA: Go ahead, Carolyn.

DR. DIMITRI: Okay. So, this is so fascinating. I mean, the whole fishing scene has been fraught with so many problems. I mean

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

everywhere you look.

Let me see. There, I had to unmute myself. It does a weird thing when you go into Spotlight.

So, anyway, this comment builds on a little bit what Kyla was saying. I mean, this idea of being certified as sustainable by a third-party certifier is just, I think, a little too vague because it just leaves room for anyone to like open up shop and become a third-party certifier without it having any bite.

So, I see with option 2 there is this effort to identify like legitimate bodies. And I don't even know how this would be done, whether there could be like a list of like here are the acceptable third-party certifiers, and the third-party certifiers would somehow have to -- I mean, I'm not saying they should petition us to get on the list, but there should be like maybe some process for a third-party certifier to go through some minimum vetting process. So, you can at least feel like something is being accomplished

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

other than just like saying third-party certifier; some company goes and gets it, and then, they just stamp it on their package, and who really knows?

I appreciate your nuanced description of this as well. It's very complex.

MR. BRADMAN: Yes, I mean, I think you raise -- you know, these are all challenging issues here. I mean, in some ways, the Seafood Watch one, perhaps if we took out the yellow category, maybe that would be the most simple. Some of the concerns are, though, that on the Seafood Watch, one concern was that it's desk-based versus some of the other organizations that actually do real inspections, although I have to check on that with the people at the Seafood Watch.

And then, the other thing is that, you know, they have a kind of public-facing consumer criteria for many fish, but they also address species on a commercial basis. And their list is a little bit longer. So, that might be a little more accessible in the sense that they're U.S.-based, but I don't think they have the global

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

reach that these other organizations have. So, again, the idea with ISO and GSSI was that they are a consortium, organizations that work across the seas, so to speak.

DR. DIMITRI: So, in a sense, it's basically these two organizations would be in charge of vetting whatever certification system, and we would, basically, trust those?

MR. BRADMAN: Yes. I don't know, it's not like they would vet them for us, but we would say that a certifier would have to get -- and this is how some people have suggested they would operationalize it, which they considered enforceable. They would expect like an attestation that they were getting fish from a stock that was evaluated by an organization that meets these standards. And so, there would be a process to document that compliance. And, of course, it would be, to some extent, honesty-based, but it would still be a step.

DR. DIMITRI: All right. Thank you.

MR. ELA: Next, we have Wood.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. TURNER: Thanks, Asa. A great presentation.

I just wanted to acknowledge that I think that one of the beauties of this process is that we put these concepts out for consideration and get feedback on them. And it certainly helps to sort of clarify one's own perspective on some of these issues.

And sometimes it does it in sort of jarring ways. Like it's funny that you raised the PCC feedback, because I did think it was interesting. They were sort of defaulting to the option 3, where I was feeling like option 2 of the options sort of felt stronger and less sort of bound to something, you know, to an individual certification. I mean, Seafood Watch is great.

I think it's great, but it's got its own -- to your point, you've raised some of the challenges with it -- it's got its own issues.

For me, where I end up landing on this, as a member of the Subcommittee, is that I actually feel like what this is telling me is that we do

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

need an aquaculture standard in organic, period, the end. Like that's what's needed here. We need this in a lot of different areas.

This is, to me, just a reflection of the continued need to kind of define these things more clearly, so that we actually stand by these things. Because what is beautiful about organic and what we're doing here is that we have the force of law behind us. And we all know that certifications across the board are fundamentally different from organic for that very important reason. And I just feel like it's just to me almost a call to action on that front to advocate more forcefully for the need for some of these more clear standards.

I know that's a big can of worms as well, Steve. And so, I'm just happy to put it out there, but that's what this discussion has brought forward from me.

MR. ELA: No, no can of worms. I think it's a great point, and that's one all our stakeholders have been making through this whole

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

meeting as well. And really, it's going to fall on your lap because Asa and I will be out of here.

(Laughter.)

So, you just committed yourself here.

But, Sue, you've got something to say?

MS. BAIRD: Yes, I do, but first a comment. You notice I've unmuted myself every time this time?

(Laughter.)

MR. ELA: Well done.

MS. BAIRD: I agree with everybody. Great job, Asa. This is a thorny question.

But, to the point that you said, that other certifying agents, third-party certification, it would be somewhat a point of trust. And that's true, but there is somewhat precedence against that, in that we accept OMRI, which is not a regulatory agency, to review our inputs that are used in organic production, or we accept CDFA when they verify that there's no pesticides -- that is a law -- no pesticides being applied to the land for three years. So, we have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

precedence for accepting other certifications for input to products. Just a comment.

MR. BRADMAN: Thank you.

MR. ELA: Yes, I'm just trying to think through that, Sue. But OMRI certifies products, not materials. That material list is only up to us. So, I'm trying to think if this is a parallel example or not. I'm going to have to think on that a little bit.

And I was going to say just, you know, we've run into this, I think, with List 4s. It is that, in the Safer Choice List -- and I think Jenny brought this up -- that Safer Choice, that's another agency which makes decisions with not necessarily any public comment, that, then, we take up and use. When we tie a fate to some of these other standards, we give away our strength to not comment on it. So, I am a little concerned about that, but I also recognize that we can't do anything, or can't do everything. So, it's a bit of a quandary. I think, actually, that's where Rick's comment comes in very strong that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

aquaculture standards would be very --

MS. BAIRD: Right, but --

MR. ELA: Sue, did you want to say something?

MS. BAIRD: Just to follow up on that, aren't these agencies certified by the states? We heard that in that panel way back when. The states are overseeing these certification processes?

MR. BRADMAN: Well, these organizations are international. So, these would not be certified within a U.S. state or U.S. context.

MR. TURNER: And no explicit state endorsement, right, Asa? I mean, there's no explicit --

MR. BRADMAN: Yes. I mean, that was why I think Tom originally thought let's use the Food and Agricultural Organization for non-U.S. waters and let's use NOAA for U.S. Waters. And the problem there is that there's inconsistencies between the definitions and standards that FAO and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

NOAA use. And therefore, it wouldn't be comparable using product from fish stocks that were under different kind of -- well, in one case, regulatory; in other case, kind of sustainability evaluation. So, the goal of our discussions was to try to make it uniform.

MR. ELA: Other comments, questions?

(No response.)

I'm not seeing any more, Asa. I think that's a great discussion. I don't envy you in figuring out a direction to go with this at this point. I think our stakeholders gave great comments, and it's a thorny issue that we all know we want to address, and it comes down to the devil in the details, as always. So, thank you.

MR. BRADMAN: Yes. Just one idea might be that, if we do come up with an annotation proposal, we can also have it contingent or have it expire once there's an aquaculture standard.

MR. ELA: Good point. Yes, that's fair.

Well, thank you for taking it on, Asa.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

You've certainly taken on some big question topics, and I think we all really appreciate that.

With that, boy, I think we're going to come in under the wire here. So, I'm a little surprised, but we'll be nice to our ASL interpreters, as always.

And I do want to thank them again. As I've said before, they've really got to deal with all the technical jargon. And, Wood, thank you for making it simpler. But thank you to the ASL interpreters for making this more accessible to everyone in our stakeholder group.

So, with that, we will adjourn for today, and then, we are going to start again tomorrow at noon Eastern Time. That will be with the Crops Subcommittee. And then, later in the afternoon, we'll have deferred votes, which at least will include the ion exchange document and the presentation of our work agendas and materials update.

So, I sure appreciate it, everybody, and thank you for participating. And we will see

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you tomorrow.

(Whereupon, at 5:00 p.m., the meeting was adjourned for the day, to reconvene the following day, Friday, April 30, 2021, at 12:00 noon.)

UNITED STATES DEPARTMENT OF AGRICULTURE

+ + + + +

NATIONAL ORGANIC STANDARDS BOARD

+ + + + +

SPRING 2021 MEETING

+ + + + +

FRIDAY
APRIL 30, 2021

+ + + + +

The Board met via Videoconference at
12:00 p.m. Eastern Time, Steve Ela, Chair,
presiding.

PRESENT

STEVE ELA, Chair
NATE POWELL-PALM, Vice Chair
MINDEE JEFFERY, Secretary
SUE BAIRD
ASA BRADMAN
AMY BRUCH
BRIAN CALDWELL
JERRY D'AMORE
CAROLYN DIMITRI
RICK GREENWOOD
KIM HUSEMAN
LOGAN PETREY
KYLA SMITH
WOOD TURNER

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

STAFF PRESENT

MICHELLE ARSENAULT, Advisory Committee
Specialist, Standards Division
JARED CLARK, National List Manager, Standards
Division
DAVID GLASGOW, Associate Deputy Administrator,
National Organic Program
ERIN HEALY, Acting Director, Standards Division
DEVON PATTILLO, Agricultural Marketing
Specialist, Standards Division
DR. JENNIFER TUCKER, Ph.D., Deputy
Administrator, National Organic Program;
Designated Federal Official

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

CONTENTS

Crops Subcommittee

Topics:

Proposal: Paper (Plant pots and other crop
production aids) - petitioned 8

Proposal: Biodegradable biobased mulch
annotation change 25

2023 Sunset substances review:

Copper sulfate 82

Ozone gas 84

Peracetic acid 88

EPA List 3 - Inerts of unknown toxicity 91

Chlorine materials (Calcium hypochlorite,
Chlorine dioxide, hypochlorous acid, sodium
hypochlorite) 112

Magnesium oxide 124

Calcium chloride 128

Rotenone 133

Crops Subcommittee (Cont)

Discussion Document: Ammonia Extract -
petitioned 135

Discussion Document: Kasugamycin -
petitioned..... 191

Deferred Votes 207

NOSB work agendas/Materials update 221

Other business and closing remarks 227

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

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

12:01 p.m.

MS. ARSENAULT: Welcome to day three of the National Organic Standards Board. The audience attendees are in listen only mode, so you don't have a mic or camera to operate. The chat function is enabled though and you are welcome to chat amongst yourselves.

For whatever reason, we all can only either chat to all panelists or all panelists or attendees. And there is no feature to privately chat with a single person, it appears. For me either. But feel free to chat amongst yourselves.

I'm going to paste into the chat window as well the Zoom login information, the phone numbers. So if you have any audio issues, you can dial in on the phone.

And with that, Steve, I will turn it back over to you to take us out of recess.

MR. ELA: All right.

MR. D'AMORE: You going to record this?

MS. ARSENAULT: Thank you, Jerry.

Recording to the Cloud. Got it.

MR. ELA: Perfect. All right, welcome everybody to the last day of the spring NOSB meeting. It's been a great discussion so far, and we've got crops coming up with a variety of things, as well as our deferred vote on ion exchange and then our work agendas at the end of the day.

I have to apologize, publicly apologize to Jerry from yesterday. I did not put on my necklace of rubber gloves for handling, I neglected to do it. So I don't want handling to feel left out, but I do have the crops focus here with some fresh apple blooms. I, hopefully I don't look too much like a Star Wars character but --

MR. D'AMORE: Looks comfortable.

MR. ELA: Looks comfortable.

(Laughter.)

MR. ELA: I'll hold them up for right now so they'll probably disappear as they fall off. Just like petals in the spring, you know.

But I want to start off with roll call just real quickly just so for the record we know

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

who is on the call. So I'll start off with Sue.

Are you there?

MS. BAIRD: Yes, I'm here.

MR. ELA: Okay. Then Asa?

MR. BRADMAN: Yes.

MR. ELA: Amy?

MS. BRUCH: Yes.

MR. ELA: Brian? Brian, are you out
there?

MR. CALDWELL: Yes.

MR. ELA: Okay. Jerry?

MR. D'AMORE: Good morning. Yes.

MR. ELA: Carolyn?

DR. DIMITRI: Hello.

MR. ELA: Rick?

MR. GREENWOOD: Yes.

MR. ELA: Kim?

MS. HUSEMAN: Hi. I'm here.

MR. ELA: Mindee?

MS. JEFFERY: Yes, I'm here.

MR. ELA: Logan?

MS. PETREY: I'm here.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Great. Nate?

MR. POWELL-PALM: Hello, hello. I'm here.

MR. ELA: Kyla?

MS. SMITH: Good afternoon. Hello, I'm here.

MR. ELA: Wood?

MR. TURNER: Yes, good morning. Hello, I'm here.

MR. ELA: All right. And I obviously am here. So it looks like we have the full Board of 14 to start things off.

And with that, Rick, I will turn it over to you as Chairperson of the Crop Subcommittee.

MR. GREENWOOD: Wow, thank you, Steve. First, a little note. A lot of the profit that you would have is on your head there. So I wouldn't do that anymore.

(Laughter.)

MR. GREENWOOD: Just a tip from one grower to another.

(Laughter.)

MR. ELA: Okay.

MR. GREENWOOD: Well, hello everyone.
And it is the Crops Subcommittee presentation.

And first of all, I'd like to thank my
Committee Members. We've had, obviously when you
look at the agenda, we have some tough things that
we've worked on for months.

And I think what's always impressed me
about the group is we've had really good
discussion, honest discussion. People are very
respectful of everyone's positions.

And these are hard issues. I mean,
we've spent a lot of time talking about it, so I
just want to thank everyone for the work that they
have put in on it.

And with that, I'd like to turn it over
to the first agenda item, which is the proposal
for paper pots. Now, you might think that this
will go on forever, but it's up to Steve to sort
of close the loop on this. So, Steve, why don't
you go ahead and talk about the paper pot petition.

MR. ELA: Sounds good. I was just

picking petals off my shirt here.

(Laughter.)

MR. ELA: But yes. And actually, Rick, I have to correct you, it is paper based planting aids at this point.

MR. GREENWOOD: Yes.

MR. ELA: We have moved beyond the paper pots.

MR. GREENWOOD: Yes.

MR. ELA: Yes. I think this is the third iteration of the proposal for, it could be forth, I'm not sure, for paper based planting aids.

And the wording and everything is in your, either posted on the website or in your binders for the Board. So that's there.

And basically we've been around this merry go round before. And from my reading of the comments, most the people are in favor of us going ahead to pass this, but there were a number of little technical comments as well, and I just want to highlight those.

One of them was in the terms defined.

They would like the addition of the words, typically in paper, to help define those.

I know we have talked about that in the past and one of the problems is, typically in paper, is a very wide, wide definition since paper is now, there could be wholly synthetic papers on the market as well. But still appreciate that comment.

Another big reservation on a number of people is that there is, the listing is missing the requirement for continuous improvement. Which would also possibly include commercial availability if a higher biobased content material were on the market.

So those are good comments. I think we've talked about them a little bit before, and it's been difficult to get that wording in that was satisfactory to people.

But again, I do agree that, I think the Board as a whole really does want this to be a continuous improvement. And that is, some of these higher biobased materials come on the market,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that this will be reevaluated and the listing updated as some of those become available.

One of the people, one of the suggestions in that was to use something like the Seeds and Planting Stock Practice Standard. Which allows for the use of non-organically untreated seeds when the equivalent organically produced varieties not commercially available. So, yes, it is a possibility.

One of the difficulties, again, is that papers themselves are synthetic just based on the processing of them, so it's a little more difficult to separate out nonsynthetic and synthetic and biobased and not biobased since biobased there can be some very resilient non-biodegradable plastics made out of cellulose.

So it's a tough listing on some of those things of how we define. Because biobased doesn't necessarily indicated biodegradability, oh, I got it this time. And likewise, non-biobased also doesn't indicate that, but it can go both ways.

Another comment is that they just urge

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

caution regarding the percentage allowance of synthetic fibers in the proposal.

And a related comment where we said the, or we suggested we had in some language from the last time that the other 40 percent beyond the 60 percent cellulose based, and we said they can be comprised of nonsynthetic, other permitted synthetic ingredients or synthetic fibers adhesives and resins.

And they, you know, it was a question of, are these ors and ands and how are those percentages calculated, are they by weight or by some other method. And I think we've kind of determined that's by weight. But all these things can go in a cover page, assuming we pass this.

Another comment that's been brought up a number of times is that we should not allow virgin paper and that the adhesives should be limited.

One of the difficulties is that using recycled paper is very difficult because of the variability in that recycled paper. And it's been brought up that there is really a tiny amount of virgin paper

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

used in these pots.

But again, very, you know, respect those comments and take them to heart.

On a bigger level, some people asked that we enumerate specific standards by which biobased content is to be verified by qualified personnel. We had originally just said it had to be verified by ASTM D6866, and some people really pushed back on that for a variety of reasons and so, we did add in the qualified personnel.

But in doing so we created another set of comments as to what those qualified personnel are. And so people would like that, that spelled out a little bit more. That's a tough one.

One person said in response to that they'd really like to see manufacturers become listed by a material review organization, such as OMRI or other material review organizations. That way there would be consistent product approval between certifiers.

One of them was, in terms of OMRI said, they would really like the biobased product to be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

used, some of the definitions from USDA BioPreferred program, although some of those definitions may or may not be consistent with the OFPA definitions.

Finally I have to laugh a little bit.

We start to chase our tail a little bit. In the original proposal we did not include any language about nutrients or fungicides or pesticides and was asked that we add in some specific language on nutrients and pesticides to note that they had to, if anything that was included, had to be on the national list if they were synthetic.

On the last go around there was quite a bit of push back on the pesticide inclusion just because pesticides have their own use category.

It's partly based on EPA criteria, so we removed that.

And now in this go around we did have several commenters note that they would really like the nutrient language taken out because that's always spelled out in OFPA. So we're kind of on the, you know, we're kind of going in the circle

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

now of those on whether they should be in or out.

A number of people really wanted them in, now a few people want them out. So I'm kind of inclined to think that we're making people uncomfortable on both sides and that this were probably about the right spot and we can leave it up to the program as they write the regulatory language to make that determination.

I think the bottom line is we want to make sure that any nutrients used in these paper pots do comply with OFPA. And if they're synthetic they are on the national list. And so I think that, however that gets done, I think that's the bottom line.

Finally, a number of people suggested listing changes in terms of the paragraphs where they're listed, or some of the references listed in terms of the nutrients. And I -- those are good comments, I think they're appropriate.

But I don't think they precluded us passing this since ultimately the program as they write the rulemaking will insert those in the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

proper place. It's really somewhat out of our purview to say where they're listed, that's the program's responsibility.

In our listing of these things we are really trying to help the program and dictate where we thought they should be, but I think some of the minor things of exactly where they're listed are probably not a reason, are not a reason to not accept this proposal.

That was a double negative. So, despite those comments we should accept the proposal and let the program decide exactly where those go.

Otherwise, most the comments were positive in favor of passing this. Let's say there were a few that really, just with regards to the virgin paper, some of these other things are not in favor of passing it.

There are, Asa has brought up the question of these synthetic products being approved in this case. I appreciate his thoughts and I think he's probably right.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Although again, we're dealing with a very small component of organic agriculture and we would hope we would move to nonsynthetic and fully biodegradable materials in the future. And I really hope that if we pass this that a future board, as some of these products mature and change, we'll ask for a work agenda to update this verification.

So with that, I would open it up to questions and comments from the Board.

MR. GREENWOOD: Thanks, Steve.

MR. ELA: Sue has a question.

MS. BAIRD: I have a comment.

MR. ELA: All right.

MS. BAIRD: I really, truly, truly appreciate all the work you guys have done on this.

It's gone back several times, you have, it has certainly been a work in progress and I really think that this needs to go forward.

Just a little ironic to see the word resins in there --

(Laughter.)

MS. BAIRD: -- based on our ion exchange thing, but you know, life is never 100 percent perfect. Thank you very much for the work.

MR. ELA: Thanks, Sue. Yes, there is always a little bit of irony in some of this, I very much agree.

Others? We have Logan and then Wood.

MS. PETREY: Hi. Thank you, Rick. Curious if any of this would apply to plant tape. Are you familiar with plant tape and the transplants with that?

MR. ELA: Yes.

MS. PETREY: Could this potentially bleed into that system there?

MR. ELA: The intent was for it to bleed into that system.

MS. PETREY: Okay.

MR. ELA: But beyond paper pots it would cover all planting aids. And we haven't heard much from the seed tape manufacturers but we presume that, and from what we understand, that this listing would be able to include those.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

My understanding is the paper pots essentially have to be more resilient than most other uses just because they have a lot of water added to them in the nurseries, greenhouses and that --

MS. PETREY: Right.

MR. ELA: -- other things are applied that essentially aren't intended to breakdown very quickly. So, yes, these, the paper planting aids are intended to cover seed tapes as well as others.

MS. PETREY: Okay, very cool. Thank you.

MR. ELA: Wood and then Amy.

MR. TURNER: Thanks, Steve. And thanks again for all the work on this. This is going to be my earliest memory of time on the NOSB.

I think, walking in the door and getting hit in the face with paper pots was a, has been an experience for me for the last year and a half, so thanks for all the work you've done on it.

I just want to, and I appreciate that you acknowledging the issue on virgin paper, I have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

raised that several times before. And I just wanted to reiterate the point, I continue to believe, the idealist in me, continues to believe that the beauty of organic, or part of the beauty of organic, is that we're not contributing to other problems, other issues in the world in our quest to kind of make organic all that it can be.

And so I do get concerned that there is not enough innovation happening to sort of move away from virgin paper. It concerns me a little bit that we're not noting the source of that virgin paper, if it is indeed used.

But I think given the fact that you have communicated very clearly about, and I think we're quite clear about sort of the overall scope or scale of this material, I know it's very important to a lot of growers but it's still a fairly small part of the organic farming, sort of landscape.

I'm cool with it but I just wanted to acknowledge, again, that virgin paper issue is something that is nagging at me and I'm going to leave it at that.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Sure. I think it's great. I'm glad you brought that up. And certainly some of our stakeholders have.

I know at least one of the manufacturers of paper pots has testified in the past, or given us comments, that they are using paper source from certified, I can't remember the certification, but sustainable --

MR. TURNER: FSC or SFI is one of, one of those two?

MR. ELA: Yes. Yes, thanks.

MR. TURNER: Okay.

MR. ELA: Thanks, Wood. So they are, as a company, are taking that stance that it needs to be paid attention to.

I can't speak for other manufacturers, and I think, I agree with your comment, that, I mean, the scale does make a difference but I would hope many manufacturers would move to respect your thoughts and comments.

MR. TURNER: There has got to be some innovation out there down the road, Steve.

MR. ELA: Yes, agreed. Agreed. And I think we've heard about the use of hemp and some of these other fibers linked, they may supplant some of this virgin paper as well as the technology improves.

But could figure out how to word that in, but again, I would hope that this could be reviewed five years down the road by a board, maybe when it does come up for Sunset. Before it does there could be a work agenda item to review whether it needs to be further annotated or the annotation needs to be up in terms of ingredients and biobased content.

We've got Amy and then Kyla.

MS. BRUCH: Okay. Thanks so much, Steve, for your communication on this subject matter.

And maybe, I have two questions. Actually, one is a little bit in conjunction with what Wood asked.

The next item that we're going to be discussing, that's also a proposal. Actually it

has that built in continuous improvement clause into this situation, so I didn't know if it makes sense to, for my opinion, and I'm still new to the Board, it almost seems like it's easier to do all of this all at once then try to, five years from now in the sunset renewal process, get a work agenda item to then start working on further annotations when hopefully in five years or maybe even in a year or two there will be some improvements in materials to try to hold people to a higher standard.

Is it worthwhile, I know you kind of touched on it in your intro to this, but is it worthwhile to include a continuous improvement clause right in this proposal right now?

MR. ELA: Yes. It's one we've kind of gone back and forth on in public comments. We initially did include about biodegradability clause that while most people want that noted, the definition and a verification of it was very difficult. And we had a number of stakeholders ask us to take it out.

I mean, we recognize that, I think everybody recognizes that's the ultimate goal, but the wording became very difficult.

And we did also have something similar in it to go towards that 100 percent biobased. But again, the concern was that you can be 100 percent biobased and completely nonbiodegradable.

Or cellulose based and completely nonbiodegradable because there are some plastics made out of cellulose that are very long lasting.

So the definition of the commercial availability in this case of what items changed, is it biobased, is it cellulose content, et cetera, was a little problematic of what we are defining.

And that we didn't want to shoot ourselves in the foot of requiring some increase in something and actually having it be an increase, like I said, of biobased content but actually less biodegradable.

So that tension of how do we define those things, at least in this case, was difficult.

I think we, I think on the biodegradable mulch

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

we're seeing some of those comments of, where we, and we'll cover that with Asa, but the 100 percent, well, what does that mean and how do you define that, and does that mean you have to use it if it's 100 percent but there are better products that are 99 percent.

So we get tangled up in that. And as much as I don't like leaving it to future boards without being written in, but the wording, the devil is in the details on this listing, and we have gone round and round in the wording, even of what we have, and the wording on commission, commercial availability was a tough one on that as well.

So, I hate to say we're kicking the can down the road but we are. Or that's my opinion. My humble opinion. And everybody can argue against me. Kyla.

MS. SMITH: Thanks, Steve. I just was going to just say thanks to the Crops Subcommittee for your perseverance on this. And to the rest of the stakeholders really for sticking with the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Board and the Committee as they took their time to get something that is workable for now, right.

And I know that certifiers were just grateful for the process to be able to, that the Board and the program went through to continue to allow these while we were able to get something that would be workable.

So I just wanted to sort of acknowledge your all's work on the Committee to stick with it.

And also acknowledge the stakeholders as well for hanging, hanging with us and providing such great feedback so that we could get something that will be implementable and enforceable.

MR. ELA: Thanks, Kyla. And in the cover sheet we send to the program I'm certainly going to note some of these, assuming it passes, let's just start with that, assumes it passes, in the cover sheet I'll certainly note some of these concerns that were given to us on this go around. As well as some of the listing issues.

But I this, you know, Harriet Behar started this, I want to give her credit. And

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

unfortunately the program allowed the use of these pots while we were deciding. I think that was, it really took the time pressure off us to try and get it right versus trying to just get something through to help these small growers.

But I, boy, this is one where I have to say, as on many things, the stakeholders really, I appreciate their thoughts in looking at this from different angles and how it might be used in ways we didn't intend, et cetera, et cetera. And the stakeholder input on the final product really shows.

And I think, I just want to thank them for all their thoughts of things we didn't think about. That really, it does show this amazing process.

Amy, I probably cut you off, on another comment you wanted to make. Do you have more you wanted to say?

MS. BRUCH: Yes, I had a very different question. No, completely find that Kyla jumped in there.

One other question. This was just maybe for clarification as well. There was a commenter, actually, it was from the certifying group, and had concerns and questions about annotating this in the terms defined list, the 205.2.

Since this specifically is more of a category and not a generic substance, like most of the listing of 205.2 has. I think overall it seems like there is consensus that adding it to 205.601 was fine, it was just adding this broad based category to the terms defined list could generate confusion from a certifier perspective.

So I just wanted to open that up for additional comments as well.

MR. ELA: Yes. Anytime any other Board Member wants to jump in on these, I certainly do not need to be the only responder.

I think the thought in talking with the program, as we do in the listing under 205.601 is paper based crop planting aids. That's the listing, but then we needed to define what paper

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

based crop planting aids are, and without that definition it's wide open.

So, we could try and put it all in the one listing, but for future use, having that definition to respond to seemed like a good way to go.

In terms of exactly where these things are, I mean, the program is really in charge of writing the regulatory language. The human capital things where some of the people said that helping the NRC with regulatory language would be very useful.

Ultimately the program has that jurisdiction, so some of these, where they go issues, I think can pretty easily be resolved. Or will either be kept or changed by the program in terms of how it makes sense in the regulations.

I don't know if that answers your question, but I would say the exact numbers that we're referring to, we're just trying to give, be fairly specific, but it's not, those aren't written in stone.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. BRUCH: Okay. That helps providing further context. And, Kyla, are you jumping in to add to that? Okay.

MS. SMITH: Yes.

MR. ELA: Go ahead, Kyla.

MS. SMITH: Yes, I was just going to say that there is some precedent for this type of framework with the definition, as well as a placement. So, biodegradable, biobased mulch films are the best agreeable since there's problematic.

But anyway, it exists as an example for placing a definition of a broader, sort of category, of item in the terms defined as well as the placement on the national list. And just feel like certifiers are familiar with that.

And I would just say that the Accredited Certifiers Association does have a continuous working group regarding materials and so I do think that if there is some questions or things along those lines that that work, or that group could take up getting collectively aligned with their

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

questions or interpretations of that.

MR. ELA: All right. I am not seeing any further questions. I know we need to move on.

So there's, and, Rick, I'll just jump in here. So there is a motion that has come out of Subcommittee. I realized yesterday when I called for a motion and a second on the floor that those were already done by Subcommittee, and we use those motion and seconds for the Board vote as they come out of Subcommittee.

So there is a motion to add the 205.2, terms defined, paper based crop planting aid, a material that is comprised of at least 60 percent cellulose based fiber by weight, including, but not limited to, pots, seed tape and colors that are placed in or on the soil and later incorporated into the soil, excluding biodegradable mulch film.

Up to 40 percent of the ingredients can be nonsynthetic.

Other permitted synthetic ingredients at 205.601(j) or synthetic strengthening fibers, adhesives or resins, contains none or less than

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

80 percent biobased content as verified by a qualified third-party assessment. With some details on that. And added nutrients must comply with 205.105, 205.203 and 205.206.

And I apologize to our ASL interpreter for going really quickly through that, but they are listed on the website and on the slide in front of us.

So the motion was by myself, Steve, seconded by Rick. And we will --

MS. JEFFERY: Steve, do we need to vote on the motion about synthetic first?

MR. ELA: Did I miss that? Yes, we do. Let's go ahead, since I made the motion, let's go ahead and vote on this one.

And actually, Michelle, you've got a comment on that?

MS. ARSENAULT: I was going to say the same thing that Mindee did. Thank you, Mindee.

MS. JEFFERY: Thank you, Michelle.

MR. TURNER: Mindee, procedurally, does the first one have to happen first for us to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

have this vote? Do you know?

MR. ELA: I don't think so. I don't think there is a prescribed order. So since we've already put this motion on the floor, let's go ahead and vote on it and then we can come back.

So, we are starting --

MS. JEFFERY: Amy.

MR. ELA: Amy, okay. So, Amy?

MS. BRUCH: Yes.

MR. ELA: Brian?

MR. CALDWELL: Yes.

MR. ELA: Jerry?

MR. D'AMORE: Yes.

MR. ELA: Carolyn?

DR. DIMITRI: Yes.

MR. ELA: Rick?

MR. GREENWOOD: Yes.

MR. ELA: Kim?

MS. HUSEMAN: Yes.

MR. ELA: Mindee?

MS. JEFFERY: Yes.

MR. ELA: Logan?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. PETREY: Yes.

MR. ELA: Nate?

MR. POWELL-PALM: Yes.

MR. ELA: Kyla?

MS. SMITH: Yes.

MR. ELA: Wood?

MR. TURNER: Yes.

MR. ELA: Sue?

MS. BAIRD: Yes.

MR. ELA: Asa?

MR. BRADMAN: Yes.

MR. ELA: Chair votes yes. Mindee?

MS. JEFFERY: We are 14-0, the motion passes.

MR. ELA: Okay.

MS. JEFFERY: No abstentions or recusals or absences.

MR. ELA: Okay. Moving on to the classification motion. The motion is to classified paper based crop planting aids as a synthetic substance.

The motion was made by myself, Steve,

seconded by Jerry. We will start the vote with
Brian this time. So, Brian?

MR. CALDWELL: Yes. Yes.

MR. ELA: Jerry?

MR. D'AMORE: Yes.

MR. ELA: Okay, Jerry is yes.

Carolyn?

DR. DIMITRI: Yes.

MR. ELA: Rick?

MR. GREENWOOD: Yes.

MR. ELA: Kim?

MS. HUSEMAN: Yes.

MR. ELA: Mindee?

MS. JEFFERY: Yes.

MR. ELA: Logan?

MS. PETREY: Yes.

MR. ELA: Nate?

MR. POWELL-PALM: Yes.

MR. ELA: Kyla?

MS. SMITH: Yes.

MR. ELA: Wood?

MR. TURNER: Yes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Sue?

MS. BAIRD: Yes.

MR. ELA: Asa?

MR. BRADMAN: Yes.

MR. ELA: And Amy?

MS. BRUCH: Yes.

MR. ELA: And Chair votes yes.

Mindee?

MS. JEFFERY: Again, we are 14-0. No abstentions or recusals or absences. The motion passes.

MR. ELA: All right. Finally, there is a motion to add 205.601(p), production aids. Paper based crop planting aids, as defined in 205.2, virgin or recycled paper without glossy paper or colored inks.

We will start the voting with Jerry.

MR. D'AMORE: Yes.

MR. ELA: Carolyn?

DR. DIMITRI: Yes.

MR. ELA: Rick?

MR. GREENWOOD: Yes.

MR. ELA: Kim?

MS. HUSEMAN: Yes.

MR. ELA: Mindee?

MS. JEFFERY: Yes.

MR. ELA: Logan?

MS. PETREY: Yes.

MR. ELA: Nate?

MR. POWELL-PALM: Yes.

MR. ELA: Kyla?

MS. SMITH: Yes.

MR. ELA: Wood?

MR. TURNER: Yes.

MR. ELA: Sue? Sue, you're on mute.

MS. BAIRD: Yes. Sorry.

(Laughter.)

MR. ELA: Asa?

MR. BRADMAN: Yes.

MR. ELA: Amy?

MS. BRUCH: Yes.

MR. ELA: And, Brian?

MR. CALDWELL: Yes.

MR. ELA: Chair votes yes. Did I get

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

everybody on that one, Mindee?

MS. JEFFERY: You did.

MR. ELA: Okay.

MS. JEFFERY: 14-0. Again, no abstentions, recusals or absences. The motion passes.

MR. ELA: All right. Thank you very much, everybody. And I'll turn it back to you, Rick.

MR. GREENWOOD: Okay. Thank you, Steve. And again, this, the paper planting aids is always reminding me of one of those zombie movies where it keeps coming back from the dead, but I've guess you've put a wooden stake through its heart. At least this time. It will be back, obviously.

Anyhow, we'll go on to Asa, and Asa is going to discuss the proposal for biodegradable, biobased mulch film annotation change. So with that, Asa, you have the floor.

MR. BRADMAN: Okay, thank you. This is going to be a hard one. I think there is a lot of different views on this. And there is arguments

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

for and against that are all valid.

So the issue here is the use of biodegradable films. I think it's important to use the word plastic here, although some people don't like that. Just because we're talking about plastic films.

Whether they're 100 percent biobased or whether they contain petroleum or other derived material. We're talking about plastic films.

And plastic, of course, can be made from petroleum carbon sources but also biologically based carbon sources as well. And it doesn't mean, they're biobased doesn't mean they're less toxic or less concerning in terms of environmental impact.

So, just to kind of frame the issue here. We have a current listing for biodegradable mulch films. And there is, you know, two key requirements are, one, that they not be produced with excluded methods, and two, that they be 100 percent biobased.

And there has been, I guess, tremendous

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

concern in many ways about the increase in use of traditional polyethylene films and other materials used in organic production. And there is a desire among many to have a biodegradable product.

And because there are no biodegradable films available that are 100 percent biobased, there has been growing support for some alternative that allows for kind of a mix of biobased. And by biobased we mean plant based, currently grown, plant based sources.

Carbon sources for the polymer content of the films versus kind of ancient plant based sources based on petroleum. And of course I think there is a real kind of philosophical concerns about the use of petroleum derived materials and fossil fuels to produce aids and inputs for organic agriculture.

There is a lot of support for a change to the annotation to allow some more flexibility on the 100 percent biobased requirement. I've gone through the comments, I may have missed some, but Oregon Tilth, OWPC, MOSA, Pennsylvania

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Certified Organic Farmers, some certifiers like QCS, Vermont Organic Farmers, NOFA, large scale groups like Driscoll.

There's a lot of support across many sectors of organic to have some more flexibility and more, I think the desire for a biodegradable component.

Let's see, I have my notes here. I can get a slightly larger image here so I can read.

So, I think there is some real benefits to having an alternative to standard plastic. And one of the issues for me in developing in this, and in discussions with people is, is it reasonable to look at this as an alternative to plastic films and is that, is it reasonable to do kind of a comparative risk assessment for the, this material against standard plastic films.

And in a way I, I think actually the answer to that is yes, but I think that's debatable.

And also, it's hard to know, if we're doing a real risk assessment we need standards. And in some ways I feel like we're kind of dealing a little

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

bit with kind of a gut feeling here.

But just to read some comments that have come up in public comment. I hate using plastic mulch so much but I have to think of every benefit it provides to justify using it. I need to plastic for some crops but would love to switch to biodegradable.

We use to take our used plastic mulch to the recycling area next to the landfill, but it was all sent to China and now they won't take it anymore, now it just goes right into the dump.

The person who creates a truly biodegradable plastic mulch should get the Noble Prize.

Plastic, here is another comment of plastic film. It is absolutely necessary for organic Ag right now. Take it away and prices soar and yields plummet.

Northwest growers can be competitive with California growers if they use plastic mulch because harvest is six weeks earlier. Paper mulches will biodegrade but they never give the soil heat that you need to get crops to market early

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

for a good price.

Here is a farmer from Pennsylvania. I would love to be able to use this product on my organic operation, it would replace the plastic that we use that we put in the dumpster and send to the landfill. We would prefer not to use so much plastic that we have to send to the landfill.

So, there is a lot of depth of support for access to a biodegradable period. And there is a lot of depth of support for considering something that's less than 100 percent biobased.

There is also support for the idea of kind of an incremental approach. So we made kind of a aspirational change to allow potentially 20 percent non-biobased and 80 percent biobased.

One of the questions out there was how did we come to that. And in some ways that's anecdotal. As far as I know right now there are not products out there that are 80 percent biobased and 20 percent petroleum based. And so, in some ways this change is aspirational. As the first listing was aspirational.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I know some really reject to the current listing because we have something on the list that doesn't exist in terms of product.

But that, again, this, sorry, I'm getting a little tangled up in words here. Got all these thoughts flying around.

Let's go back to the 80 percent. Again, it's anecdotal. In some ways though we kind of borrowed that a little bit from the paper pot rule, or the paper production aid rule, where we required an 80 percent biobased and suddenly there is a certain logic to extent that to other materials.

And then some manufacturers have said they could potentially achieve an 80 percent biobased product. So we're not quite there yet.

And maybe that's a problem if we have something that still is aspirational.

Other concerns about the language so far is that, I don't think we got some of the wording right and I don't think we got the notion of continuous improvement right. So I think there

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

is some, actually some work to still do on the language that's important.

And there has been some suggestions in comments on improvements and language, many of which I like. And I think perhaps we need more discussion on that.

And this might be something we consider sending back to the committee to try to get the wording quite right.

Other concerns in terms of language that verification is a challenge that, with the current language we also have too many levels that could require verification.

There was suggestion too that we look more carefully at the biopreferred products. And I have looked at those.

In some cases there could be issues there with having them produced by excluded methods, but I think that's, perhaps we need to look at that a little more carefully.

If you look at the write-up there is, right into the write-up we've included things that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

can make arguments for and make arguments for against this product. And I appreciate all those who really feel that this material is not ready for prime time.

And that we need more research on the potential real world degradation process and the concern that we're going to be introducing a new source of microplastics directly into the soil.

And this of course would be a petroleum based material. And I think there is kind of an objection to that.

I've made the point several times though that we already allow petroleum materials to be added directly to agricultural environments.

And that's especially with the use of oil based mineral oils, with horticultural oils.

In that case we're allowing a component of petroleum to be used as a pest control. And God forbid if we try to take that off the list, it's really an essential tool.

In California, overall use both conventional and nonconventional. It's actually

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

one of the most heavily used pesticides in the state. And it's also heavily used in the organic sector.

So, we already do have the precedent.

We're allowing petroleum products to go into the soil, into agricultural environments. And I think we have to think about that.

There is, was comment that this is kind of undoing the work of 2012 when the biobased standard was, I believe, first made. But I guess, and this gets back a comment I made yesterday about carrageenan and this idea of stare decisis relying on precedent and when do we make a change on the national list or regulation.

I don't think it should just be at the whim of a changing bore. Although in this case I feel like we're nine years later and circumstances have changed.

And one of those is that plastic use in agriculture has exploded. In organic agriculture. And I think that is a, something we should all be thinking about.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

When we talk about container growing, I've said this before and I'm sure some people might object to this, but I really feel like infecting some of the parties to the lawsuit, again, hydroponics are actually using container growing methods by, I like the term that came up in public comment, wrapping the soil in plastic.

And all those acres and acres of plastic, from organic agriculture, are going into a landfill. And they're also breaking down. In many cases, when plastics are removed there can be residues left in the soil.

And now here I'm talking about the polyethylene films. And there's also probably microplastics that are leeching from those materials and getting into the soil.

So, de facto, we're already allowing plastic material to be used in organic. And it's also going into the soil.

So, when we talk about plastic culture I think plastic culture is both in, potentially a container setting, but also in a soil setting.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So the notion of plastic culture is much broader than just containers.

In fact, the term actually comes from, for example, our strawberry production systems where we're basically mounding the soil into plastic covered rows.

Let's see, I have a few more comments.

So, I think actually that's the kind of the end of my comments. And again, just to emphasize. As laid out in the proposal, we cover both the range of reasons to allow this and a range of reasons not to allow this.

There is a depth of support for this material in many sectors and it's not simply, it's not like a, this is not a corporate initiative to change organic production, I think there is just real challenges.

Again, to summarize too the concerns about the current language that we haven't got it right, and I think we should, as a Board, consider sending it back to the Subcommittee to improve that language and then consider that.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

But I'm more interested first in having kind of a discussion on the substance before we think about what we might do about the language and what further discussion would be necessary.

MR. GREENWOOD: Thanks, Asa. Steve?

MR. ELA: Yes. Just getting myself unmuted here. Go ahead, Brian, and then Logan.

MR. CALDWELL: Yes. Thanks, Asa, for going through an incredible amount of work on this and putting something, I think, very useful together.

I'm really conflicted on this. I can see, like Asa, I can see really both sides, really strong arguments. But I think what is tipping me in favor of this right now is that two different research groups testified that these mulches, the ones that were commercially available now, some of them were 100 percent biodegradable in spite of the fact that they have a significant synthetic components.

They said, and I asked them specifically, and they said it was 100 percent

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

biodegradable. So that really makes a big difference for me.

And the other thing I wanted to mention was, that over the years I've spoken to several small scale vegetable growers who said that they were not organic specifically because they couldn't use a biodegradable mulch and they refused to use a polyethylene plastic mulch. And that's a significant number of folks who feel that way. So those are my thoughts.

MR. ELA: Logan.

MS. PETREY: Hi. Yes, thank you. Thank you, Asa. Just a comment also.

You know, you mentioned a lot of people talking about taking the plastic to the landfills and that gives a bad picture. And then I think you mentioned later on, there are some residues left.

And I actually grew up on a plastic farm, it was conventional, and had to rip up plastic and it does not come up like a bed sheet, it just comes a part after a long season. The weather will

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

tear it. And you live with that. And it's in the field a lot.

And I grow some crops that are for processing, and mechanically harvested, and that would be a foreign material. And so I can see where using the plastics, or your traditional plastics, can be limiting as far as crop rotation and getting, I don't know, full utilization out of a crop program.

And so, absolutely in favor. I'm excited. I've actually seen the biodegradable mulches before, excited. I mean, it was years ago on a conventional farm and I was impressed with how fast they went away.

And I'm sure growers will have to work around that. They have to make sure it lasts the length of their crop. But it was exciting to see.

It was a very clean field from what I was used to and what I grew up on.

So excited about it. Thank you, Asa, for all the work you did.

MR. ELA: Okay. Next we have Wood.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. TURNER: Great job, Asa. This one is like (audio interference) always mark my first stretch here on the Board.

I'm going to go somewhere that you, because you went there and I am curious because I just want to have you insights on how you would reconcile, how you reconcile kind of these parallel paths, if I dare say it, I mean, paper based planting aids and biodegradable mulch and the very real reality that paper pots also are going to have similar components to the paper pots, as approved, that will be contributing similar synthetics, if you will, to the soil in the same way that this proposal would, this annotation would do in the case of mulches.

And I'm just curious, how you reconcile the feedback we've heard from the community on those two different, those two different materials and sort of what that does in your brain if it's, are we, should we be thinking about these a little bit more in the same context or are they fundamentally two different things?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I don't mean to put you on the spot, but I just would really benefit from your, the way you are reconciling this in your brain.

MR. BRADMAN: Yes. No, I think that's a really good point. I mean, I think part of me feels like, if you support the paper pots rule as it's written, you kind of have to support this. Even though we're talking about different scale.

You know, paper pots are a relatively small amount of material on a small number of farms in a small area within the farms, whereas here we're talking about potentially thousands of acres of material.

The paper pot rule does leave open right now the 20 percent that's nonbiobased, could potentially be like nylon fibers, which are not biodegradable.

And once different here with the biodegradable mulches is that they have been designed that bacteria can munch on them and derive energy and a carbon source from them and that they should decompose. So this actually is a material

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that is potentially less persistent and impactful than that 20 percent in the paper pots.

So, I didn't want to actually get into that, too much discussion about the paper pots because --

MR. TURNER: Sorry about that.

MR. BRADMAN: -- Steve, no. Well, Steve touched on that. And also, there is a real need in the community for this material in terms of labor and how, viability. And I'm kind of hearing the same message for this as well.

So it is hard to reconcile at moment.

One thing also to touch on, which I agree with, there is comments, very thoughtful comments in the public comment about, do we want these plastic mulches at all.

I agree that mulching with plants and sawdust and other materials is, you know, that's what I do in my garden, which is obviously not an economic venture, but the notion of using plastic is not something I'm comfortable with. Whether it's biologically degradable or not.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

But the reality is, is that plastic has become entrenched in organic. And it seems to me this product could be an alternative. And I hope that they are really a hundred percent biodegradable and that we're not introducing a new source of microplastics into the environment.

But then again, I do also do this comparative risk assessment that we're already doing that. So given that we're already doing it, that helps to validate this choice for me.

MR. ELA: Next we have Kyla, then Amy, then Carolyn.

MS. SMITH: Thanks, Asa. As a certifier I think that I tend to hone in on how are we going to enforce this, right, and that words really matter. I'll say that like a bazillion times in my tenure on the Board, I'm sure.

And so, just in regards to the terms I know that a commenter was like talking about that so I just wanted to clarify that. And it's really just the consistency of how the terms are being used.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So right now the term in 205.2 is biodegradable, biobased mulch film. And then we start to introduce a new term with the term plastic in there.

And it's not because plastic is in there, it's just because it's now used inconsistently throughout the definition. And then in the listing.

So my urge would be just to like pick a term and go with it. So if we, as a Board, want to replace biodegradable, biobased mulch film with biodegradable plastic mulch film, or whatever the term is, great. But then we just need to use that consistently throughout the thing, we just can't flip back and forth. One thing.

Second thing that I picked up on from like certifier comments, mostly about the percentage, is the aspirational approach. And I do understand trying to align that with the paper based planting aids.

And so I understand like the, yes, the consistency there with the 80 percent and know that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it's aspirational. I will say that when I was looking at like the background information and all the resources that we have to look at, that I have noticed an uptick in that percentage, right?

So in the, I think it was like the 2016 TR they were talking about like a ten to 20 percent biobased, and now in some of the 2020 documents I saw 60 percent. Or 20 to 50 percent. So I do think that there is that increase.

But what several, at least certifier commenters were commenting on, is that it's still aspirational and will not be something that we can review products to and approve products to right now, which is what farmers are asking for. So we don't know when that 80 percent will be able to have a viable product on the market.

And so, there was just several things I saw about either put a percentage in the, that could be achievable with a product in the market today or delist it.

And then my last comment is just around that term, available. And again, just a call to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

there is a term already defined about commercial availability and just a clarification of terms if that is what we're on about, making sure that we stick to the terms that, as they are defined. Or if that's not what we're on about, just making it clear so that certifiers are able to enforce the annotation.

MR. BRADMAN: Yes, I appreciate all those comments. And I think there is definitely some problems with the language here, and that might need some more fine tuning in the Subcommittee. I definitely see the complexity here and noted many of those comments too.

And in terms of the issue of 80 percent versus allowing current used materials, honestly I took my queue there from the paper pot discussion and felt like, well, we're reviewing this material and we kind of came up with a base that seemed acceptable to the Subcommittee.

And as we've seen now, unanimously to the Board, that that was kind of the threshold.

So that might leave that frustration out there

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that we're kind of notching it down a little bit but still not allowing the product to be used.

But I guess, as you noted, there has been an increase in the biobased content. And this, I guess, since it's a higher threshold, but I understand it's potentially achievable.

But I guess I wouldn't necessarily want someone to notch it down to 50 percent five years from now at some point without first there being a real attempt to increase the content of the product.

And of course we want 100 percent biobased project, or a 100 percent biobased project that may have the same microplastic and other concerns. But that's more acceptable, I think, to us as a community because of the idea of a petroleum derived carbon source.

But I definitely agree there is problems here with the language and how to actually implement this.

MR. ELA: Okay. We have Amy, then Carolyn.

MS. BRUCH: Okay. Thanks, Steve. Asa, thank you so much for kind of laying out this situation in its entirety. The current situation, the PE film, as you know, it is definitely far from ideal.

But I guess my comment is, is the alternative to PE film, is it always just building a better film or is it addressing, in the 50,000 foot view, how do we really improve this entire situation. So that, to me, can hopefully maybe be addressed through the research side of things.

But the volume of the amount of plastic that's being used, to me, is pretty concerning.

And that's how I can differentiate, in my head, our last vote to this subject matter.

And the multi-use piece, consecutive year after year after year, I think needs to be studied. It's one thing to say, in two years they don't have any remaining plastic, but I'm concern, what does it look like after you have based loaded a system several years consecutively, what does this look like.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So I personally think more research needs to be done. I mean, most of the microbial activity is in that top four inches of soil. I think 95 percent of it is.

So if you want these plastics to degrade, they're going to have to be in the top four inches. So if you have that year after year after year, I'm just really concerned that there is going to be a buildup.

So my thoughts are I think a lot more research needs to be done so we get this right and we do make this annotation change.

MR. BRADMAN: Yes. And I totally see that. I think a lot of the comments that this is not ready for prime time reflect that. What information we have and what decisions get made where we have incomplete information is always a challenge.

One thing, I mean, we can look at the rule, if we're talking about at least 90 percent biodegradation in less than two years, you could actually, it wouldn't be too hard to actually

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

develop a little mathematical model using a pretty simple decay rate equations.

And we can actually try to model plastic buildup in different soil types. That actually would be an interesting effort. But that could be something to do just to, to at least inform some discussion about that.

MS. BRUCH: Yes. I think that's a good idea. Different soil types, different environments, climates, et cetera. So thank you, Asa, I appreciate it.

MR. ELA: We have next up Carolyn.

DR. DIMITRI: Asa, I really appreciate your thorough discussion of the pros and cons of this because it is really complicated.

I guess my question comes from my training as an economist. It's like, what actually triggers farmers to undertake specific behaviors.

So, do we really have any understanding that farmers using plastic now are actually going to switch to this, which you are kind of arguing

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

is a better system, or is this actually going to just like encourage people who are using something else to start using this so that you are adding, overall, more plastics to the soil in an aggregate?

So, I mean, I think in addition to wanting to better understand the science for what happens in the soil over the long term from this product, I guess I would also like to understand who this will change farming practices.

Does that mean we're going to like prohibit plastic, sheets of plastic, from being put on farms? So, just a different thing to think about.

MR. BRADMAN: Yes, I think that's a really good point. And do I think this is a better system than polyethylene film, I don't know.

Honestly, I could vote either way on this. Yes or no. Or abstain. It's a hard issue.

I don't think it's actually worse than polyethylene, so that might be kind of a low bar.

I think it might be better if you look at the support for it in the community across broad

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

sectors, there is support for it.

And in the absence of this we also will probably see continuing growth and use of polyethylene films. I mean, honestly if I were voting about polyethylene films right now, I might vote no in terms of re-listing it. And that would be a huge disruption to organic agriculture.

I wish plastics were not in use and that we had natural materials and, that we weren't using plasticized material. I think, honestly, I think it's kind of a stain, a little bit, on organic.

When it's used across all sectors, big and small, corporate and not corporate, real organic and not real organic. ROP, you know, it's everywhere.

So yes, I guess there's a real philosophical issues with this one.

MR. TURNER: Your muted, Steve. I guess you're calling on me.

MR. ELA: Sorry, Wood. I'm just going to do a time check as well. But let's go to Wood, Kyla and Carolyn and see if we can finish it up.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. TURNER: Sorry for the additional question but I just wanted to reiterate the point that I made in the paper pot discussion that I fundamentally believe that organics should be a real contributor to a circular economy, a more circular economy. And for what it's worth, I just want to reiterate that point because I do think that's relevant here.

Asa, it occurs to me in listening to this conversation, as we talk about the films and the plastics in general, and in my role as the chair of the materials subcommittee, you know, we have pretty tightly defined the research priority related to this. As it currently reads, related to the examination of decomposition rates, the effects of residues on soil biologies and the factors that affect the breakdown of biodegradable biobased mulch film, as a research priority that we've articulated.

You know, it occurs to me that what we're really talking about here, we actually, it shouldn't be that narrow. And if I'm hearing the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

NEPA presentation and the fact that we shouldn't keep it narrow, frankly we need to understand more clearly the lifecycle impacts of plastics on soil clearly to the end.

Like, it shouldn't be narrow around biobased mulch film it should be about PE film.

It should be about the long-term implications if you do remove plastic PE film from fields and put it in the landfill.

I mean, what are the true lifecycle implications of that choice. And it does it go back to a more philosophical perspective that I share with you, Asa, where we should have less plastics in agriculture, or is it this is a true lifecycle view of sort of the implications are of soil, or our material handling and waste management system and so on and so forth.

So I'm going to argue that from a research and priorities perspective that we consider, through this next cycle, before we vote on it in the fall, expanding the view of what we're really researching there, what we're really asking

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

for in the way of research to go well beyond biobased mulch film because it's a much broader issue.

MR. BRADMAN: I think that's a great suggestion, and also kind of reflects your idea of an organic as a systems approach. And we have to think of the system, the whole system, and I think that's a great suggestion.

MR. ELA: All right. We've got Kyla and the Mindee. I know, Carolyn, you had your hand up so let me know if you just want to say it in the chat, whether you want to ask a question or not. So, Kyla.

MS. SMITH: Yes, I was just going to try to answer Carolyn too a little bit in that, more from a not sure about those that are currently using plastic mulch if they would make that switch. Probably some would, probably some wouldn't.

I do know that there has been mention about operations that currently choose not to go organic because of this one thing, so we would get more from those comments, I'm assuming. We get

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

more certified, or more operations that come certified organic.

Now that's a philosophical question I guess on whether or not one wants those operations under the tent that are using these types of materials that are adding more plastics into the soil.

So just wanted to comment that more operations would come in, from what I am understanding. But not sure about those that are currently using plastic mulches and whether or not they'd make the switch.

MR. ELA: Go ahead, Mindee.

MS. JEFFERY: Thank you. I'm emotional about this issue. And at Good Earth, about 15 years ago, we did a big push to try to educate consumers on how they could stop choosing plastic in the store.

And it was before everybody had a reusable water bottle. And we really succeeded at challenging people on their everyday decisions because that's what people want to be positive

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

contributors to climate change issues. And the plastic issue is really big in the minds of consumers.

And like, the organic saying yes to leaving microplastics in the soil, I can't get over it. And I realize that's a, you know.

And for me, if I see commenters and stakeholders disagreeing with me wholeheartedly on something, than I can get over my fundamentalism in a way. And I don't see that yet on this for me when I'm reading the comments. There is lots of different trajectories.

And trust me, I really don't like disagreeing with Asa. I love how your mind works and I love the level at which you pursue all the angles, and so thank you so much for how hard you're working on this issue.

And I think for me, I could be comfortable sending it back to subcommittee and working on some of the issues that the stakeholders are pointing out. And then if more consensus and more comfort level comes forth from the stakeholder

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

community than I can compromise on my fundamentalism around this issue, but I'm not there yet in that sense.

And I feel like part of the reason why that's true for me is that looking at the ethos of organic and everything that we've done to make this food system possible, and the scale at which we've succeeded, for me means that I don't have to compromise more towards industrialization in organic, that we can slow our progress on technological solutions, if we can slow them.

Because we're succeeding at industrial scale. We're a \$55 billion industry that came from a movement of people by, for and about the soil.

And so, when I think about balancing that, for me this is a moment where I want to hold on and like really get it right and really get consensus because the plastic, us saying, yes, let's leave microplastics in the soil just hurts me in a way I can't get over.

MR. BRADMAN: Yes, and I totally appreciate that. For me it's also just the idea

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of a petroleum product, but of course we already do that.

But again, there is also this kind of comparative risk assessment idea. You're discouraging people from using plastics in the store, but plastics in organic production, soil-based organic production, we don't even have to go there in terms of containers, is exploding and increasing.

I mean, just look at the strawberry industry in California, organic strawberries. Other berries, melons. I've seen it with tomatoes.

So, the plastic use is increasing. From my understanding this is increasing in the organic sector. So maybe it's not showing up at the supermarket but it's out there.

And those are introducing microplastics into the soil, but more generally into the environment. So that's already been happening. That industrialization is already there.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So this, I think potentially, the question that got raised earlier, is this a better system. And if it fully decomposes, we're not introducing microplastics into the soil.

Having said all that, everything you said I share too. And those feelings are definitely, you know, I hold them as well.

MS. JEFFERY: Yes, I know you do. Thank you. I appreciate it.

And I think part of the reasons why I'm more comfortable staying where I'm at is you see at the store level customers are trying to choose it every time and I think what, is there a leverage point at which we help farmers in a different way succeed at not adding more plastic. And I don't know the answer to that.

I definitely, that's an imaginary realm in some ways in my mind. But I do feel like there is some way in which I'd rather be creative in thinking along those lines. And compromise here, when, if the community is 100 percent behind it. Or way more behind it.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

But when I'm reading the public comments, particularly, I think there is some more things to work out. So that's why I think, for me, I'd be more comfortable sending this back to subcommittee than anything else at this point.

MR. BRADMAN: Yes. I totally get that and agree in many ways. Including that maybe we need more discussion at the subcommittee.

MR. ELA: So, this is so important I let it run long. And we've got Carolyn and Nate, so let's go to them and wrap it up and we'll decide what we want to do. So, Carolyn.

DR. DIMITRI: Okay, I can be fast here. I guess just following Mindee's line of argument.

I think another important research question is to try to understand what are the implications for overall plastic usage by farmers if this particular product was allowed?

Which would mean, not a science-based research but more of a social science-based research. Thank you.

MR. ELA: All right. And, Nate, did

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you have something?

MR. POWELL-PALM: Yes, just a quick note. I think I really, I hear Mindee loud and clear that this idea, I think of Javier Zamora, who is a strawberry farmer in California, innovating clamshells with paper containers.

And I think that there is a lot of me that says everyone has said we can't do certain production technics in organic and we've just figured it out. And so, I think sending it back to Subcommittee really kind of resonates with me because I think this is important enough.

Enough of a potential kudos to organic consumers that we are not only addressing pesticides but we're addressing plastic in agriculture as well. In a more obtainable way.

So I would be supportive in sending it back to Subcommittee as well.

MR. ELA: Yes. And I have a quick comment myself.

I was the descending vote out of Subcommittee, not because I disagree with Asa at

all, in fact, I, this is a complete fence issue for me.

I am really against polyethylene mulch. It drives me crazy, just like other people said.

And I really struggle with what the next step is. I am not convinced, at this point, that biodegradable mulches are truly biodegradable in some systems.

And that's my hang up of, theoretically, certifiers can say polyethylene mulch has to be removed. Until they see evidence of it, they can write a noncompliance. Whereas with biodegradable mulch they won't be able to, if they see fragments, it's pretty hard to write a noncompliance on that one.

So, I struggle. Asa, I'm so glad you decided to bring a proposal to this meeting because I think it really, proposals frame things much better than discussion documents.

So I know you felt adamant about that. And I'm glad you did. I think it really helps people respond to things and try and narrow it down.

I think, and, Mindee, I see you have your hand up but I am going to go ahead and move forward, with my apologies, just because we are over time at this point.

But I think we'll start off with a, Mindee, I'm going to go back to you just because I want to recognize everybody on this thing but can you --

MS. JEFFERY: No, I was just going to make the motion that we go back to Subcommittee.

MR. ELA: Okay. I kind of realized that you might be doing that and I was going to suggest the motion.

So there is a motion to go back to Subcommittee. Is there a --

MR. POWELL-PALM: I would second. Nate.

MR. BRADMAN: I'll second it too.

(Laughter.)

MR. ELA: Well, Nate got in there first so motion by Mindee, second by Nate. We will go to a vote on this. And I believe we start with

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Carolyn, is that correct, Mindee?

MS. JEFFERY: That's correct.

MR. ELA: Okay. Carolyn?

DR. DIMITRI: Back to Subcommittee.

MR. ELA: Rick?

MR. GREENWOOD: Yes, back to Subcommittee. It's just not ready for --

MR. ELA: Yes.

MR. GREENWOOD: -- for enough reasons.

MR. ELA: And I'll just be clear that a vote yes is for going back to Subcommittee --

MR. GREENWOOD: Yes.

MR. ELA: -- just so people know. So, Kim?

MS. HUSEMAN: Yes. Echoing the thoughts of other Board Members, yes.

MR. ELA: Mindee?

MS. JEFFERY: Yes.

MR. ELA: Logan?

MS. PETREY: Yes.

MR. ELA: Nate?

MR. POWELL-PALM: Yes.

MR. ELA: Kyla?

MS. SMITH: Yes.

MR. ELA: Wood?

MR. TURNER: Yes.

MR. ELA: Sue?

MS. BAIRD: Yes.

MR. ELA: Asa?

MR. BRADMAN: Yes.

MR. ELA: Amy?

MS. BRUCH: Yes.

MR. ELA: Brian?

MR. CALDWELL: Yes.

MR. ELA: Jerry?

MR. D'AMORE: Yes.

MR. ELA: Chair votes yes. Mindee?

MS. JEFFERY: 14-0. No abstentions,
recusals or absences.

MR. ELA: Great.

MS. JEFFERY: We're going back to
Subcommittee.

MR. ELA: Asa, thank you so much.

MS. JEFFERY: Thank you, Asa.

MR. BRADMAN: Yes.

MR. ELA: I think the whole Board echoes your confliction on this and the difficulty of it, and thank you for being willing to take it on. You've taken on some tough issues.

And hopefully this discussion will give you some, I don't know if it clouds the water or makes it clear, but it's certainly good to hear everybody's thoughts, and hear stakeholders' thoughts.

So with that I am going to turn it back to Rick. So, Risk, I think we're up for sunsets.

MR. GREENWOOD: Yes, we are. So the first sunset is copper sulfite and Jerry will be presenting it. And that's reference 205.601(a)(3) copper sulfite for uses in algicide and aquatic rice systems. It's limited to one application per field during any 24 month period.

Application rates are limited to those, which do not increase baseline soil test values for copper over a time frame agreed upon by the producer and the accredited certifying agent.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And 205.601(e)(4), copper sulfate for use as tadpole, shrimp control in aquatic rice production, is limited to one application per field for a 24 month period.

MR. D'AMORE: Hello? Hello?

(Off record comments.)

MR. GREENWOOD: There was some background.

Application rates are limited to levels which do not increase baseline soil test values for copper over a time frame agreed upon by the producer and accredited certifying agent. Okay, Jerry.

MR. ELA: Jerry, we aren't hearing you.

MS. SMITH: I think that that was Jerry who was saying hello --

MR. BRADMAN: I think it was.

MS. SMITH: -- and maybe it sounded like he was getting a call or something.

MR. ELA: I'll tell you what, Rick, since we will check back with Jerry here, let's go on to ozone gas and we'll circle back around.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. GREENWOOD: Okay.

MR. ELA: And if we go to ozone, we'll assume you've read copper sulfate into the record.

MR. GREENWOOD: Okay, very good. Thanks. Okay, so ozone gas is the next sunset. It's mine. And that's reference 205.601(a)(5), ozone gas for uses in irrigation system cleaner only.

It's interesting. Ozone, and we've talked about a number of disinfectants, works by oxidizing plant tissues, similar to chlorine and other things. And it's been used for over 100 years as an antimicrobial agent to clean irrigation lines.

In the comments by people with written comments, essentially overwhelming support, and also one of the reviewers mentioned, commenters, that the increase in their group of people that they certify has gone from three groups to up to 50 now.

One of the advantages of ozone over chlorine is that when it degrades, it essentially

has no residue. It becomes oxygen.

So it's a useful group. It's used in municipal waters. I think the concept of ozone always worries people because of the increasing ozone in the atmosphere, but in fact, this is used within a closed system so it really isn't off-gassing.

There is a potential for injury for people using it, but that doesn't seem to be a problem because of the way it's used and the way it's generated onsite.

So, support, no one really had any comments against it. So, open that up for questions about ozone.

MR. ELA: Are there any questions?

MS. HUSEMAN: Yes, Rick. Sorry, I don't know, Steve, if you saw my hand or not so --

MR. ELA: Go ahead.

MR. GREENWOOD: Go ahead, Kim.

MS. HUSEMAN: And it's more of a comment than a question. I -- reading through the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

comments I did see that it's also used as an effective root sanitizer as well as in the irrigation lines. So I'm not sure if anyone on the Board can speak to the use of that or the effectiveness. But I did see that as a comment so I just wanted to make sure about that.

MR. GREENWOOD: I really can't speak to that. I wasn't part, I didn't see anything in the TR of that. I mean, it is used in a number of situations.

It's, I guess, a useful compound if used correctly. It can, you know, it's a strong irritant but in closed systems seems to be fairly effective.

MS. HUSEMAN: Right. And again, it was followed with, that it leaves no residue on food, food contact surfaces or water. So no negative impact to the consumer, worker, for soil or waste water.

MR. GREENWOOD: Yes.

MS. HUSEMAN: So, just found that very interesting from the group perspective. I didn't

think about that when listing the irrigation lines either, so, thank you, Rick.

MR. GREENWOOD: Yes.

MR. ELA: I can't, I've heard of it used in irrigation lines, but I can't speak to my personal knowledge of it. Certainly FSMA and E. Coli and water and things that, I mean, we're seeing that ourselves.

And certainly if it were any crop where the water was directly applied, it might be a pretty important use. And might be better than, well, probably is better than some of the chlorine materials.

So that would be my two cents. I know it's used in dump tanks and packing sheds at times, so another, probably another good use for it. Go ahead, Rick.

MR. GREENWOOD: Yes. So, is Jerry on the line now?

MR. ELA: I don't think we're seeing him yet so why don't you go on down.

MR. GREENWOOD: Okay. So we'll go on

to peracetic acid, which is Wood Turner.

That's reference 205.601(a)(6), peracetic acid for use in disinfecting equipment, seed and asexually propagated planting material.

Also permitted in hydrogen peroxide formulations as allowed in 205.601(a) at concentrations of no more than six percent, as indicated on the pesticide product label.

And 205.601(i)(8) peracetic acid for use to control fire blight bacteria. Also permitted in hydrogen peroxide formulations as allowed in 205.601(i), at concentrations of no more than six percent as indicated on the pesticide product label. Wood.

MR. TURNER: Okay, thanks. Thanks, Rick. So I think the annotation on this from folks was pretty straightforward in terms of what we're talking about here in terms of the use of the material.

So, it tends to be a fairly straightforward listing. It's been a listing, obviously that's been, there's a lot of use of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

peracetic acid in the community.

It's favored by many because it doesn't involve, it is one of the most effective materials in disinfectants. As a disinfectant that doesn't involve chlorine.

And so, it's in very widespread use.

And I would say across the community there is just an extraordinary amount of support for it in sort of maintaining it.

And I think it falls into this continual conversation that we have about sanitizers and the need for effective rotation to sanitizers that are going to allow the most efficacy among the community.

It is worth noting, I would say, that with this, in my later presentation on chlorine materials, it's a, the use of this material in a crop setting is a little different than it would be in a facility because it's not, there is not as many, we're not talking about as sort of as many of these sort of difficult FSMA considerations related to kind of cleaning irrigation lines or

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

disinfecting equipment that's outdoors. So, just something to consider there. But I think there is widespread support for it.

Most of the international community also supports it and has listings for it that allow it to be used with some exceptions, I think. But in general, very widely used.

Does create some irritation, obviously if misused. But again, that's not, hasn't, by in large, been a concern by many folks in the community.

There's been much discussion in the past about the various forms of peracetic acid and kind of the source of the material and where it comes from. But ultimately the discussion has led to pretty emphatic support. In fact, overwhelming support for the material.

And I would say in this cycle it's just sort of a running list of stakeholders who continue to want to see it re-listed.

MR. GREENWOOD: Thank you.

MR. TURNER: That's what I have.

MR. GREENWOOD: Questions?

MR. ELA: Are there, yes, comments, questions? I am not seeing any. Thanks, Wood.

Rick, I think we've got Jerry on the phone, so let's go back to him.

MR. GREENWOOD: Okay. Jerry, are --

MR. ELA: I don't think you need to, yes, I don't think you need to read it all again.

MR. GREENWOOD: Okay. Jerry?

MR. ELA: Well, we thought we had him on the phone.

MR. GREENWOOD: Okay. Well, Steve, why don't we go to you then? The next sunset is EPA List 3, inerts of unknown toxicity. And this is reference 205.601(m) (2), EPA List 3 inerts of unknown toxicity for use only in passive pheromone dispensers. So, Steve.

MR. ELA: Thanks, Rick. I'm not sure how I ended up with all these this time. I've got to learn to say no or pay attention to the --

MR. GREENWOOD: But you do such a good job you should do it.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(Laughter.)

MR. ELA: Thanks. The List 3, as Rick mentioned, the passive pheromones. And they play, they do play a critically important role in controlling pests that affect many crops.

They're widely used for lepidopteran pests. We use them for either mating disruption for, such as for codling moth, which is the worm in the apple, or also peach crown borer which really, it's the only way to control that organically.

Obviously List 3, List 4 is a defunct list. I think all the arguments that were made for List 4 can be made for List 3.

But I will say that these List 3 ingredients are probably, they're not applied to the fruit, they are contained within the dispensers. Whether it be a dispenser for mating disruption or a capsule or a lure for trapping to monitor.

So they are a little less, more amounts are used. And they're also not directly applied

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to the fruit, so that may make a difference to people.

I think the biggest thing though really is that they are on a defunct list, and so there is certainly lots of comments from stakeholders about, we need to do something about, in similar way to the List 3.

One of the interesting things about this is, yet again, was one that was recommended to be taken off the list. And there are a number, several stakeholders noted that really it was supposed to be changed by 2015. And they argued that this is actually an illegal, or not proper listing still on the list.

But I guess the biggest thing is we can encourage or ask or, in stronger language, I don't even know what the stronger language is, but these do have to be dealt with. And I think they can be dealt with, with the List 4 ingredients.

There were some questions about how, whether there were natural alternatives. At this point there are no natural alternatives. These

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

have a very, very specific use.

Another question on the percentage of ingredients in passive pheromones. While often they are relatively small, the materials we use, I believe it's below ten percent, there are some dispensers out there that use upwards of 90 percent of these synthetics. So it really varies on the dispenser used.

And then the final question, whether these List 3 ingredients in passive dispensers defuse into the environment or whether they remain in the dispenser. In personal conversations with one of the manufacturers, and then in some of the public comments, these materials are much heavier than the pheromones and so they do stay within the dispenser rather than diffusing out into the environment.

So they are very contained and controlled. And certainly if they were removed from the list they would cause significant disruption of the organic industry.

I think it's one of those really cool

organic products that started with organic growers because they were so disparate in terms of codling moth for some way of controlling it, and it's now very, very widely used in the conventional industry as well. So the organic growers piloted it and they have, you know, they changed the conventional industry as well.

I love that when organic growers can move research into the conventional industry.

So I think the biggest thing is that we move them to some other system of classifying them. Whether it's having them individually petitioned.

There are only a handful of these versus the List 4s where there are significant numbers.

And a couple stakeholders think they would probably pass muster if they were petitioned, so that may be one route with these. Or just wrapping them up in the List 4 review.

So with that, I will quite talking and open it up for questions. I am not seeing any, Rick, so, oh wait, Asa has a question. Sorry.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. BRADMAN: Just, I guess this is a comment, but just, I guess a little frustration that we haven't dealt with the List 3 and List 4 issues and that it's still kind of on our plate when we could have dealt with this a long time ago.

And we would be talking about individual ingredients and inerts rather than these, this whole issue.

So, just a shout out to, I hope we can solve that problem and avoid kind of the drama.

Especially that we have with List 4.

MR. ELA: Yes. I think that that comment is shared widely by, well, I can't speak for the Board, but certainly stakeholders.

And I think Jenny said that they have released the notice of advance rulemaking to get comments of how to solve this problem. So I think there is movement.

But I just will reiterate to stakeholders that with this notice of advanced rulemaking I really hope that solutions are put into those comments and not just a concern that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

this isn't fixed.

So, I mean, I think at this point it is up to the stakeholders to give ideas to the program about which way to go. And if you don't, this is going to be a, continue to be a real quandary.

And I see Jenny popping on. And, Jenny, go ahead and give you thoughts.

DR. TUCKER: I just wanted to clarify that I have committed to moving this forward. We are in the process of writing an advanced notice for proposed rulemaking. It has not yet been published.

So for folks who right now are out there trying to frantically search the federal register for this, this has not been published, it is in the writing phase right now.

I would go back to the theme I shared on Wednesday of this is, again, a process that worked where the community came together and was able to express why this is important and that everybody agrees that it's important in a really

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

compelling way. And that has allowed it to be on the list of priorities that Mae Wu shared was important in her welcoming remarks.

So, again, the system works for these priorities. And we really appreciate the work of the Board on this topic.

MR. ELA: Thanks for that clarification, Jenny, I really appreciate it. And I appreciate you letting us know it's not up there yet but it is in process. So I guess I'll just say to stakeholders, watch for it, comment on it, and give constructive ideas of how to solve this problem.

We've had a lot of control on this process through this advance rulemaking and make use of it. And that will be the best way to help the Board and use move forward through this issue.

So, Kyla has a question, and then, Rick, we'll go back to you.

MR. GREENWOOD: Yes, okay.

MS. SMITH: It was more a question for Jenny based on her comments and what Mae Wu shared,

and I just wondered, based on that, am I understanding you correctly that it is on the unified agenda or not?

DR. TUCKER: I don't think it's going to make it onto the spring regulatory agenda, but I've lost the bubble on whether that's been released or not. So somebody can chat an answer to me on that.

It would definitely be on the fall agenda. Once we write it, it has to go through clearance. And so, everybody knows it's coming.

We have written what's called a work plan, which signals kind of the OMB universe that we are planning on working on this. So it is, it is way further in the pipeline than it was at the April meeting of when I promised that I would commit to moving this forward. We have moved it forward.

I just got an answer. It is on a list called the critical priorities list. The spring agenda has not yet been published, but it is on a critical priority list. But no specified, exact deadline.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

However, I mean, I hope that we're pointing to what has happened through to spring, since the spring, and when I said I was committed to moving it forward. We've made progress, even though it has not been published in the register yet.

MR. ELA: Does that answer your question, Kyla? Okay.

All right, Rick, we'll send it back to you.

MR. GREENWOOD: Okay. Yes, just one comment. I think the part that bothers me the most is where we have the term inerts of unknown toxicity.

We have all these sunsets, and everyone that we go through has the toxicity and all the human exposures. And even though I know these are contained, just hate to have that title, unknown toxicity, in the inerts.

And we know that. You know, I'm sure Asa will shake his head for the List 4 groups too.

I mean, we're so specific on some things and then

others we say, hey, it's unknown.

But anyhow, I think Jerry is back on the line. So, Jerry, can you do copper sulfate?

And I've already read that into the record.

MR. D'AMORE: Yes, sir, thank you. And I apologize to all of you, my California, rural California Wi-Fi is always weak, but it totally went out on me.

Well, thank you for the introduction.

Copper sulfate is made by treating copper metal with high concentrated sulfuric acid.

In terms of international acceptance, copper sulfate is not allowed for use in organic rice production in Canada, Europe or Japan. The European chemical agency makes a point of saying that it is very toxic to aquatic life.

We have a little under 25 stakeholders commenting. Most were in favor of re-listing the sunset. Several were strongly opposed to re-listing giving lengthy and thoughtful comments.

To be fair, most of the comments for re-listing came from organic rice producers, which

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it should not amaze any of us.

Further, those in opposition to re-listing were mostly focused on the current annotation and our process. Saying that annotation needs to be more specific regarding applications. And further saying that we need to move on with continuous improvement.

Specifically to our stakeholder comments, which were two. First one, what are the roadblocks to transitioning to dry-seeding or transplanting of rice seedlings into the rice production.

Not many responses directly to our questions. The one that resonates to me, encapsulates a few of them, education about alternatives to wet seeding and proper timing of water management.

Our second question. Are there variable practices that can be used to offset the toxic buildup of copper sulfate in the soil and water, i.e. crop rotation, phytoremediation with plants that draw out the copper from the soil?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

There was not much helpful response to this question indicating to me that it is a heavy lift.

I do feel that the environment concerns are justified. That copper sulfate can be deadly to fish and other aquatic organisms at certain concentration.

With that said, my conclusion at this point may be a bit surprising, as I also do believe that not re-listing copper sulfate would do great damage to our organic rice farmers and it would be very hard for them to adjust practices within two years.

So I, at the moment, recommend re-listing the sunset with a hard look at the annotation process and a clear message that we, collectively as a community, need to find a better solution. Be it cultural practices, softer materials or a combination of both.

I'd like to conclude by saying, and emphasizing, that I, through this process, was very heartened by the tenor of the stakeholders.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Neither side appears to be entrenched in their position.

I believe that the naysayers want to be heard regarding our forward progress in continuous improvement. And I believe the farmers are already seeking more environmentally friendly alternatives. Thank you.

MR. ELA: All right, we have questions, comments, discussion from Brian, and then Nate.

MR. CALDWELL: Yes, thanks, Jerry. I was a little surprised. The previous slide on, that I saw on my computer screen was a little bit different than what I have in my notebook. Yes, great. Thank you.

There is this 3(e) listing in there that isn't, I don't think it's in my notebook. And I'm just wondering, I actually have a bunch of questions.

The first one is about that. Is that sort of separate than the use in rice production and then --

MR. D'AMORE: No.

MR. CALDWELL: Okay. So yes, there is a bunch of questions.

And another one is, since the copper sulfate can be used for both, as an algicide and a tadpole, shrimp, could that be two applications within 24 months rather than just one?

MR. D'AMORE: Do your questions at one of a time if you would please there, Brian?

MR. CALDWELL: Oh, sure.

MR. D'AMORE: Yes, I'd like to answer that. That's part of the feedback we're getting from our stakeholders that questions like that have not been addressed.

It may conceivable give the opportunity for two applications in two years. And in my looking, they appear to be right. So we have addressed the issue broadly, but they would like more specificity to the applications.

MR. CALDWELL: Okay. Yes.

MR. D'AMORE: And to the buildup in the soil. But I'm sorry, go ahead.

MR. CALDWELL: Yes, that makes a lot

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of sense. So, I'm sorry. Just, if you could go back to the E, insecticide listing there. 3(e).

MR. D'AMORE: The algicide?

MR. CALDWELL: Well, on 3 --

MR. D'AMORE: Okay, no I --

(Simultaneous speaking.)

MR. D'AMORE: Yes. I'm seeing that on this screen for the first time quite frankly. And I'm really not prepared to address that.

MR. CALDWELL: Okay. Yes, I'm with you on that one. I guess probably most of us known that copper sulfate was part of a bordeaux mixture, which is a really old miticide from way back.

But anyways, my last question is, I don't know so much about how rice is grown in California, which seems to be the main state where this is an issue, but I assume that the field has to be dry for the rice to be harvested. And is that process just something where the water that's in there just seeps into the soil or is it something where actually like a gate is opened and the water runs off?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And the reason I ask that is, because if it's the second, if the gate is, if it's just run into a ditch, than a lot of copper sulfate could be just like, you know, runoff the field into some waterway somewhere.

MR. D'AMORE: Right. Well, you actually asked or indicated something. Now, there is significant rice production in the United States. And to a limited extent, in Canada with the high volume producers in Thailand, the Philippines and Italy.

To your specific question you're going to, I don't know. My assumption has been that it, there is no sluice gate, but I will not go on record as saying that that's true.

MR. ELA: Can I just jump in here real quick? There is a little misunderstanding. So, in this listing, so it's, unfortunately it's not listed with indents, so the first one, for uses in algicide, it's listed under 205.601(a) --

MR. D'AMORE: Correct.

MR. ELA: -- as an algicide

disinfectant. And the second one is listed under 205.601(e) with the indent of Number 4.

So, it's listed as an insecticide but with a subset for use as tadpole, shrimp control.

So it's not, as --

MR. D'AMORE: All right.

MR. ELA: -- it's not, it's a separate category. For use as tadpole, shrimp is a subset of that one.

MR. D'AMORE: Thank you. And I appreciate that, Steve. The mite control was completely new to me. And that, maybe it shouldn't be but it was. Thank you.

MR. ELA: So you don't have to address --

MR. CALDWELL: Thank you.

MR. ELA: -- it just includes those, but as insecticides it's specifically for tadpole, shrimp control.

MR. D'AMORE: Correct. Thank you.

MR. CALDWELL: Great, thank you.

MR. ELA: Go ahead, Jerry. Or Brian.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. CALDWELL: No, thanks a lot, Steve, that was excellent clarification. I'm just thinking that this issue of how the water in the rice fields are managed might be something that when this goes back out for input from the community they could comment on that.

MR. D'AMORE: Brian, excellent. Thank you very much.

And, Kyla, I saw you raise your hand. I'm not sure you still want to get on?

MS. SMITH: I was going to clarify the way the listings work, just as Steve just did. But I'm good.

MR. D'AMORE: Thank you.

MR. ELA: And Nate has something to say.

MR. POWELL-PALM: Yes. I was just hoping, Jerry, could you speak a little bit to kind of the state of continuous improvement for rice farmers.

It seems, from what I've read, that this material is being used somewhat sparingly but it

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

is also that they're on the hunt for less toxic and kind of dealing with a double threat of the toxins in rice and kind of an arsenic aggregation.

And so, can you speak a little bit to how you think, what do you think the state of the industry is and do you think that in the next five years we'd be able to work towards a reasonable path to de-listing?

MR. D'AMORE: Well, that one I'm very happy for as a question. And I had hoped to indicate that in my closing.

I see a community in rice farmers that has been and is looking for alternative solutions.

With that said, since, you know, we have given them this tool since 2011. And I, once a tool is given, it becomes a part of the toolbox that eventually becomes essential.

And I would say that today it is an essential tool for their well-being. Their ability to be in the organic world.

But I'll further say that universally, on both sides of a debate, that the notion that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

we need to show forward progress on finding a way to take that substance out of the toolbox is where we're all headed.

And I guess what I would say is, running around in five years I would be disappointed to see us asking ourselves the same questions. And I think the mood is right, now, to be more specific about where we'd like to see ourselves going and have the community support that and go forward.

MR. POWELL-PALM: Thank you. I appreciate that.

MR. D'AMORE: Thank you.

MR. ELA: Yes, and I agree. This is one coming out of the Subcommittee I thought we would be able to de-list, and the public comment was more than compelling. So it shows the value of public comment process.

So with that, I think it goes back to you, Rick.

MR. GREENWOOD: Okay, thank you. Now we're going back, again, to chlorine materials under the crops. And, Wood, I think I'll go ahead

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and read all of these and you can take them as a bunch.

So, the first one is calcium hypochlorite, reference 205.601(a), as algicide disinfectants and sanitizers. Including irrigation system, cleaning systems to chlorine materials for pre-harvest use, residual chlorine levels in the water and direct crop contact or as a water from cleaning irrigation systems applied to soil, must not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act, except that chlorine products may be used in edible sprout production according to EPA label directions.

The next one is chlorine materials, chlorine dioxide, reference 205.601(a) as algicide disinfectants and sanitizers. Including irrigation system, cleaning systems to chlorine materials for pre-harvest use, residual chlorine levels in the water and direct crop contact or as a water from cleaning irrigation systems applied to soil, must not exceed the maximum residual

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

disinfectant limit under the Safe Drinking Water Act, except that chlorine products may be used in edible sprout production according to EPA label directions.

Next hypochlorous acid --

MR. ELA: Hey, Rick, can I just interrupt real quickly?

MR. GREENWOOD: Yes.

MR. ELA: We're getting some comments that you are still pretty hard to read so our interpreter, or to hear, sorry, not read.

MR. GREENWOOD: Oh.

MR. ELA: So our interpreter is having problems, as well as some of our stakeholders. So I don't know if there is a way you can shout or somehow give us a little more.

MR. GREENWOOD: Okay.

MR. ELA: It's probably the avocados in the back muffling you.

MR. GREENWOOD: Yes. How is this now?

MR. ELA: About the same.

MR. GREENWOOD: What? Good?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: No, still need a little bit more.

MR. GREENWOOD: Okay. How about here?

MR. ELA: Similar.

MR. GREENWOOD: Similar.

MR. TURNER: For what it's worth, Rick, I can hear you up the coast.

MR. GREENWOOD: Okay. How is this?

MR. ELA: Can our interpreter say, I don't know if you can hear him or not. So, so.

MR. GREENWOOD: Okay.

MR. ELA: Is that better? I think that might be better.

MR. GREENWOOD: Okay. Shall I go again?

MR. ELA: I think we can start from where you were.

MR. GREENWOOD: Yes.

MR. ELA: But I'll defer to the interpreter as to whether she can hear you.

MR. GREENWOOD: Okay. So, I'm doing

--

MR. ELA: Yes, go ahead.

MR. GREENWOOD: Yes, hypochlorous acid, 205.601(a) as algicide disinfectants and sanitizer. Including irrigation system, cleaning systems to chlorine materials for pre-harvest use, residual chlorine levels in the water and direct crop contact or as a water from cleaning irrigation systems applied to soil, must not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act, except that chlorine products may be used in edible sprout production according to EPA label directions.

How was that?

MR. ELA: Better, Rick. Thanks.

MR. GREENWOOD: Okay. And so, let me try this one more time.

Chlorine materials sodium hypochlorite, reference 205.601(a) as algicide disinfectants and sanitizer. Including irrigation system, cleaning systems to chlorine materials for pre-harvest use, residual chlorine levels in the water and direct crop contact or as

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a water from cleaning irrigation systems applied to soil, must not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act, except that chlorine products may be used in edible sprout production according to EPA label directions.

And with that, Wood, it's yours.

MR. TURNER: Thanks, Rick. And I am going to do them altogether for the sake of the ASL interpreter and my own sanity. I'm going to just keep it all with one bunch because we have talked about these materials already in livestock and in handling. And so, obviously the use, as we're talking about here, are different.

I think the fundamental need from the community for kind of a, not only an effective suite of sanitizers and disinfectants to be able to meet food safety needs and expectations remains and persists. As does, I would say, the communities very strongly worded and strongly communicated belief that comprehensive approach to how we look at sanitizers and disinfectants needs to be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

contemplated here as we move forward.

So, there is not much more I would say about these materials. I think we've talked them through fairly completely in the previous two sunset presentations, so I don't want to belabor them.

But I think they, we all know that chlorine materials have some human health considerations and concerns. Concerns about impacts to aquatic systems and aquatic habitats.

So there are issues that we all in the community know and yet are trying to sort of navigate relative to kind of the need to maintain a clean and health food supply.

I guess the lingering issue for me, Rick, on this is that simply, and again, one of the things I don't necessarily feel like I see in the community, in the feedback from stakeholders to date, is whether or not the use of chlorine materials, in crop systems, for cleaning equipment or irrigation lines or the like, is fundamentally the same FSMA consideration that cleaning surfaces

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

in a facility, in sort of a handling livestock context, if it's really fundamentally the same thing and whether or not there is another pathway in this particular category of uses.

And so, I would ask that question again of the stakeholders and the community to sort of, I guess help inform a further discussion on this at the Subcommittee level in a review for the fall.

I just think that's something to consider.

I also think it's interesting to think about, we had this very robust conversation about plastics and organic and I just, the reason I asked that question about crops in particular, and chlorine materials, is because we all share this concern that petroleum based products or plastics, the proliferation of these materials in organics is sub-optimal.

And one might argue the same thing about chlorine materials and whether we want to be, whether we can, you know, whether we want to simply look at chlorine materials as being something that are just going to proliferate because we need the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

suite of materials and we need the food safety security and risk management to maintain the strength of the industry. Or if there is other pathways in the way we think about these materials.

I will also acknowledge, Rick, that, and I'm going to say this with an acknowledgment to a former board member that I respected a lot, and respect a lot, Emily Oakley, who helped suggest some of this draft framework for considering how we look at chlorine materials. How we look at sanitizers in general.

And it was in a nod to Emily, from my perspective, to include that in the discussion documents. In the proposals that went to the community.

You know, chiding is the wrong word, I don't think the community chide us for include -- chided us for including those graph, that graph framework in the documents, in the FSMA documents, but didn't like it, let's put it that way.

And I just want to say, I totally understand that. Totally get that using a draft

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

framework that way was perhaps premature, but I did want to sort of use it as a way to kind of, create some continuity between the sanitizer panel that we had in the fall and beginning to start thinking about what we're all looking for, which is a more comprehensive way of thinking about these materials. So, I just want to acknowledge that feedback.

And I think that pretty much covers, there is a lot of support for the re-listing of these materials. I think that's pretty much across the board.

But also a lot of support for this one, this comprehensive sanitizers review and sort of a clearer way, if not even a compartmentalized way of looking at sanitizers for the Board moving forward. So with that, I'll turn it back to you, Rick.

MR. ELA: All right. Are there questions or comments, discussion from the Board?

I am not seeing any.

Wood, I think as you noted, this has

been -- oh, yes, there is always one. That's why I pause. Asa actually has a thought to share.

MR. BRADMAN: I just want to thank Wood for your work on this and the discussions that we've had about chlorine materials. I know we talked a lot yesterday, and maybe we, a lot of the discussion yesterday applied today. I just want to thank you for your thoughts on this in also going forward as we think about sanitizers.

MR. TURNER: Right back at you.

MR. ELA: Yes, echo. Echo that. Any other things for Wood? Wood, I'm just going to say your question about crops use, while we personally don't use it because we pick dry.

I know those folks that have to hydro-cool things that are very, very perishable, that chlorine probably is a very important use. And that would be different from handling. So just to answer that question a little.

And I think also, we've had these comments before, but there is a scale issue with some of these sanitizers in a sense that large

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

growers with larger facilities, or whatever, may be able to use a more set of diverse sanitizers than a small grower where it would be very expensive to have as many things on the plate, equipment and such, to use some of the alternatives.

That's not to say that I don't think they should, but I am worried about resistance.

But I think we do need to acknowledge that.

That different size growers may have access to different, or lack of access, to different things. I just want to put that in your bonnet, I guess.

MR. TURNER: Thank you, Steve.

MR. ELA: Sue has one last comment.

MS. BAIRD: Yes, I just want to echo that, Steve. I appreciate you bringing that same comment up. We do have to remember that we have a lot of diversity and scale of operations.

MR. TURNER: A hundred percent.

(Laughter.)

MR. TURNER: Yes. Thank you.

MR. ELA: All right. I know we're

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

bearing in on the lunch hour here, I at least, well, let's take a few more minutes here and see how far we get with the next three sunsets. We may take a break before the end of them, but we'll see how fast we cycle through them here. So back to you, Rick.

Rick, you're on mute. We really can't hear you now.

MR. GREENWOOD: Okay, how is this?

MR. ELA: That's better.

MR. GREENWOOD: Okay. And you can hear me okay?

MR. ELA: So, so.

MR. GREENWOOD: Okay.

MR. ELA: Okay, interpreter gives a thumbs up so go ahead.

MR. GREENWOOD: Thumbs up is international. Okay, this is Amy's and it's magnesium oxide, reference 205.601(j)(5), magnesium oxide. And the CAS Number is 1309-48-4, for use only to control the viscosity of a clay suspension agent for humates. Amy?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. BRUCH: Okay, thank you, Rick, appreciate it. I guess I'll follow Wood's lead and use an abbreviation for the benefit of our interpreter, so we'll call this MGO going forward.

The purpose, MGO is allowed for single use only to control the viscosity of clay suspension agent for humates because the major portion of nonsynthetic liquid humic substances are insoluble in water.

MGO is neither a strong acid or a strong base, but it acts as a buffering agent when in aqueous solutions. It's fairly benign and has a wide use of uses outside of this particular use.

So for antacids, milk of magnesia. And in industrial process, such as producing cement and furnace linings.

So, this is actually the first sunset review for this product since it was added to the national list. In terms of international acceptances, there are currently no references to synthetic MGO for use in crop production.

Just to summarize some of the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

stakeholder comments, I do appreciate the ones that we received. We received a handful of them. And primarily they were in favor of having the substance for this particular use.

There was one comment in favor of including an expiration time frame on which this material will be reviewed in the future, but that would have to be handled through annotation outside of the sunset process.

In relation to the questions, there were five. The first question, has magnesium oxide been used for this purpose as described? It currently is.

Question two. Are there any commercially available nonsynthetic alternatives?

The original petition actually states there are a few alternatives, dolomitic limestone, wood ash, et cetera, but they're right now commercially available or they don't meet the chemical, physical specs for suspending humates in solution.

Question three. Is there still a need for liquid humates in organic agriculture? So,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

one commenter noted that natural humate substances stimulate biological activity fostering cycling of minerals, conserve water and improve soils in multiple ways.

And then another commenter states, humates can support biological life in the soil, which is fundamental for mineralizing nitrogen.

The question four, can nonsynthetic acids be used in place of sulfuric acid in the manufacturing process of MGO? This question actually wasn't specifically addressed through comments.

One commenter mentioned the possibility of using nonsynthetic acids in place of synthetic sulfuric acid, but it will have to be reevaluated. Maybe perhaps the TR will address this.

And actually, I forgot to mentioned, a TR has been requested and we're hoping to get it here in the near future.

The question five, are there environmental human health issues that should be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

noted? So, just in regards to this, it's mainly with the manufacturing process of MGO, just due to the fact that sulfuric acid or hydrochloric acid is leveraged.

Carbon dioxide is also released in the manufacturing process. So those are the two directly related components.

On the flip side, if MGO wasn't available, humates in the dry form would probably have to be applied. And those are in a micronized powder form. So concerns about exposure to dust is the flip side of things.

MR. ELA: All right, are there questions, comments, discussion for Amy? Amy, the Board is being nice to you. You're off the hook.

MR. TURNER: Yes.

MR. ELA: Good job. Your first sunset review.

MS. BRUCH: Thank you. Appreciate it.

MR. ELA: Rick, back to you.

MR. GREENWOOD: Okay, thank you. The next one is calcium chloride, and that's Logan.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Reference 205.602(c), calcium chloride brine process is natural and prohibited for use, except as a foliar spray to treat physiological disorder associated with calcium uptake. Logan?

MS. PETREY: All right, thank you, Rick. Okay, so calcium chloride, it's pretty straightforward. I'm glad I got this one as my first one under these situations I'm in.

Okay. So, we've had a lot of support from the commenters. It's used for, in fruits, it's used in, I mean, we have it in vegetable problems we calcium deficiencies that come up.

So, under the questions we have, what physiological disorders associated with calcium uptake is calcium chloride used by producers? Now, blossom-end rot in tomatoes and pepper, bitter pit in apples, fruit split in cherries, tobacco leaf in cabbage.

And there are others as some of these issues we don't see, or grower, producers do not see until post-harvest issues and so, that can lead to rejection. Very costly rejections.

And sometimes it's hard to see early in the field so they will be, that fruit will be harvested. So signs can show up later. So they can be very significant losses.

A second question is about alternatives. Whether limestone, gypsum and rock phosphate, which all have calcium, can be used as sole additives, whether they can amend that problem.

No matter how much calcium you can have in the soil, that does not prevent calciums deficiency. I, myself, have high calcium levels in the soil and still battle with calcium deficiencies.

Calcium is a nutrient that is actually taken up through a transpiration rate in plants.

So, if you ever have a reduction in transpiration, in humid climates or really cloudy, foggy times, you can have lack of transpiration and you may still have development of fruit or, those organs in the plants, and calcium is not being taken up.

And so, no matter how much you add to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

the soil, it does not always amend the problem.

So it's important to have calcium, and calcium chloride, so that it can be fully applied.

And once, also, once calcium is in the plant, it is considered immobile. And so, it actually does not leave the place where it's being used to go to the needed area.

So calcium is kind of tricky in that area, it's not like nitrogen or potassium in those sorts.

And we've had a lot of support from the commenters, it's widely used. Certifiers can have hundreds of growers that do use the product.

Do not see any negatives on it. It is prohibited because of the chlorine component and the concern of buildup in the soil, so people do support the re-listing with the annotation. Thank you.

MR. GREENWOOD: Okay, thank you, Logan.

MR. ELA: Thanks, Logan.

MR. GREENWOOD: Steve.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. ELA: Are there any comments, questions, discussion from the Board on this one?

I will just echo Logan's presentation on the use of calcium. We also have very high calcium soils and still can see bitter pit in apples. And she explained it very well about calcium moving in the water through the plant and that being, depending on the water flow of the plant is where calcium will go.

So, actually, in apple trees it is mobile. The newly growing branches will suck calcium out of the fruit. So if you have a vigorous tree you can also see bitter pit.

And likewise, for the opposite reasons, as she mentioned, humidity and such, we have problems with calcium because it gets too hot and dry here. When it gets hot, the tree can't keep up with transpiration and so it actually shuts down in the afternoon, which also limits water flow.

So, for exactly the opposite reason, we have issues.

So Sue has something to say.

MS. BAIRD: Also, just a comment. That in Missouri Midwest, our climate, we're having a whole lot more spring rains than we used to have and it gets very hot quickly. And it can cause almost steamy conditions for a while.

Blossom-end rot in tomatoes is significant. And if we didn't have this product we probably wouldn't be producing tomatoes. It's become that bad with our climate change.

MR. ELA: So, with that, if there are no further questions, Rick, we will move on to the last sunset and then we will break for lunch and come back for the discussion documents.

MR. GREENWOOD: Okay, thank you, Steve. Last sunset is rotenone, which is mine. And that's reference 205.602(f), rotenone. And that's CSA Number 83-79-4.

And this is actually referenced as a prohibited substance. It's a potent nonsynthetic botanical. And in the U.S. it's registered only now as a piscicidal, if I said it correctly, fish killing purposes.

It's no longer registered by the EPA as a pesticide. And it's not available for purchase in the U.S. It's banned in Europe and United Kingdom.

We had a few comments on it and the comments were, keep it as a prohibited substance.

So I don't think there's much else to say about it.

Apparently it is for sale in some of the places around the world, so there's the potential we want to keep it on the list as prohibited so it doesn't end up coming into the country.

So, outside of that, there were no questions. And the only people that commented say keep it prohibited.

MR. ELA: All right. Any discussion on that? I don't see any.

So, I just want to say, for all our new Board Members, great job on your sunsets. You are all inaugurated now, and we expect we'll start dumping more stuff on your plate. So your feet

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

in the water and that's a heavy go.

But we're going to break for lunch before we come back to the discussion documents on ammonia extract and kasugamycin. I know we're running late, but we also have some time built in at the end of the day, so I'm not too, well, I shouldn't say I'm not too worried, but I think we're good.

But nonetheless, let's come back at, let's take 40 minutes for lunch and come back at 2 o'clock. Is that, no, 3 o'clock. Help me out here, Michelle.

MS. ARSENAULT: It's 3:00 Eastern.

MS. PETREY: The top of the hour.

MR. ELA: Top of the hour. Thanks, Logan. All right. Somehow on times I cannot get the conversion right, so at the top of the hour. Well said. So, we'll see you after about 35 minutes, 40 minutes or so.

(Whereupon, the above-entitled matter went off the record at 2:20 p.m. and resumed at 3:02 p.m.)

MR. ELA: Well, we're going to call things back to order after lunch here. Michelle, are you ready to go?

MS. ARSENAULT: All set, Steve. We are recording.

MR. ELA: I figured maybe you had, like, stepped out, you know, for the next two hours just to see if we could handle this one our own, which I know we can't.

So all right, Rick, it is back to you after lunch here.

MR. GREENWOOD: Well, actually, it's back to you, Steve. So we're back on the crops, and we have two discussion documents. The first one, and Steve was really lucky to do this one, ammonia extract. And it's a petitioned substance. So, Steve, take it away.

MR. ELA: Yes. Let me get to my notes here. I knew I should have left some things after lunch before this. So, yes, ammonia extract is a Petition that we received. I think it's been about a year ago at this point. Dave Mortensen had

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

taken it on. But with his resigning from the Board, I think I raised my hand to take this on.

And then partly, well, it's a huge topic. I have to say it is a personal interest.

As a grower, certainly, nitrogen is one of the things that, you know, is constantly in my mind of, you know, how we take care of our trees. And I know it's an issue for many other growers. So I think I partly raised my hand just because I had hoped it would give me insight into some of our fertility processes.

It's obviously a complicated topic. You know, I hope every Board member thanks me for putting out this discussion document and giving them more reading to do. I can't remember how many pages in our public comment were devoted to ammonia extracts, but I know it was a few. But also I really thought the number of comments and the thoughtfulness of them were greatly appreciated.

I originally had not thought about putting a discussion document out because we had one last fall. But I'm very glad we did, and I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

asked for references and such. And our stakeholders came through in spades on it.

So I will say I have not read all of the scientific references. I hope to make a good cut at them after this meeting. But I do appreciate the people responding to that request.

I'm going to break down my presentation on this, I hope, the steps that Asa in his dealing with a very complicated topic so well. But I want to cover, I guess it looks like six things. I like to do everything in threes, but we're going to do six.

The first one is professionalism and then I want to really talk about the definition and then look at kind of soil health and biodiversity, quickly on yields and then international recognition and finally on highly soluble fertilizer sources.

So just starting off with professionalism. I know in the oral comments, we had some issues with this as well. Most stakeholders do so well in keeping this on a high

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

level, but it's one of the few topics I have seen not as much professionalism.

You know, I'm just going to list one thing. I mean, there's a comment that this is written overly broad and inappropriate due to its obvious commercial bias. You know, it's an attempt to increase the focus of the Board based on certain companies' production methods and pandering to certain company's request may raise questions about the neutrality of the NOSB.

And another one was there is no reason for the NOSB to give credence to this vague, political and commercially motivated Petition.

I just want to say to our stakeholders that I find this offensive and irresponsible to get comments like this, and some of the comments that we've had on oral testimony. The NOSB looks at each Petition as it's written, and we take all of them very seriously.

And I find with this kind of comments that they're just not appropriate. So I hope as we move to proposal that the stakeholders that did

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

stoop to this level will rise to a higher level and, you know, that we are doing our best to look at things as an independent Board and as each of them in their own right.

And I just had to say that because it irritates me, and I just don't think it's appropriate for this Board.

So moving on to the more pertinent items, I kind of want to start with the definition.

And this is one of the things we asked in the discussion document prior to this. Does the Petition definition fit?

And, you know, this question, really, I think, is part of the crux of the matter and it's very difficult. And I think we're going to have some, you know, struggle in trying to come up with a definition.

The Petition notes that the ammonia extract is described in the Petition as a fertilizer produced using a range of methods where the output contains ammonia and/or ammonium that has been produced through a biological physical

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

process, captured in liquid form and concentrated or extracted and packaged for application in a crop system.

This raised some concerns from a number of stakeholders that this definition may be overly broad and may encompass some material -- well, essentially any material that contains certain amounts of ammonia.

And so I think that probably is a valid criticism. And the suggestion that, you know, there are a number of products that have been on the market for a number of years or many years or have been widely accepted and that we don't want to include those in the definition of what might be prohibited.

So then that brings us to, you know, what would a definition be. And, you know, I guess, you know, the Petition raises concerns about uncertainty and inconsistent determinations by material review organizations regarding the classification of these ammonia extract technologies.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The TR and some stakeholders have noted two different processes for making these ammonia extracts. For lack of any better words from the TR and also some comments, ammonia stripping or ammonia concentration is two methods although another stakeholder did not that they utilized a very different still non-synthetic process on either of these two.

In essence the ammonia concentration method is taking the original material and removing water so that you are making that much more of a concentrated substance. And that would still include the nutrients and organic matter in the original substance.

And I suspect when we had oral commenters talking about that their products still included soluble organic compounds that this was the type of method that they were referring to, or I should say, carbon compounds.

On the other hand, the ammonia stripping is where the ammonia is actually taken out of the product and concentrated as pretty much

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

pure ammonia.

So each of these processes are both being considered under the umbrella of the petitioned ammonia extract category and in some ways they are very different because one does include these other materials such as carbon and one does not.

And so I think we will have to consider how widely we cast the net in the definition and whether we want to restrict it to just the stripping method or make some stab at saying that even though it's concentrated, maybe above a certain level of ammonia would fall under this Petition for prohibition.

I want to note that AMRI has noted that they have seen an increase in queries and product review applications over the past three years for these types of fertilizers that have elevated levels of ammonia nitrogen and that they're sometimes produced through these non-synthetic classifications.

There are some that already appear on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the AMRI list. And so far AMRI has encountered methods that involve extraction, isolation and concentration but that some of them may be generically described as more of the ammonia stripping variations. So AMRI has seen fairly, you know, a diverse range of things, but some of these are the stripping.

Another note that is that non-synthetic fertilizers that test above 3 percent ammoniacal nitrogen are considered at a higher risk for violating the soil fertility and crop nutrient management practices at 205.203. And AMRI and others have noted that any product that contains this highly soluble nitrogen must be applied in a manner that does not contribute to the contamination of crop, soil, water as per OFPA.

Its use must be part of an organic system plan that maintains or improves the natural resources of the operation, including soil and water quality and comply with crop and nutrient soil for requirements. And that was noted by any number of oral comments as well as written that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

included those for the Petition to Prohibit and those against the Petition to Prohibit.

It does come back that these should not be used in isolation and that certifiers should, whether they're used or not, make sure that the requirements for soil building and such and improved natural resources are complied with.

I guess so that really kind of covers the definition where, again, the scope of the Petition, whether it impacts the valuation of other common nitrogen non-synthetic fertility inputs such as compost teas, manure teas, process manures and liquid fish products that contain some ammonia but are produced through biological processes and may undergo some form of concentration or extraction but that retain the organic matter versus the purified ammonia from the stripping process.

So we need to think of, you know, through the black and white versus the gray areas there of how we deal with those.

So moving on to the next area that I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

think we can kind of categorize beyond definitions and that comes down to biodiversity and soil health. Obviously, a lot of the comments address this issue. We had pages and pages and pages and pages of comments. Like Sue, I don't know how many pages of notes I took from this one.

And ultimately, you know, as we always have to go back to OFPA, which identifies the seven criteria that we must consider an evaluation of substances and, of course, those include environmental effects, you know, soil effects, human effects, et cetera.

As I noted in the analysis, greater than 3 percent must comply with additional recordkeeping inspection requirements. They must comply with soil fertility and crop nutrient management practices and such. So, you know, harm to human health and environment and, you know, the Petition noted that they thought that if we did not prohibit these substances, we would not be supporting the importance of organic farming and handling that is listed in OFPA.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

Moving on, you know, we certainly received comments that plants already take up nitrogen in the form of ammonia and nitrate, that no matter in what form, you know, even if we apply manure, it does go through the ammonia and nitrate forms and that manure-based nitrogen is subject to the same environmental losses as ammonia extracts.

I think we are familiar with those arguments often, but I do want to make note of that.

And also that, you know, biological, if we apply manures, that process of mineralization happens throughout the year, and it doesn't start and stop only when there are growing crops in the field.

So the argument is that there is some potential for loss of nitrogen and leaching even in organic systems that are manure based.

Another note was that nitrogen application, when that is below the optimal rate, as it often is in organic agriculture, the addition of more end fertilizers does enhance soil carbon micro biomass, and there were citations based with

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

that and that the effect of these biobased fertilizers was more evident in soils with low biological activity than compared to soils of high biological activity.

Again, I don't think any great surprise on that. You know, we know that if we have a soil that is not operating well the addition of nutrients does make it operate better.

So, you know, and so in one of the comments, you know, promoting these ammonia extracts, it was noted that the capture of organic ammonia from these manure byproducts allows precision in applying it to the fields and does reduce the volatilization of ammonia into the atmosphere.

And it also, by applying just straight nitrogen, it reduces the chances as from manures that we would get a significant buildup of phosphorous in the soil profile, which can create an MPK balance issue, again, in reference to manures that may be higher in phosphorous and potassium and is needed by the crop.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

The final thing is they did note that, you know, there's potential groundwater contamination if manures and some of these other organic nitrogen products are applied at the wrong time where the crop is not demanding them.

Ultimately, you know, I'll throw out there that I think a lot of this comes down to issues of carbon to nitrogen ratios that if lower rates of carbon are being applied rather than in we will get reduction of soil carbon. And that, you know, if we apply materials that are higher in carbon that, you know, it will increase characteristics related to soil health such as organic matter, soil aggregates, biological activity and increased nutrient cycling.

So finally just, you know, kind of on the bigger concepts that the stakeholders gave to us, and I'll quote some comments here, that the prohibition of synthetic nitrogen fertilizers manufactured through Haber-Bosch process is a longstanding fundamental prohibition in organic agriculture.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The proliferation of these fossil fuel-based synthetic fertilizers in conventional agriculture was a primary motivator of the modern organic agricultural movement.

The principles listed in the original 2001 NOSB recommendation seek to achieve agriculture and environmental goals through the use of cultural, biological and mechanical methods as opposed to using synthetic materials to fulfill specific functions within the system.

Therefore, substances that mimic the chemistry and functionality of synthetic nitrogen fertilizers can be understandably considered as equally incompatible with traditional organic principles.

Purified natural ammonia and ammonium compounds mimic conventional synthetic nitrogen.

So I think that's a fundamental argument within this Petition that these ammonia fertilizers are very close to synthetic fertilizers and that they are inherently incompatible with organic principles based on that.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

When we get into those that contain -- that may be just simply concentrated, then that becomes a little more cloudy as to whether the carbon and other micronutrients included in that fall within or outside of organic principles.

I think, you know, it does pay to note that some of these are of higher solubility, that provide nutrients directly to the plant and that they also may be because of that, rather than working with the soil on a primary basis, that they are countered to the fundamental organic principles.

Another commenter did note about the law of return where residues are returned to the soil by tillage, composting or mulching. While most organic growers depend on some offsite inputs, most of the fertility in a soil-based system comes from practices that recycle organic matter produced onsite in one form or another.

So for the sake of agricultural productivity and ecosystem stability, special attention must be given to soil organic matter

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

because of its key role in maintaining soil aggregation and other soil health issues.

You know, this is really, I think, you know, comes down to the crux of the problem is the soil health issues, contamination issues and really the cycling of nutrients in organic systems.

I guess, you know, the manufacturers of some of these ammonia extracts do indicate these products are meant to facilitate precise and responsible application of nutrients and are not intended to be the sole nutrient fertility system.

And I think most of them restated a number of times that they should be added, but the basis of cropping fertility systems should be the things that organic growers recognize of building a healthy soil and that these are just extra things to try and address the needs at specific times of the crop in terms of nitrogen.

I would just like to finish this soil health biodiversity section by noting that there was a comment that really tried to do some meta-analysis of the data from these types of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

fertilizers. And what they found was that crop rotation, inclusion of legumes in the rotation along with organic inputs were all significant factors affecting the soil microbial size and activity. The point being that crop rotation legumes and other organic inputs all have their own issues that affect the soil health and that it's also very difficult to make an overarching statement on this sort of thing.

They noted that effective sampling position, soil texture characteristics, initial soil organic matter, additions of carbon from other management techniques, ammonia extracts and previous management history all affect soil health properties. So it's just not a black and white issue.

So that's a very high level summary of the biodiversity soil health issues. There were pages and pages of comments on that. I've done my best to distill that down to a longer CliffsNote section. I know it's not short, but I think that hits kind of the arguments on both sides of the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

coin about whether these extracts are beneficial or not.

I would just like to move on to yields.

I think it was noted that these extracts -- organic farmers are under pressure financially. They need to increase yields in order to be able to compete in the market and such. We did have a couple comments on that both in the public oral comments and the written comments noting that these may be important for yield increases.

Conversely, in the public comments, we did have a citation to the organic system farming trials that Rodale has done. And, you know, they noted that over the 40 years on average, there's no statistical difference in yield between conventional organic and climate change scenarios like years of drought. Organic keeps performing better than conventional.

We have found 30 percent higher yields in organic and conventional than in years of drought. So that to me kind of counters the need for -- the ability to give increased yields through

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the need for ammonium extracts. But that there are two sides of the coin on that.

And ultimately, you know, the comment that the long-term consequences of continued reliance on conventional practices will be a decline in soil productivity that increases the need for synthetic fertilization, threatens food's security and exacerbates environmental degradation.

Now I know that is referring to conventional practices, not organic. And if it is a mix of ammonia extracts and organic practices, that statement may or may not apply.

So, again, that, you know, yields, it seems like there are two sides of that coin. But that certainly in some long-term trials, organic yields have kept up with the conventional yields.

And I know in a conversation with Amy Bruch on our Board that, you know, her goal as an organic grower is to be right up there or above the yields in her area of conventional growers.

I know in my organic peaches, we

certainly are very similar to or better than conventional growers as well. So yields can be done at least in certain crops.

Just to kind of -- the last two topics here, international consumer issues. It has been brought up that sodium nitrate is an issue with Canada. That they do not accept organic materials or crops that have been treated with sodium nitrate whereas it is approved in the U.S.

So certainly while we always make a nod to international acceptance of some of these products, that is certainly one that has been identified and is an issue with other countries that they do take objection to and specifically don't approve them in materials going across the border.

So, you know, that is a critical variance in the U.S.-Canadian organic equivalency arrangement. And I think it probably in this case really needs to be paid attention to because it could be a big factor. I know one of the growers that grows organic tomato transplants for us, he

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

specifically asked me if we exported anything because of material he was using as a side, as kind of a kicker for his transplants, it did include a small amount of sodium nitrate. He primarily grows the transplants with soil-based items, but he was using it as a little kicker.

So that's a note on international acceptance. And I'd just like to finish up with some more general comments on highly soluble sources, and people did submit a number of comments on this.

They note that non-synthetic materials mimic synthetic nitrogen fertilizers and have been prohibited in the past. That sodium nitrate was prohibited in part for the same rationale and is limited. One past Board voted to completely prohibit it. But even before that it was limited as to 20 percent of the nitrogen applied.

So there is some precedence on limiting these things and that, you know, the previous Boards have set precedent on that.

I'm just looking through my notes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Material source from agricultural waste products have been prohibited by NOSB in the past when the carbon value of the original source material was not retained in the final product.

There are several examples. Ash from manure burning was prohibited in part for the same rationale as an inappropriate method to recycle organic waste. And that has been reiterated, and I guess ultimately actually kind of affects part of the biochar in the Petition we had before us and that, you know, the substance of ammonia extracts could fail to align with the 2004 NOSB recommendations.

Also in terms of alternatives, while there may have been a shortage of liquid fertility inputs in the 1990s, there are now many liquid formulations that have allowed fertilizers with over 10 percent nitrogen, which, of course, including Chilean nitrate, which are allowed. So there are alternatives. This is not the only source. So that may or may not make a difference.

Several commenters noted that they

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

believed there will be more highly soluble fertilizers brought to the market, but this is not the end of it. And that it is time to regulate fertilizers that bypass the benefits from soil fertility and limit the number of highly soluble fertilizers or at least limit their use in organic systems.

And one such agreed that such fertilizers do need to be regulated. They pointed out that ammonia extracts are not unique. There are other highly available natural materials commonly used as fertilizers, as soybean hydrolysates, Chilean nitrate, in some cases, fish, that allow growers to feed their crops without feeding the soil. They urged us to address this issue and regulate the use of all highly available fertilizers that bypass feeding the soil.

And another that limits may be prudent on excessively high nitrogen levels, 15 percent or higher end products and that farmers should be accountable to add carbon back to the soil as part

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

of an organic program and that any limits set by the NOSB should weigh the unintended consequences of excess and duplicate regulation on organic farmers.

So finally I think that pretty well makes the point and certainly one commentator just kind of referred that they would hate to create a situation where a grower could use 20 percent Chilean nitrate, 20 percent fish, 20 percent soybean hydrolysate and something else and get most of their fertility from these highly soluble sources while maybe still adding some carbon soil back to the ground and put the certifier in the difficult position of trying to write them a non-compliance.

But as we know from some certifiers it's very clear in OFPA that the definition of soil health and such makes it very difficult to write a non-compliance and support that non-compliance because, you know, it's one person's idea of soil health versus another's.

So with that, I probably talked too fast

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and included too many things. But I think those are the big issues that I see out of all the public comments.

I don't want to put anybody on the spot, but I would be very curious to hear from Amy and/or Logan as other growers, what their programs are.

I know on our own farm, we really work to get most of our nitrogen from vegetative sources, legumes and organic matter that we grow on the farm.

Manures are a small addition. And I guess I kind of want to address that because it seemed like many responses to the Petition really said, you know, manures were the main source of nitrogen and that we needed to avoid the build-up of phosphorous and potassium in things and that's why these extracts would be useful.

So, I don't know, Amy would you be willing to kind of share how you're approaching this nitrogen, phosphorous, potassium approach?

MS. BRUCH: Sure, Steve. Well, thank you. That was such a thorough review of the situation in front of us. And it kind of is a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

common theme for the day, I think, these complex situations that we have to unwind.

But just to answer your question, you know, on my farm, again, we're row crops, small grains, pulses and oilseeds. So how we manage our fertility, you know, we really have to look at it on a three to five year basis.

Otherwise, you know, we do understand we will get ourselves into trouble for some of the things that some of the commenters pointed out if you rely on just a manure based system there will be accumulation of phosphorous, potassium and also calcium. Those are really nutrients that accumulate and aren't that visible within the soil.

So a three to five year plan is what we look at. Complementary rotations, we're putting -- and this is a common thread kind of in the Midwest as well, these robust crop rotations.

They both help with our fertility in which they are complementary in generating some nitrogen that can complement a corn crop that needs a little bit more nitrogen.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And they also are strategic from a weed management perspective, too, of breaking up the weed cycle. So really, you know, when we look at putting these programs together and rotations together, they're multifaceted both for fertility and also weed management, which is another challenge that we face.

Also with margin management on our farm and using that total systems approach, growing our nitrogen kind of like you mentioned is really important as well. It helps with increasing biodiversity. We're growing cover crops in the off season.

It increases our organic matter in our soil, which also helps contribute to nitrogen needs in the future. And if we're strategic in our deployment, leveraging some of those legumes, clover, vetch, et cetera, can really generate some nitrogen to our crops as well.

We do use some broiler liver. That's a little bit lower in calcium and also phosphorous. And we deploy feather meal. We also use just a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

little bit of biological activators and high humic acid as well. So it's a real comprehensive approach just so we are cognizant of soil nutrient balance.

We take annual soil samples. But we are part of a water district in Nebraska. We're all irrigated so we have to report our nitrate levels annually to the Water Board. And there's some great university materials out there that we leverage for annual soil samples as well just to know what do our soils contain and what are we going to need both short-term and long-term because manure application is kind of like you said, it's not a one term generation of fertility for our soils. There are multiyear benefits with manure so we want to make sure we have a comprehensive approach to that.

MR. ELA: Thank you, Amy. I know different cropping systems are, you know, different. I was just kind of like the use of sanitizers are different in each system. Here's another theme that goes throughout this meeting.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

But, Logan, can I put you on the spot? And I see you have your hand up anyhow? But I don't if you can make comments but --

MS. PETREY: Yes. I put it up. Absolutely. Okay. Thank you, Steve. Great job.

I thought you hit both of those sides very, very well.

And, okay, so I am in the Southeast. If you haven't visited the beautiful Southeast, it is not always beautiful. We have lots of rain.

So we average about 55 inches a year. And where we are in North Florida we have sandy soil. So we do run into leaching issues, not just leaching of nitrogen, leaching of soil foliar, leaching of potassium. And so that runs into hard issues when managing fertility in organics.

And because of the pest pressures in the summers, we typically grow in the winter. So what you can run into is high leaching rates. You run into a two or three inch rain in the winter and then it gets cold. And that typically follows a -- cold trend will follow rainfall. And when

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you get cold, you get into the 40s, 50s and fortunately most of the manure-based fertilizers will not start breaking down and making more available nitrogen.

And so you can have a lag time for weeks without having that product available. And so where those soluble nitrogens are not necessarily desired in the organic system, we can have a dependence on it just to make sure we don't have crop failure, you know, with some of the things that we're working with.

And really fertility, in my experience fertility is the number one tool to fight against pests or insects and foliar pests. And so, you know, if the plant is looking healthy, I'm less worried about, you know, things jumping on it. But at the moment, fertility is a draw, especially nitrogen. We definitely see onsets of stuff, which increases your pesticide use and things.

And so although the program is not built, our fertilizer programs are not built with soluble nitrogens in them, when we can use them

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

we do and when need an immediate fix after the rains.

It does not, our use of like sodium nitrate with fish or the corn steep liquor does not reduce our use of crop rotation. We grow 20 different things. I want to say six or seven crop families. Our crop rotation is extensive. And it helps, and it does, you know, make those yield breakers like Steve was mentioning of the organics versus conventional. We've seen it.

And it's neat, you know. All the farmers around, because we don't have very many organic farmers in this area but, you know, are watching and experiencing, you know, things that we get to use or that organics do use to complement the system.

So it doesn't limit our crop rotation.

It doesn't limit the use of the manure base or the natural fertilizers. It still uses it a lot.

Believe me, it's over 50 percent of our crop budget. So it is used.

We do use mostly the manure. We use

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

a lot of chicken litter. It's in the area. We try to stay on broiler side. We do have the results of an egg litter sometimes, which increases our calcium. And we do run into a higher pH issue of phosphorous buildups. And our potassium leaches, I guess, as much as the nitrogen.

But as far as cover crops and what we used in the off seasons, which would be in the summer and some during the winter, we have the sunn hemp, which is a scavenger for starting things.

It has an incredible root system. It's a nitrogen fixer. So we do use cover crops to try and combat any of those fertility issues.

We're not able to rely on -- and nobody is. No grower, no conventional grower in the area is able to rely on cover crops as a sole use. Not saying that anybody else can, but it's not a significant nitrogen source because of the amount of leaching we get, especially during planting season.

I mean, most of our planting seasons are in September and October. And that's

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

hurricane season in our time. So we do have to side dress often. I know a lot of growers mention they prefer that -- or they think that's best to do all pre-plants.

Well, it doesn't work in every geographical area. We do a pre-plant application, and we do two or three side dresses depending on the link to the crop.

And one thing about, you know, the manures, they have a very low nitrogen percentage.

And so your rates are really high. And it makes it very difficult sometimes to get out the amount of nitrogen needed.

But we start using the feather mills and other products that have a higher, like, a 10 or 13 percent nitrogen. And they may have a lesser phosphorous or potassium amount. But still most of these things are looking at a two to three week release curve onset and so they are great for the soil.

And where, you know, you kind of cringe when you have to apply it is at the tail end of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

the season when you do get a rain. But you've got to finish the crop or at least keep the tops green, whatever the case is, and you've got to maintain that health, but you only have two or three weeks of the crop left.

And so you make the application, knowing you're only going to get a week out of it or two weeks out of it. And it has a, you know, six week release curve on it. So you're losing that other three weeks.

And we have to, you know, plant the fields to get a new crop in and to avoid any ceiling, like damping off issues, you've got to have a relatively clean field to go back into. And so that time is in land preparation, and it is lost.

So there's loss with, like Steve mentioned, there's loss with natural fertilizers also.

And so I am in complete agreeance that limitations are fine. That wouldn't scare me at all because I prefer to use natural fertilizers and to farm that way. But I will say that it does help growers in this area to maintain that crop

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and to maintain that yield.

And when you do have yield, it helps you bring return to the farm, which you put into the farm. I mean, you make investments. You make better cover crops. You make, you know, better decisions that way.

So thank you, Steve, for letting me answer. And it was long. But that's a lifetime of the Florida experience there. So thank you.

MR. ELA: This is why we have multiple growers on the Board and from multiple areas. That's really, really valuable.

So I'd like to open it up to the rest of the Board for discussions and comments. Obviously, this Petition created quite a bit of interest. So I would like to try and come to a proposal next fall. But, you know, certainly it's going to be a bit of challenge to capture everything. So this is our chance for the full Board to comment on this before I try and write this up in the summer. So please give me feedback from the rest of the Board if you will.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I'm not seeing -- oh, there's Mindee.
Well, first Wood and then Mindee.

MR. TURNER: I don't even have a follow-up to that incredible primer from Amy and Logan. I'm just sitting here with my jaw on the floor. I'm so thrilled that they're on the Board.

So for what it's worth, this is such a softball question, Steve. I'm still trying to get my head around all this time. And I mean it literally has made my brain hurt just trying to sift through it.

One question that I'm having though is are we comfortable that there is a clear enough definition of what the material is? I don't know that I have that -- I feel like this is sort of a blanket petition that I'm not sure I'm 100 percent clear that we're capturing sort of the nuance that I feel like I'm hearing in the comments and hearing from my colleagues on the Board about the nuances here.

So I'm just curious. I feel like there's something lacking in this for me that maybe

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

could benefit from some more definition.

MR. ELA: Yes. I think you raise a great point, Wood. And, you know, in our original discussion document last fall, we didn't get a ton of response on the definition issue. We certainly got a lot more this time. And I think probably stakeholders dove into it a little bit more.

I think this will be, you know, just like with biodegradable mulch and paper pots and some of these other things that, you know, the nuances are really important. At this point, my bias would be to probably write a definition that is fairly conservative.

You know, we don't want to take out -- I don't believe we want to take out, you know, products like fish oils and some of these others that have long been a staple of organic growers.

I think, you know, there is a danger in that. So maybe the wording of the definition in the Petition might be overly broad.

So I guess I would favor a little more conservative one that maybe doesn't go far enough

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

in terms of what it covers but at least does something. And so I kind of come back to those two definitions of concentration versus stripping.

Obviously, I'm sure, there's gray areas between there. But I would tend to lean toward, you know, the stripping that really produces a pure ammonia pretty much might, like I said, be a very conservative definition that might not go far enough, but at least I think that one is arguably much more similar to synthetic ammonia that's supplied because it doesn't include carbon and some of these other materials.

Like I said, I don't think it probably goes far enough, but that would be a black and white, you know, proposal. You know, somebody strips ammonia and adds back some soluble organic carbon, do we -- you know, how do we deal with that?

How does a certifier deal with that? I don't know. But that's maybe where I would start. But I certainly want to talk to more people this summer to try and flush that out a little bit more.

MR. TURNER: That would be great.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Thanks.

MR. ELA: Mindee and then Kyla.

MS. JEFFERY: I think you guys got me on that. Thank you.

MR. ELA: Kyla then.

MS. SMITH: That was mostly going to be my comment. It was just really, like, honing in on the definition and, yes. And I think you pretty much covered it.

MR. ELA: We'll just ask, Kyla, I mean, again, this is a great time for the Chair to put people on the spot. I squirmed on this thing so I'll make everybody else squirm.

As a certifier, and certainly I know you've worked with AMRI and such, at this point, if somebody is using a highly soluble fertilizer and you're looking at a farm system plan and knowing the criteria, you know, the necessity for soil health in the applications, how would you assess out, you know, the use of a highly soluble fertilizer versus something else that is required in a soil system plan?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. SMITH: I always look like, oh, thank God, that's not me up there when people would ask Scott these questions.

Believe it or not, I don't have the regulations memorized. I, like, know them. But if you give me a minute, I may be able to, like, get you an answer.

MR. ELA: We'll stall for a minute here.

MS. JEFFERY: Well, I guess I could add then in the -- to support the stalling -- I can't pretend to be an ammonia expert, but I'm really, like, mulling over this notion around the highly soluble liquid fertilizers and like the organic ethos has a high emphasis there.

And I think my first reactions were, yes, we have to prohibit this. And then I really listened to a lot of what people said. And I feel like if we can get a really clear definition and a really, like, narrow annotation, I would really like to support innovation and support the need for the specificity of the use of this in times,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you know, like Logan was describing of, like, how and when it can become important for unforeseen circumstances.

So I guess I just philosophically see myself being capable of compromise if we have great definitions and narrow annotation. And is that within the elasticity of the scope of the Petition rewrite?

MR. ELA: Sure. I mean, we often take a petitioned item and then it's within our realm to annotate in some form that, you know, we feel appropriate to limit or whatever. We've done that with a number of other things. But, yes, we agree with the Petition except here's how we're going to narrow it or whatever.

We've got Amy and then Carolyn and then I'm going to put Nate on the spot, too, as a certifier after that just so the pain is shared by Kyla. So go ahead, Amy.

MS. BRUCH: Thank you, Steve. No. This is a good topic, for sure. I can't help but kind of look back at our conversation on the

biodegradable, biobased mulch in a way.

And as I look at some of the comments, I see there seems to be a large need of the ammonia extracts with those folks that are actually using these plastic mulches. And so, you know, when we think of this comprehensive systems approach, it's kind of hard to do that when you have plastic laying on your soil.

So, you know, I just think sometimes with this whole organic approach, we need to step back and also look at the domino effects of, you know, what we are doing because that does concern me a little bit not having the access to the soil.

We are able to, as Logan kind of mentioned, she does split applications. We do that as well because when you have small crops, just like small people, they don't eat as much as food as larger people do.

And so, you know, that's kind of what I think about with this covering of the soil that, you know, it's really hard to get those multinutritional sources to your plants.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So I just wanted to make one comment on that.

MR. ELA: When I give farm tours, I always ask people, you know, how often they eat in a month or in a day, you know, it's three to five times or whatever. And in our orchards, you know, what our trees want to eat and when. And so if we had a healthy soil they get to browse on the smorgasbord and if we just are trying to apply materials two times a year or so, we're really trying to guess what the tree wants. And it's not very good at telling us. So I think that's a great point. But, Carolyn?

DR. DIMITRI: Yes. So kind of following-up on the last two comments. You know, again as a -- I am an economist. I'm not an agronomist. And I'm not a farmer.

So, like, a lot of this language is really difficult for me to follow. And kind of like Mindee, my default is always like to the organic ethos.

So one thing that I would find really

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

helpful, you know, over the next, you know, period of time as we think about this, is there a way, like, at the end whatever the recommendation is, to have, like, three sentences in English that could be used to help consumers understand, you know, wherever we end up on this.

Because it's kind of like when we were talking about the resins and the ion exchange, it's just like how do you distill that to something that someone can feel comfortable with rather than feeling like these external forces are coming and taking something that they highly value and, like, pushing it away from, you know, where people think it should be. So that's just my request. I don't have an opinion on this yet, but I'm sure I will by the fall meeting.

MR. ELA: Gosh, you want something in final --

DR. DIMITRI: Thank you.

MR. ELA: -- how strange. No, I think that's a great point and certainly something we need to be aware of, and I shouldn't make fun of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it. We do have to -- it's just like Jenny saying about pet foods. If you frame it in the language of supporting organic livestock growers, it may put it in a very different frame. So thank you for that thought.

Nate, what do you think in terms as a certifier that's out in the field, how do you deal with soil building and criteria with OFPA versus the use of maybe some highly soluble fertilizer?

MR. POWELL-PALM: Yes. I think that when -- so I will say I don't have a lot of experience with the Southeast and lots of rain.

But I have done a lot of inspections kind of, you know, California over to Pennsylvania.

And I think that the coolest thing that I have found as far as when we discussed -- agriculture's contribution to climate change is our ability to say that we don't use ammonia. We have a much more robust and integrated soil building program that is not super input heavy.

And I think that can apply to a lot of different types of crops even if you have plastic,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you know, when the plastic comes off and it's not a cash crop. Your cover crops aren't going to be grown in plastic, and there's going to be a lot of opportunity to feed that soil.

And so I think partly I would really hesitate -- so if I purchase as a farmer, I know we've been looking at prices for different grains fluctuate a bunch from, like, 2013, I started doing inspections and traveling a bunch and corn prices were great. But partly that market stability is due to needing to rotate your crops. Everyone can't grow corn every single year.

And so my worst nightmare is that some certifier shops has a certifier that doesn't look real closely at crop rotation, and they're throwing some clover seed out there but raising really corn on corn on corn on corn because it's doable.

And I think that is something that from a when we talked about organics' impact on rural communities, organics' impact on climate change, there's so much to that that I think that for me the ammonia extract sort of flies in the face of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

everyone who sort of said the organic ethos and for just an approach from the organic ethos.

I also think that regulating it, and I know this has been talked about a lot so I won't belabor the point, but as an inspector who is trying to audit a farm that has ammonia extract, I feel like it's going to be really, really hopeful that we're going to be doing things like isotope testing and we're going to be doing things -- I mean, we're auditing practices. You know, the amount of testing that we've done on fertilizers is probably not sufficient to actually make sure people aren't just using conventional ammonia.

And so when a -- yes, when I think about also the conventional -- the organic place in absorbing the newer, protecting waterways, acting as that sponge in a community, I think there's study after study that says we should be looking at how do we integrate livestock? How do we ultimately make it so that we don't have livestock and crops divorced, livestock and feedlots sending manure into waterways and, you know, crops ultimately

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

having a deficit of soil microbial activity?

And so I think that this kind of directly speeds along that organic divorce. I mean, organic crops in a big way need to have livestock nearby or they need to be figuring out how to get manure onto their ground.

I've also recently interviewed some farmers who don't have livestock nearby. They are corn farmers in Southern Illinois, and they were saying that they ultimately just do as much crop rotation as is necessary to get a good crop of corn.

Rather than speeding and pushing the system, they're going to grow other value-added crops like rye for seed and hay and these other crops that will ultimately be contributing to the soil health but not be pushing the system just to maximize corn, which I think is really kind of awesome. And I think it's a lot easier to communicate to the world why organics is the solution to agriculture's contribution to climate change.

MR. ELA: Great. Thanks, Nate. I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

appreciate that perspective. And I look at Logan, 55 inches of rain a year, we get 10.

MR. POWELL-PALM: Same here. And I don't mean to speak for Logan at all. Just it is a whole different world.

MS. PETREY: No, it's okay.

MR. ELA: Kyla, have we given you some time?

MS. SMITH: You've given me some time to think on it. Yes, thanks for that.

So I would just add to say that 2 up by 203 is the soil fertility and crop nutrient management practice standard. And so while there isn't -- anyway, so we would look at input use and that practice standard as well. And so unless the material has a specific annotation, like, you know, we've been talking about Chilean nitrate, we don't necessarily look at inputs -- well, we look at them in the context of that. But unless there's something that specifically -- you know, one that we're looking at in an annotation, it wouldn't restrict the use, I guess, is what I'm saying.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

But we would look at it in the wider context of the use.

And there is the citation in there that does direct us to look at materials and ensure that they don't contribute to the contamination. So, anyway, we would look at that. But, again, it's not like a hierarchical regulation as there are in other places in the regulation, I guess.

MR. ELA: Great. Thank you so much.

MS. PETREY: Yes.

MR. ELA: Well, we've had a great discussion. I don't want to use too much more time. But I will say the one thing I did not cover was fraud. There were a few comments on that.

I know in conversations with the California Department of Agriculture, they really felt that they had that covered as well as AMRI with some of the isotopic analysis.

You know, their point was if you take -- even though there's the variability of isotope ratios, if you take that sample at the manufacture of a lot and if you take it at the farm, those ratios

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

have to be consistent. And if they're not, it raises a red flag.

Like anything, if you're trying to look at what was applied to the soil and go backwards, you really can't verify that. So, you know, it's tough. But that would be the same if somebody wanted to cheat with ammonium nitrate or something else, you're not going to -- once it's in the ground, it's going to be really hard to verify or double-check.

And, you know, that's where the processes of organics -- I know around here, several violators have been identified by the other growers because things were just strange. And I think that grower oversight of red flags is really important.

So I did mention fraud a lot because I think I've been somewhat convinced that that may not be as big of an issue as overall fraud is. But with this product, it may be able to be delimited.

Kim, one last comment?

MS. HUSEMAN: Yes. I'll make it quick. On that same tangent, I was going to mention -- and I was actually reviewing the AMRI written comments as you were prior to speaking, and on that same note, you know, they did mention that isotope ratio testing as they had previously commented that they no longer request isotope ratio testing due to the unreliability of test results to complex funded simulations.

So just something to note there. And to your point, the organic space is always having debates around fraud in one context or another.

And that was what I was trying to, I think, understand a little bit better from the public comments was, you know, how do you manage other than a mass balance from that perspective?

And, you know, there's -- that, I think, is just one thing as a consideration too as we look at this more going forward.

MR. ELA: Great. Thanks. Thanks. And I should have probably spent more time on the fraud issue and with future write-ups, I will.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

All right. Well, that was a robust discussion. Thank you, everybody, as we move on to writing a proposal. But the subcommittee certainly will reach out for thoughts to other people beyond the Board and such. It makes my brain hurt, too. But I think it's so key. And, you know, the scientific literature is fascinating to be honest. So it kind of makes me wish I was a grad student again. Maybe not. I don't know. So I'm glad I don't have to take classes.

But, Rick, we'll turn it back to you. I know we're going to run long here. We were supposed to adjourn at 4:15, but we already scheduled to 5:00 so I feel like we're probably okay on this. So back to you, Rick.

MR. GREENWOOD: Okay. Thank you, Steve. Good discussion. And just one comment, Logan. This year we have 4.5 inches of rain. So we're really in a desert.

MS. PETREY: Bless your hearts, as I saying stop raining.

MR. GREENWOOD: It makes things very

difficult. So I'm going to talk about kasugamycin. We've been petitioned for its use as an approved active ingredient in crop production. I'm going to take, and Steve actually mentioned, used a human analogy of feeding trees.

I'm going to use my human experience.

As a long time clinical microbiologist and lab director, the thing that I have seen in microbiology is anti-microbial resistance. And nothing is really sadder than isolating a person that has tuberculosis and finding that they have a multiple resistant M. tuberculosis. It makes treatment very difficult if not impossible sometimes.

The other is, as I'm sure all of you have heard is MRSA, M-R-S-A, also incredibly resistant microorganisms. And the reason that they're around is because of overuse of antibiotics. And people have been talking about this for literally decades or as long as I've been in that. And in particular they use it not only in humans where people get antibiotics when they

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

go into the physician. You know, they have a viral infection and it's not necessary but also in the whole animal industry.

And microbiologists have recognized it, the bacteria and microbes have recognized it even earlier. I mean, they're incredibly adaptive. And whatever happens is you put something in the environment and eventually they get around it.

So that's sort of my preamble to kasugamycin. It's another aminoglycoside that they want to use for fire blight. The comments that we got, some from the growers. And I understand that as a grower myself, they want, and they keep saying, another tool in the toolbox. The public and many of the other groups, I got a count of probably 250 comments saying keep antibiotics out of organic.

I mean, I think it's a pretty clear message that people don't want them there. And I think some of the concerns that we have, and it came up in the TR, is that resistance gets built

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to these things very quickly. And there's some literature about microorganisms becoming resistant in soil samples after one use of kasugamycin.

There's the other issue that when they're sprayed on trees, it drips onto the ground, and you can get animals foraging in the ground and you have the potential for building resistance.

There are methods to control it. And I think one of the things -- I'll get to call on Steve as an apple grower. I'll turn the tables on him. There are methods, cultural methods, to make it more difficult. I won't say impossible but more difficult for fire blight, which is a bacterial disease. It's an *Erwinia amylovora*.

You can control it. It's much more difficult. I think that's clear. And there are regional differences. And we've talked about that. Some areas, it's not much of a problem and we had some of the apple and pear growers even mention that. You know, in our area, it's not a big deal.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

But when it's in use, and it's developed even in Japan starting in 1965 and this was in the TR, rice blast developed resistance very quickly.

It couldn't be used. And it's also in Florida, rapid fuel resistance to bacterial spot on tomatoes caused by xanthomonas.

So there is history for these things.

And I'm happy to talk about them. But I would say our stakeholders really don't want us to have something else come into the production area as an antibiotic.

And the NOSB and NOP actually identified several reasons to stop the use of streptomycin, which is a very similar microbial agent, antimicrobial agent and in 2014 stated that the expectation is that antibiotics are not used in organic production.

So I'm happy to discuss this. I have feelings for the growers since I'm there. But I think it would be the wrong message to send to our stakeholders. And I think even though there might not be resistance now, California has allowed

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

kasugamycin with an application plan. I think it's only going to be time before we develop resistance.

So, Steve, I'll stop it there. You may want to be one of the first commenters since you're an apple guy.

MR. ELA: You know, I'll let a couple other people go first and then I am willing to chime in on that, yes, apples and pears. So, but, yes, let's go to Brian and see and then I'll say something about it.

MR. CALDWELL: Great. Thanks, Rick. Thanks, Steve. I was actually hoping that Steve would go first being a large scale apple grower.

But I think I'd like to speak, of course, with my dual role. But I'm going to start as an apple grower. And I think we farmers have to realize that without our customers, our crops are pretty worthless. And there is just overwhelming, as Rick said, sentiment against adding antibiotics into organic production systems.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And there was quite a fight in 2014, I believe it was, to take antibiotics out of apple and pear production, which is actually my only previous involvement with the NOSB as I did give some verbal testimony against it -- well, in favor of taking that out.

I've been an organic apple grower for over 40 years. And we do see fire blight occasionally in our orchards. We don't have any spray program targeted against fire blight. But we do use cultural practices. Most of our varieties, not all of them, are pretty tolerant, pretty low susceptibility to fire blight compared to the worst. We grow root stocks that are not susceptible. And we don't push our trees. And that's a big one.

There's a mentality of like really rushing even in an organic production, rushing the yield in the fruit production. And that's a big part of the problem is combining a sensitive variety, a sensitive root stock and high fertilization is just a total recipe for fire

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

blight.

So that's the cultural practices that I think, you know, if you turn it the other way, less susceptible varieties, and I know their market is strong. But, you know, the market can be strong for other varieties as well. That's a tough one.

But less intensive planting systems with root stocks that have resistance again, farmers don't want to do that. They feel it's old fashioned or something. But it can be done. And then again, just taking it easy on the fertility.

So I think that's pretty much my message there. And I'll appreciate hearing what Steve has to say as well. But we really have to keep in mind the consumer is the one who buys our products, pays the premium and supports us. And we really need to listen to them so.

MR. ELA: Let's go to Sue and then I'll say something and then Logan.

MS. BAIRD: Yes. I guess I was just echoing Rick and Brian. My background, of course, is in poultry science but with a minor in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

microbiology. And in poultry, you have to rotate antibiotics because they build up resistance.

And I think that's echoing what Rick says. If we allow antibiotics back into organic production, we're going to build resistance, and they're going to have to add something else.

But most of all I'm thinking about the perception that people are being bombarded with now that we are diluting the organic standard by whatever reason they want to say it is, hydroponics or whatever, whatever.

And if we as the Board approve adding antibiotics back into our National List, I think we're going to really get slammed hard. I'm totally against this one.

MR. ELA: Thanks, Sue. I'll say something and then Logan and then Mindee.

Oh, gosh, this is -- you know, as an organic grower, fire blight is a big issue for us on pears and susceptible varieties.

I've told people my sister went to the International Science Fair in 1960 something with

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

fire blight as her theme. You know, researchers have spent their careers, you could call it a career breaker, looking for a solution to this and failing. If it's around, it's tough. It's fine.

It's not a big deal until it becomes systemic at which point your choices are civil war, surgery or amputation.

So we deal with it. I think climate change has made it worse where we see -- it's really a combination of water and temperature because it's a bacteria. So if water moves it into the nectary of the flower, which is where it enters the tree and it's warm enough temperature, you have problems. So if there's water and it's cool, the bacteria won't expand. If you have warm temperatures and it's dry, the bacteria don't get moved into the nectary of the tree.

So we really watch for, you know, at bloom time the weather events and really track with models the susceptibility issue.

In fact, this week we had a 40 percent chance of rain and our blossoms were just starting

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

to open, and I was flooding.

Once, we used streptomycin when it was still on the list. It's really useful because you can put it on after an infection event if you get it on within 24 hours after you've had an infection event. It would kick back and help you solve problems. It was always better to put it on ahead.

But I would prefer to put it on after because then you weren't using it preventatively, and it would really minimize your use of it.

In Colorado, we tended not to use it very much. We still had susceptibility to streptomycin but in other areas where they've used it a lot, there was resistance, and they had to tetramycin.

So once those were taken off the list, fortunately that next year there were a couple products released that are more effective. Fortunately, because otherwise we would have been really hanging in the wind with no effective method.

But the method now is a systems

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

approach, which is in one way good, but it involves copper and lime sulfurs early in the season so it does increase our copper use on apples and pears significantly. We rarely applied coppers to them before this and now we routinely apply them because we're trying to reduce the inoculum in the orchard before we even get started.

And then a lot of organic growers use lime sulfur at bloom time for thinning. Unfortunately, the product that is now used for prevention is a yeast product that you spray on when the flowers are open so it colonizes those nectaries and excludes the bacteria.

But if you're using lime sulfur for thinning, it would kill the yeast so you have to really use a sequential lime sulfur and then the yeast so you don't shoot yourself in the foot.

And we've often been in the situation where you see a storm coming in. The flowers are open. You need to thin. And then you literally have to turn back around and apply the yeast. And the timing may literally be half a day or a day

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

or we ran into a situation a couple years ago where it was hours.

The blossoms didn't open up that morning, until that morning. It rained that night. And so we had to thin and protect the flowers almost one on top of the other except we can't do one on top of the other.

So it's a gray hair moment. Most of our varieties are somewhat resistant. But we grow several varieties that are really -- you know, consumers demand them that are not resistant.

And I've got a block of trees we haven't lost a Jonathan. We haven't lost that many trees, maybe 10 percent. But I bet we've reduced our canopy volume by 60 percent because we've had to cut off so many limbs. So that's a real economic hit.

But all that being said, the Board has set a clear precedent over the years of not wanting antibiotics. I think consumers, based on the response rate, expect that at this point. I argued against the removal of streptomycin, tetracyclin

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

from the National List.

But I think -- I can't remember who at the start of this meeting said we need to respect Board precedents unless we have an overarching reason to change it. And so I think with this material, I would hate to change those precedents.

I think the resistance issue is real. It is the only antibiotic that we could use at this point.

So it's, you know -- we all vote for our stakeholders. My stakeholders would say absolutely approve this. But I also think as Board members we represent stakeholders, but we also have to vote our conscience and our gut feeling.

And I've certainly gone against my stakeholders on some things and voted with them on other things. So I'm going to have a tough time with this one that I am, you know, I've never abstained on a vote. This might be one. But I'm leaning that it probably isn't acceptable. So, Mindee, go ahead.

MS. JEFFERY: Thank you. I'm not in favor of allowing antibiotics in organic. And

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

thinking about how much we heard, especially on Tuesday last week about consumer perceptions being destabilized, and I think it really behooves us as a community to provide more context to the consumer. And my experience with my many long years of direct interactions with consumers, putting pressure on why organic is doing what it's doing is that they're really available for the context.

And what I mean is that this is a really beautiful form of democracy. The level of stakeholder engagement and consensus building that we do, that really inspires the consumer. And if we can just take a little bit more time when we're asking for support to help them understand that we examine all Petitions equally and then ask them for support in prohibiting things like antibiotics if that's what we're asking.

And that really matures our consumer audience, which then can help us make exceptions in the future if we need to in such a way that we're not knee jerk reacting on black and white issues,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

but we're looking at them from the perspective of the beauty of this democracy and everything that we've accomplished in organic and that we're still going to evaluate everything neutrally against our criteria. And we need their support to say no in this particular issue if that's what we're asking them for.

But I think the context in our messaging to help the consumer understand the depths of what we're doing and then ask them to support us is really important, especially in this kind of context.

MR. ELA: Thanks, Mindee. Other comments from Board members? All right. Rick, I think you're off the hook.

MR. GREENWOOD: Thanks, Steven. And I appreciate your comments because I know the bind that you're in. And in fact I think that's how I ended up with kasugamycin.

I mean, these are all tough decisions and especially more so for some of us that are actually doing some of the farming, and we have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

good representation. But it's interesting. But I still want more rain, Logan.

MR. ELA: Yes. Our snowpack is at 50 percent. So it's going to be an ugly year at this point. But thanks, Rick, so much for that great job on chairing crops.

And, again, I just want to recognize all the new chairs. You guys did a great job. And as I said, congratulations to the new Board members.

You each essentially had one sunset so I know we didn't overload you. But you got to figure out what a previous Board member was trying to say and you all did great. And like I said, you're all professionals at this point.

So congratulations, and I much appreciated everybody's taking over items.

So with that, I think we're going to move on. We have a couple things, deferred votes and the work agenda update. I think we'll come in just fine on our timing before 5:00.

I do want to say one thing that the Board

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

has been talking about in the background. And I'm particularly excited, but I know the Board is as well about a bill that was introduced this morning, bipartisan, about the resolution on the continuous Improvement and Accountability in Organic Standards Act.

And basically that bill is noting that the USDA has failed to implement and has run into issues with implementing key NOSB recommendations to clarify and update standards such as animal welfare, origin livestock, organic seed use and greenhouse production.

And in the spirit of continuous improvement there is foundational in organic systems a legislative solution for repairing the public-private partnership and advancing organic standards was introduced in the Congress today.

This Act, again, the Continuous Improvement and Accountability in Organic Standards Act will require the Secretary of Agriculture to initiate and complete notice and comment rulemaking to implement recommendations

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

approved by the National Standards Board and specifically the bill will require the USDA to develop an action plan for clearing the backlog of NOSB recommendations that have not been implemented, creates a system of accountability for advancing future recommendations under the transparent and shortened time frame and requires the USDA to report to Congress on the results of accreditation audits of third-party certifiers and their implementation of new regulations and agency guidance to ensure consistent application of organic standards.

I know the Board is very much in support of this. We polled the Board, and nobody is against this. So I just want to say thank you to all the groups that signed on to that. There's an extensive number of groups that are in favor of this.

The Board didn't have enough time to pass the resolution, but we want to stress that we are highly in favor of this. And we're very excited.

Jenny, I know this may put you in a bind.

We know you get caught between us and Congress at times, so we sympathize with your position. But I think this really respects the work of the NOSB as has been talked about often today. And I just want to give a shout out to those that worked to get -- all the groups that worked to get this bill introduced.

So, again, I want to stress that it is -- the Board is unanimous in their support for this even though we didn't pass the resolution and such.

But the Board is very excited. So I hope that will be taken into account by the higher ups.

With that, we will move on to the deferred vote, which is on ion exchange filtration.

All right. We talked about it extensively yesterday. But before we vote, I would like to just open it back up for a brief comment period from the Board and see if there's anything else that needs to be said before we move to this vote.

So I see Brian with his hand up.

MR. CALDWELL: Thanks, Steven. I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

think I do have some information at least that was new to me. I did a little research. I was concerned yesterday in our discussion that styrene is considered a probably carcinogen. But polystyrene, which is the actual resin, one of the very common resin materials, is not. It's highly stable. It's not listed as a carcinogen at least what I could find in an admittedly kind of quick online search. But it didn't come up.

And polystyrene sulfonate, which is, and again, a common resin material, is actually used as a medicine, a human medicine, and it is considered in the write-up of that. It's considered that it's 100 percent excreted. So even if some polystyrene through leakage or whatever did get into some products, it sounds like it's not harmful.

So that actually put my mind to rest on that issue. However, I still would like to see this go back to the committee. I think we can vote separately on whether recharged materials and resin materials need to be on the national list.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And also I would like us to hear clarifications -- for the groups on the clarifications as to what the implication is that the process causes a chemical change in the treated product and what that means in terms of its organic status and that sort of thing so.

I just wanted to put that out there.

If the vote -- if we do vote and it's decided not to send it back to committee, I will vote in favor because I think it's more important that the NOP gets some guidance from the NOSB than not. So that's the last point.

MR. ELA: Thank you, Brian. Other comments from the Board? All right. I am not seeing any. So I know yesterday we discussed the options that we had. We did defer the vote, which was one of the options. The other option is to take a vote on returning it to subcommittee and then the final option if it does not go back to subcommittee is to move forward on the vote.

So I will pause. I do not want to cut anybody off if they do want to make a motion to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

return to subcommittee. But if that motion does not occur, we will move on to the vote.

Asa, we recognize you.

MR. BRADMAN: Thank you. Just based on the discussion yesterday and the interest in, you know, those kind of representing consumers, I'm going to make a motion that we send it back to the subcommittee.

MR. ELA: Okay. Asa has made a motion.

Is there a second?

DR. DIMITRI: I'll second it. This is Carolyn.

MR. ELA: Carolyn, okay. So there is a motion and a second on the floor. We will start with the voting. We lead with Rick, is that correct, Mindee?

MS. JEFFERY: Indeed.

MR. ELA: Okay. So this is the vote to move back to committee. A yes vote would move it back to the subcommittee. A no vote would not.

This is a simple majority vote. We will start with Rick. Rick, are you there?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. GREENWOOD: I am here, and I vote
no.

MR. ELA: Kim?

MS. HUSEMAN: No.

MR. ELA: Mindee?

MS. JEFFERY: No.

MR. ELA: Logan?

MS. PETREY: No.

MR. ELA: Nate?

MR. POWELL-PALM: No.

MR. ELA: Kyla?

MS. SMITH: No.

MR. ELA: Wood?

MR. TURNER: Yes.

MR. ELA: Sue?

MS. BAIRD: No.

MR. ELA: Asa?

MR. BRADMAN: Yes.

MR. ELA: Amy?

MS. BRUCH: Yes.

MR. ELA: Brian?

MR. CALDWELL: Yes.

MR. ELA: Jerry?

MR. D'AMORE: No.

MR. ELA: I believe -- oh, Carolyn, I'm
sorry.

DR. DIMITRI: No.

MR. ELA: And the Chair votes no.
Mindee? We'll make you do your work.

MS. JEFFERY: I have 4 yes and 10 no.
Is that what you have, Michelle?

MS. ARSENAULT: Yes. That's what I
have as well.

MS. JEFFERY: Great so -- I'm sorry.
I said it wrong. I have --

MR. ELA: You were correct, I think.

MS. JEFFERY: Four yes to
subcommittee, ten no to subcommittee. The motion
fails.

MR. ELA: And just for the record, no
absences or abstentions.

MS. JEFFERY: Thank you.

MR. ELA: All right. Asa, I don't know
if I failed to lower your hand or you still have

it raised. With that, we will move on to the vote on the proposal and the motion to accept the proposal on ion exchange materials as written. The motion was made by myself, Steve, and seconded by Jerry D'Amore. So we will start the voting with --

MR. BRADMAN: I guess maybe this is a point of order. But are we allowed to say something at this stage before the vote, not a discussion item but a question?

MR. ELA: Sure. I'll entertain a question.

MR. BRADMAN: Okay. For some reason I remember that's allowed at some point. But just that there would be a cover letter with this. And I talked about the cover letter asking for some specific information. I just want to --

MR. ELA: Did you --

MR. BRADMAN: -- on board with that.

MR. ELA: Yes. Would anybody like to speak to that?

MS. JEFFERY: Do you mean in the sense

of establishing our requests for the cover letter going into the vote?

MR. BRADMAN: Yes.

MR. ELA: The cover would cover so as I think about it, it is proper to open up the discussion after a motion and a second. So, Kyla, would you like to say something?

MS. SMITH: Yes. I mean, I guess that I would be in favor of putting in the cover letter that we're looking for specific answers on the legal interpretations, you know, on whether or not the ion exchange resins, like, how they are definitioned within FDA, you know, in regards to food contact surfaces or subsurfaces or direct food additives aligned with, like, our definition of processing aid.

MR. ELA: It sounds like you're willing to help me with that cover letter.

MS. SMITH: Yes. I already committed to that, Steve.

MR. ELA: I just wanted to make sure. But all right. Any other discussion before we

move on. Amy?

MS. BRUCH: Just a quick question with that. So after this cover letter and that question gets answered, does it return back to subcommittee for finalization? Is that the intent?

MR. ELA: I think the intent is for the program to give some information back to the Board.

MS. BRUCH: Okay.

MR. ELA: And after that, then, I think it depends what the NOSB and the program would like beyond that. So I'm not going to guaranty it comes back to the Board. It may not. But I think that bridge is crossed down the road.

MS. BRUCH: Okay. Thank you.

MR. ELA: Anything else before we move to the vote? All right. We will start with Kim.

And just to be clear, a yes vote is to pass the proposal. A no vote is to not pass it. And this requires a super majority. So with 14, it requires 10 votes to pass. Kim?

MR. ELA: Kim?

MS. HUSEMAN: Yes.

MR. ELA: Mindee?
MS. JEFFERY: Yes.
MR. ELA: Logan?
MS. PETREY: Yes.
MR. ELA: Nate?
MR. POWELL-PALM: Yes.
MR. ELA: Kyla?
MS. SMITH: Yes.
MR. ELA: Wood?
MR. TURNER: Yes.
MR. ELA: Sue?
MS. BAIRD: Yes.
MR. ELA: Asa?
MR. BRADMAN: Yes.
MR. ELA: Amy?
MS. BRUCH: Yes.
MR. ELA: Brian?
MR. CALDWELL: Yes.
MR. ELA: Jerry?
MR. D'AMORE: Yes.
MR. ELA: Carolyn?
DR. DIMITRI: Yes.

MR. ELA: Rick?

MR. GREENWOOD: Yes.

MR. ELA: And the Board votes yes.
Mindee?

MS. JEFFERY: Fourteen to zero, no
abstentions, recusals or absence. The motion
passes.

MR. ELA: The motion passes.

MS. JEFFERY: I really miss Jesse Buie
right there, though, I'm not going to lie.

MR. ELA: Yes, we put Jesse on the spot
a few times on the vote, too. I know we'll have
a ton of votes next fall with all the sunsets.
And often what we'll do is put Nate on the spot,
the Vice Chair, as well as the Secretary. And
we'll tally the votes just to double-check and that
way we don't put Michelle on the spot. So, Nate,
be forewarned.

MS. POWELL-PALM: I'm all about it.
Ready to work.

MR. ELA: Sharpen that pencil. So
that will conclude our deliberations and such.

We would like to move on to the preview of the next NOSB work agendas and materials update so that our stakeholders know what is coming up and where the Board is thinking.

Obviously, these sometimes change. We do our best to put what -- if we think we might at all go to the vote, we put up the vote so we don't surprise anybody. Sometimes things we have up for a vote get moved back to a discussion item or get moved back some if we run out of time or have issues or such.

So we'll move down the list here. I don't think that I'll necessarily read all of them.

But we certainly have the second part of the human capital, the supporting the work of the NOSB, going to a vote.

Let's see here. I'll tell you. You just moved it on me, Michelle. We have chitosan as a plant disease control and a coagulant for fertilizer, which is a Petition going to a vote.

Biochar is to vote. Ammonia extract is a vote. Kasugamycin is a vote. Hydronium,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

which is a new one that we haven't reviewed -- that we haven't had a discussion document that is in review going to a vote.

Carbon dioxide, which is a newer petition, is probably going to discussion.

Lithothamnion, which again we haven't had a discussion document on going to a vote. And then, of course, all the sunsets going through crops as would be expected. We'll just keep going down through those. Those are required to have votes in the fall.

Then moving on to handling, cetylpyridinium -- oh gosh, cetylpyridinium, there we go, chloride. The Chair always has to show humbleness by mispronouncing people's names as well as product names or material names. That will go to a vote.

Phosphoric acid with an annotation change would go to a vote. Zein would go to a vote.

Peroxlactic acid, PLA, will be a discussion document.

Fish oil annotation, which we discussed

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

at this meeting, will go to a vote. L malic acid reclassification we have as a vote. But I will be honest. I don't know if that will end up there.

It may or may not.

Then the various sunsets for handling.

And livestock, also a chitosan product for the processing aid in the production of livestock feed will go to a vote. And then the sunsets for livestock as well.

Finally in materials, we'll have the research priorities which we discussed at this meeting. Wood will dress those up, and we'll go to a vote.

Excluded methods, depending on timing, we will hopefully go to a vote on that. Tall oil, which is actually materials because it covers a number of different committees. So Jerry will stick that on. We'll go to a vote.

And then as always, our review of the Policy and Procedures manual will be a discussion if we need changes to that.

So are there any questions from the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Board on that work agenda list? Asa?

MR. BRADMAN: I don't think we've had a discussion document on CPC. And we're still waiting on the TR. So I don't know, would we still want to go for a vote in the fall or a discussion?

MR. ELA: I think that can be decided as we move forward when we get the TR back. I guess we put it up as a vote because it possibly might go for a vote.

And we wanted to be optimistic so that the stakeholders would be ready if we did go for a vote. If it gets pulled back to a discussion, we will note that as soon as we know that in the subcommittee notes or executive notes.

MR. BRADMAN: Okay. Thank you.

MR. ELA: Good point. And just to point out, we do not have to go to a discussion document. We can go straight to proposal if we feel so inclined. Discussion documents are optional, not required.

Michelle, you have a point.

MS. ARSENAULT: I was just going to add

that we didn't -- on this list we didn't add in biodegradable biobased mulch going back in that was sent back. Just so you know it.

MR. ELA: Good point. Yes. Thank you for that catch. So that will be updated. So whether, well, in the crop subcommittee. I don't need to put it all on Asa's shoulder as to whether that comes back for a vote or something else. So we'll put it down as a vote and then we'll see where that one goes.

Anything else? All right. Well, I want to thank the whole Board. You all have been wonderful. I would ask you to reach out to anybody you know. Encourage them to nominate themselves or others for the Board. I think those close June 1st-ish.

I want to remind people of the Coffee with the Board. That is next Tuesday. And anybody that is interested in nominating themselves or others for the Board, Michelle just flashed up organic farmer, experienced in environmental protection resource conservation,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

public interest or consumer interest and the science position, which Dave Mortensen was in, and expertise in the fields of toxicology, ecology or biochemistry. Fortunately, Asa has also been great on that as well.

So please attend that coffee if you want. Get a little more information. I think the Board members will be very candid. And we have some current Board members that are now off the Board as well to participate in that.

I'm trying to -- I just lost a thought in all of that. I guess one thing that I have really appreciated about the Board members in general and certainly on this Board is how many people actually could fill two seats. I know I'm both a crops person and handler. Nate fits certification as well as a grower. Kim is a handler and has been a grower. So just to name a few Board members.

But many of us really have experience across several categories. And I think that makes the Board ever so much richer because we can comment

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

on things bigger than just where our seat is so I really appreciate that from the Board.

So please, yes, the Coffee with the Board, get nominations out. We'd love to have more diversity and, like I said, push the limits on what the organic community can do, whether it's by color or region, gender, gender identification, all those things are very important to us.

With that, I get to have the enjoyment of letting this meeting go and calling it to a close. And we will have our next meeting starting with public comments the week before. But the next meeting with fingers crossed will be in Sacramento, California, and hopefully we can see each other in person and let new and old Board members commingle.

So with that, Jenny, do you want to say anything before we call this meeting closed?

DR. TUCKER: Thank you so much, Steve.

I mainly want to say thank you to the Board. Thank you to our interpreters and thank you to the community. This was our third virtual meeting,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and it was done beautifully. And I just want to thank you all. So a big round of applause if you are still on with us.

We're still at about 100 folks. So go ahead and applaud the Board and all of you for all the work that you do during this meeting and all around the year to protect organic integrity. So thank you. Be well. Stay safe. And we look forward to seeing you soon.

And I think the meeting is officially closed.

MR. ELA: Thank you so much, everyone.

(Whereupon, the above-entitled matter went off the record at 4:45 p.m.)